

7-5-2016

# Representation of Adolescent Identity Status through Facebook Use: A Qualitative Multicase Study of Adolescent Digital Behaviors

David Valdez

University of South Florida, dvaldez813@gmail.com

Follow this and additional works at: <http://scholarcommons.usf.edu/etd>

 Part of the [Educational Psychology Commons](#)

## Scholar Commons Citation

Valdez, David, "Representation of Adolescent Identity Status through Facebook Use: A Qualitative Multicase Study of Adolescent Digital Behaviors" (2016). *Graduate Theses and Dissertations*.  
<http://scholarcommons.usf.edu/etd/6423>

This Thesis is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact [scholarcommons@usf.edu](mailto:scholarcommons@usf.edu).

Representation of Adolescent Identity Status through Facebook Use:

A Qualitative Multicase Study of Adolescent Digital Behaviors

by

David Valdéz

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
Department of Secondary Education  
College of Education  
University of South Florida

Major Professor: Michael J. Berson, Ph.D.  
Vonzell Agosto, Ph. D.  
Darlene DeMarie, Ph.D.  
Cheryl R. Ellerbrock, Ph.D.

Date of Approval:

June 1, 2016

Keywords: social networking, Marcia, technology

Copyright © 2016, David Valdéz

## **Acknowledgments**

I would like to thank my committee for their mentorship and experience along this dissertation process. To my major professor, Dr. Michael Berson, thank you for your guidance, patience, and support. Thank you to Dr. Vonzell Agosto, Dr. Darlene DeMarie, and Dr. Cheryl R. Ellerbrock for guiding me through the research and writing process that was essential to the scholarship of this study. Also, thank you to Dr. Barbara Cruz, Dr. James Duplass, and Dr. Howard Johnston for their constant encouragement, advice, and reassurance throughout my time at the College of Education.

## Table of Contents

List of Tables .....	iv
List of Figures .....	v
Abstract .....	vii
Chapter One: Introduction .....	1
Personal Identity Development and Technology .....	2
Social Media Platform: Facebook.....	4
Adolescence and Development.....	6
Technology Use and Access in Education.....	7
Rationale for the Study .....	9
Purpose of the Study & Research Questions .....	12
Background of the Researcher, Curriculum and Teaching with Facebook .....	14
The School in the Study.....	22
Teaching Philosophy.....	23
Conceptual Framework.....	28
Assumptions.....	32
Limitations of the Study.....	33
Definitions of Terms.....	36
Chapter Two: Review of the Literature .....	41
Conceptualizations of Adolescence and Identity .....	41
Patterns of Personality, Family, Ethnicity across Identity Types .....	48
Adolescents and Technology .....	58
Net-Geners in the Classroom .....	63
Social Networking .....	68
In the Classroom .....	81
Chapter Three: Methods .....	86
Research Design.....	86
Collective Case Study Approach .....	88
Recruitment and Participants .....	89
Building the Collective Case Study of Four .....	92
Gender as a Purposive Criterion .....	97
Commitment to Documentation as a Purposive Criterion .....	98
Dedication to the Research Period as a Purposive Criterion .....	99
Availability for Interviews as a Purposive Criterion .....	100
Technology Literacy as a Purposive Criterion.....	101

Teacher-Student Rapport as a Purposive Criterion.....	101
Data Collection: Identity Survey Instrument .....	104
Data Collection: Construction of the Technology Questionnaire.....	107
Data Collection: Interviews .....	109
Data Collection: Duration of Research.....	112
Analysis and Rigor in Qualitative Methods.....	114
Chapter Four: Findings.....	121
Case: Identity moratorium- Jim .....	121
Social Media .....	125
Identity .....	127
Pedagogy.....	133
Case: Identity moratorium- Jennifer .....	134
Social Media .....	139
Identity .....	143
Pedagogy.....	149
Case: Identity achievement- Alex.....	150
Social Media .....	153
Identity .....	159
Pedagogy.....	162
Case: Identity achievement- Sara.....	164
Social Media .....	166
Identity .....	172
Pedagogy.....	176
Cross Case Analysis.....	178
Identity Moratorium.....	179
Identity Achievement.....	181
Gender.....	182
Similarities .....	187
Limitations .....	189
Chapter Five: Discussion.....	194
Social Media .....	196
Identity .....	200
Pedagogy.....	203
Theoretical Frameworks .....	217
Ethics of Trust.....	219
Reflexivity.....	240
Epilogue .....	244
References .....	252
Appendices .....	273
Appendix A: Introduction Script-Administer Ego Questionnaire .....	273
Appendix B: Post-Questionnaire Debriefing Script .....	274

Appendix C: Marcia Identity Status Questionnaire .....	275
Appendix D: Technology-use Questionnaire.....	282
Appendix E: Script Semi-structured Introduction-Interview 1 .....	284
Appendix F: Script Semi-structured Debriefing .....	285
Appendix G: Semi-structured Interview Stems- Interview 2 .....	286
Appendix H: Ethical Documentation and IRB forms .....	288
Appendix I: Instructions for Online Diary .....	298
Appendix J: Approvals and Certificates .....	299
Appendix K: Copyright Permission.....	306
Appendix L: Introduction to Summer Assignment.....	307
Appendix M: Summer Assignment .....	308
Appendix N: Social Media Policy .....	316
Appendix O: Facebook Profile of Mr. Valdéz.....	317
Appendix P: IB Learning Objectives-Developmental Psychology .....	318
About the Author .....	End Page

## List of Tables

Table 1: Marcia's Matrix of High and Low Dimensions.....	29
Table 2: Marcia's Four Identity Status Types.....	30
Table 3: Family and Personality Characteristics across Identity Types .....	48
Table 4: Participant Quotations about Race by Identity Status Types.....	51
Table 5: Common Forms of Digital Communication .....	67
Table 6: Distribution of Ethnicity among Responding Participants .....	91
Table 7: Distribution of Identity Status and Gender among Participants .....	96
Table 8: Pseudonyms of Four Participants by Identity Status and Gender.....	111
Table 9: Summary of Findings Across Research Questions.....	179
Table 10: Summary of Findings Across Gender.....	182

## List of Figures

Figure 1: Percent of Teens Across Most Popular Social Media Platforms.....	5
Figure 2: Philosophy of International Baccalaureate graph.....	16
Figure 3: Photograph posted to Phineas Gage Facebook.....	21
Figure 4: Media center room.....	111
Figure 5: Musical Promotion posted to Jim’s Facebook page.....	126
Figure 6: Theatrical Promotion posted to Jim’s Facebook page.....	127
Figure 7: Black Lives Matter image posted to Jim’s Facebook page.....	128
Figure 8: Promotional Image Advertising Theatrical event.....	128
Figure 9: Project-Shattered Silence promotional image.....	129
Figure 10: Gender-Bender Day at Jennifer’s School.....	142
Figure 11: Profile Picture of Jennifer.....	144
Figure 12: Psychology-related post from Alex.....	154
Figure 13: Post #1 of Theatrical Production from Alex.....	156
Figure 14: Post #2 of Theatrical Production from Alex.....	157
Figure 15: Background Quite from Alex’s Facebook profile.....	161
Figure 16: Sara Embracing her Boyfriend.....	168
Figure 17: Sara posts Album of Private Family Event.....	169
Figure 18: Sara’s Profile Photo update March 30, 2015.....	172
Figure 19: Psychology-related post about a Bull.....	207
Figure 20: Hey Girl meme related to Statistics.....	208



Figure 21: Posting of non-psychology item: 7-11 .....	209
Figure 22: Video of Bunny .....	210
Figure 23: Video of Qualitative Research .....	212
Figure 24: Posting of non-psychology item: Thermostat .....	231
Figure 25: Content posted from Student.....	232
Figure 26: Zimbardo Trailer .....	234
Figure 27: Student post about Psychology Textbook .....	235
Figure 28: Former Student shares a Selfie.....	236
Figure 29: Selfie Student with Autographed Book.....	237

## Abstract

The expanding landscape of social media offers users several platforms to introduce into their lifestyle choices. Facebook continues to be one of the most ubiquitous social media platforms in the United States (Pew Research Center, 2015), and its use in educational contexts has become an area of inquiry. This study examines how a sample of high school seniors in an IB psychology class use social media, specifically, Facebook by inquiring into the interrelationship between social media use, identity formation, and personal teacher pedagogy as part of instruction. The research questions for this study were: Question 1- How are students using social media platforms during their senior-year of high school? Question 2- In what ways does Marcia's model of adolescence identity type help to explain potential differences in Facebook use among adolescents? Question 3- In what ways are students' Facebook practices and teaching practices that relies on social media responsive to one another? Following ethical guidelines as prescribed by IRB procedures, participants were surveyed and categorized by their respective identity type using Marcia's (1967) model of adolescence identity type. Utilizing a socioconstructionist theoretical framework and Marcia's model, data from four students were analyzed over a four-week period. Identity achievement students regarded their social media use as active and were more likely to use Facebook to research future goals. These students felt Facebook deepened interests in aspects of their identity and often used Facebook to follow-up with classwork/homework. All students agreed that their current Facebook profiles no longer represent their identities accurately. Gender differences, recommendations for classroom inclusion of Facebook, and personal reflections on pedagogy were also described.

## **Chapter One: Introduction**

Industrialized nations are saturated with technology. According to the Pew Research Center (2015), 92% of teens in the US aged 13 to 17 years, report going online daily including 24% who say they are online constantly. Increased accessibility to technology means that communication, information, and distractions in various forms are virtually unlimited to adolescents. The ubiquity of technology and ease of access to social media in school by students and educators raises questions and concerns about student growth and development in educational settings.

Social media platforms provide users with a number of freedoms that allow for exploration of interests, anonymity, privacy, as well self-promotion, increased connections, and expanded opportunities for strengthening relationships. The psychology of social media is a rich and complex tapestry of interpersonal and intrapersonal influences. As technology progresses and social media applications continue to specialize, the digital landscape becomes a fluid environment where adolescents are afforded opportunities to explore identity and social norms (Boyd, 2014).

Digital landscapes provide numerous opportunities for users to explore their identities because they allow for customization of features and various degrees of anonymity. Because these online spaces allow for the exploration of identity for the adolescent, this landscape deserves to be carefully investigated. Given their expanding social roles, "adolescents consciously and conscientiously negotiate the boundaries of public and private spheres as they deliberate about who they are and who they want to be, within their local community and the

larger culture" (Stern, 2008, p.97) and the Internet provides a place for this complex identity work.

Developmental psychology generally understands adolescence as a period of physiological and psychological changes and growth that occurs in a manner that is either discontinuous or continuous, that is, either a gradual process of maturation or a series of stages through which an adolescent experiences particular milestones in identity formation (Susman & Rogel, 2004). Examining the concept of adolescence is a challenging task in and of itself. As such, exploring the relationship between these two forces, adolescent personal identity and social media usage requires a conceptual framework and theoretical perspective for support. As a classroom teacher of psychology who is motivated to better learn how these two forces interact, I draw on Marcia's (1967) adolescent identity framework and sociocultural perspectives to understand students' use of social media at the adolescent stage of human development with the expectation that the study will produce findings that inform teaching (i.e., classroom instruction, content delivery, and/or personal relations with students).

The intersection between the adolescent search for identity and the fluid landscapes of social media are the specific focus of this study. Specifically, my interest focuses on the behaviors of adolescent Facebook users as characterized by Marcia's particular identity types. This endeavor presents challenges in the effort to capture real-time data without compromising adolescent privacy or encouraging socially desirable behaviors while adolescents are being observed.

### **Personal Identity Development and Technology**

The development of personal identity is a complicated process. Individuals must reflect upon their interests and habits. Questioning their roles in society and expectations in society,

individuals clarify their personal values. They might reconsider their preferences of dress, music, and/or relationships (Engler, 2003). The development of one's identity and the choices one makes to edit and revise his or her sense of self may be typified by challenges, barriers, and unanswered questions. The process of establishing an identity involves "integrating into a coherent whole one's past experiences, ongoing personal changes, and society's demands and expectations for one's future" (Sprinthall & Collins, 1984, para. 1). Typically thought to begin as a task in adolescence, the development of personal identity is made all the more complicated by a growing trend toward globalization and the infusion of technology into the daily lives of youths.

Exploring personal identity is facilitated by the influences of modern technology in its various forms of communication, connectivity, and creative expression (Turkle, 2012). At the same time, the tremendous sphere of influence technology exerts upon adolescents in our industrialized nation also makes necessary the added dimension of technological social skills. These are the mannerisms a given society deems appropriate or inappropriate related to the use of technology. As adolescents develop their identity and make choices about their sense of self, it is valuable to assess the ways in which this task is mediated through the use of technology and knowledge of technological social skills. The expanding forms of technology including cellular telephones, digital cameras, personal media devices, PDAs, computers, and Internet applications are commonplace to many adolescents (Pew Research Center, 2015). Of particular interest to this paper, is the use of social networking sites and the ways in which such media outlets have permeated into modern culture. Adolescents are the first to absorb this phenomenon and have quickly attached the regular use of social networking sites (Hofstra, Corten, & van Tubergen, 2015). Social media consumption has become a regular norm of cultural assimilation among US

adolescents (Reid & Weigle, 2016). According to the Pew Research Center (2014), Facebook remains the most popular form of social media followed by Twitter, Instagram, Pinterest, and LinkedIn. For the purpose of this research, I examined the social networking site Facebook because of its relevancy and social significance among adolescents and its potential influence as an instructional tool in my classroom.

### **Social Media Platform: Facebook**

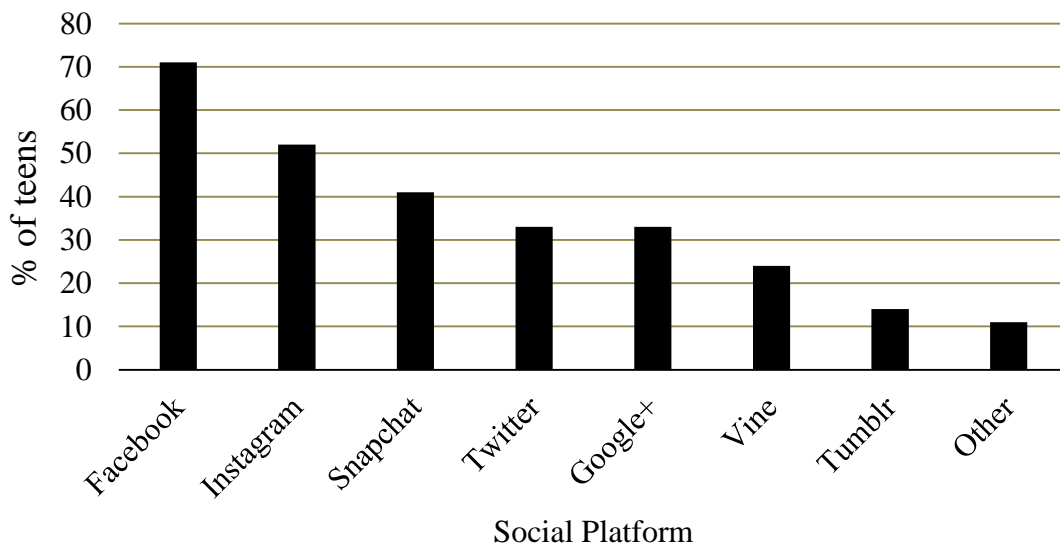
According to their own self-reported statistics, Facebook (2009) has more than 350 million active users. A national sample of 935 youths ages 12 to 17, confirm that 55% of online teens have created an online profile online using a site like Facebook. As of November 2009, 21.5% of Facebook users were 17 or younger (checkfacebook.com, 2009). In addition, the survey reports that 48% of these teens visit social networking sites daily (Lenhart & Madden, 2007).

Concerns of diminishing Facebook use among teens was documented when *The Washington Post* reported that active users had remained stagnant at 84% with no new growth among teens for two consecutive years (Tsukayama, 2013). Yet, 84% of US teens is still a significant faction who utilize a popular social media platform. Given the diversification of social media outlets, teens are moving to other social tools and yet they remain engaged with Facebook as a social media platform. A Pew Research Center report (2015) found that 71% of teens between 13 and 17 years continue to stay engaged on Facebook. Instagram is the second most popular social media platform drawing 52% of teens (Pew Research Center, 2015).

Incidentally, Instagram is owned by parent company Facebook (Upbin, 2012).

As of the first quarter of 2016, Facebook had 1.65 billion active users (Statistica.com). Focusing on the United States, "total minutes spent on social networking sites have increased

83% year-over-year. In fact, total minutes spent on Facebook increased nearly 700% year-over-year, growing from 1.7 billion minutes in April 2008 to 13.9 billion in April 2009, making it the number one social networking site when ranked by total minutes for the month" (Nielsenwire, 2009). The findings from the Nielsen survey are confirmed by CNN that users spend more time on Facebook than any other social networking site (Goldman, 2009). Given the time spent by adolescents on Facebook, it remains crucial for educators to learn why this site is so attractive and to make viable connections to the classroom when (and if) appropriate. Adolescents still demonstrate high-interest for social networking sites, which is often at odds with low-interest in school-related responsibilities.



*Figure 1. Percent of Teens Across Most Popular Social Media Platforms*  
*Note: Teens in survey were ages 13-17, n=1060. From “Teens, Technology, and Romantic Relationships” by the Pew Research Center (2015).*

Investigating how these technological tools aid (or hinder) the search for identity is valuable to parents and educators. For parents, awareness of the roles these technological tools have in adolescent identity development may give parents a richer understanding as to why youths rely so heavily upon forms of technology. It may also provide guidance for parents when

deciding how much technology is 'too much' and which forms are critical for healthy identity exploration. For educators, the insights from this investigation may better inform teachers how to infuse technology appropriately into classroom instruction. It may allow teachers to better deliver content in ways that are more salient and meaningful to adolescent students. If teachers can better understand why adolescents might have a stronger affinity to one form of technology over another, it may lead to improved best practices in curriculum development and teacher pedagogy. A qualitative approach that investigates these issues directly from the teens themselves will provide a rich and insightful collection of data to explore.

Within this landscape of social media use and identity formation, there is a need to reflect upon the evolving nature of the Internet and its role in the lives of adolescents. The proliferation of social media platforms reflects the changing and unrelenting pace of digital environments that require the application of psychological theories in order to account for and accommodate human behaviors (Barak, 2008). This investigation recognizes digital landscapes as meaningful and worthy of serious study in its attempt to observe phenomenon indigenous to cyberpractices.

### **Adolescence and Development**

Personal questions of individual purpose, value choices, and meaningful contributions are not unique unto adolescence, but certainly show themselves throughout the normative course of human development. Bandura (1964) was skeptical about popular claims that adolescence was indeed a distinct period of human development. In particular, Bandura was especially critical of the idea that adolescence is a period of stress and rebellion, claiming that the rate of emotional difficulties is no higher among adolescents than it is among adults.

It is not uncommon for developmental psychologists to disagree about the validity of adolescence itself as a legitimate concept at all. Adolescence is a socially constructed concept



and therefore limited to and influenced by cultural barriers and manufactured expectations of group members (Larson & Wilson, 2004). Typically, developing countries which rely on agriculturally-based economies do not have an adolescence period for youths (Arnett, 2000). Instead, the transition from child to adulthood is marked by an initiation rite or at the very least, an apprenticeship that trains the child to assume work skills of the adult. Given these cultural differences, the data included for this project focuses on research in industrialized nations where a period of adolescence is typical and conforms to the social norms of a society.

Conceptualizations of identity formation and ego development are non-uniform; they are experienced differently by each individual in various ways and in various times across the lifespan (Susman & Rogol, 2004). There are therefore numerous definitions and conceptualizations of identity as a construct that vary across psychological disciplines, life span theories, and developmental milestones. Deciding on a single and comprehensive understanding of identity is challenging and sometimes evasive. Typically, adolescence is understood as a period of identity exploration before adult responsibilities are assumed (Lerner & Steinberg, 2004). A well-established (and seminal) paradigm of identity formation across the lifespan has been influenced by the foundational work Erikson (1950). A number of developmental researchers have attempted to derive testable models from Erikson's research, including Marcia (1966, 1980). Concentrating on personal identity, Marcia developed a status typology approach that was inspired by Erikson's writings (Schwartz, 2001).

### **Technology Use and Access in Education**

Adolescents continue to utilize Internet tools in creative and industrious ways (Boyd, 2014). The ubiquity of technology makes the Internet and related software tools easily accessible among teenagers in the United States (Pew Research Center, 2015). Modern students enter the

classroom technologically sophisticated, although not necessarily critical or reflective of their skill sets nor the wealth of information they can access online (Hull & Schultz, 2001; Street, 2003). Their skills are implicitly formed through their natural inclination towards and regular use of technology. Students can spontaneously transfer certain digital practices from school to home and vice versa depending on the contexts (Digital Youth Network, 2009). Because these skills are present in the classroom, teachers should make efforts to be aware of the different digital habits that are more or less likely to manifest among different students. This knowledge may better enable teachers to provide differentiated instruction or develop best practice strategies for content delivery to students (Tyner, 1998).

School districts promote appropriate infusion of technology into classroom practices in order to better utilize teacher classroom time, accelerate learning, reduce the cost of instructional materials, and offer alternative forms of delivery, yet teachers often remain unsure how to incorporate technology initiatives into their pedagogy (National Education Association, 2008). While pre-service training and professional development can help educate teachers, they must still learn how to address individual student needs and preferences for technology. Different personal, cognitive, or social factors may make some preferences (or aversions) to technology more evident/relevant.

Amid this hurried inclusion for classroom technology and efforts to groom 21<sup>st</sup>-century learners, students bring with them their personal tablets, laptops, e-readers, and smartphones—devices each with connectivity to social media platforms, including Facebook. Understanding why adolescents choose to utilize these social media outlets (and to what extent) can be an elusive effort. Yet, the need to recognize patterns of online behaviors and the influence these behaviors may have on identity formation can become a valuable tool for parents, educators,

policy makers, and developmental theorists (Tyler, 1998). Being able to identify these patterns can enable parents to be more informed about the well-being of their children and their social networking proclivities; it can help educators recognize the types of adolescents in their classrooms and how these students utilize forms of technology in and out of the classroom; and it can help policymakers make data-driven decisions about legislation which better ensures student safety and plans for improved technological infrastructure (Digital Youth Network, 2009; Hull & Schultz, 2001; Street, 2003). Developmental theorists can outline behaviors influenced by an ever-growing digital landscape and challenges of identity formation among virtual social spaces online.

As teachers become increasingly aware of the success of differentiated approaches to learning (Tomlinson, 1999), I hope that the research included here will provide some meaningful insight into teaching 21<sup>st</sup> century adolescents. Amid ubiquitous social media options and the formative years of identity formation, this research topic is timely, relevant, and meets a need for instructional staff.

### **Rationale for the Study**

The need to understand the adolescent learner in the face of changing technology is a relevant concern. As social networking sites like Facebook continue to permeate areas of adolescent life their presence must be acknowledged and understood in a way that could facilitate the goals of educators.

In an overscheduled classroom complicated with curricular demands, student needs, and campus-related distractions (assemblies, fire drills, state-mandated testing), educators could benefit from understanding how to capitalize on social media in order to build rapport with students, expand content delivery options, and bring greater efficiency to the class. Adolescents

are attracted to new technologies and their respective applications (Prensky, 2010). For instance, Facebook supports video, gifs, text, photos, and has a private email and messenger system built into its architecture. Furthermore, it is easily accessible across hardware platforms, has worldwide appeal, and is flexible enough to allow user interface without much difficulty. Adolescents are among the first-adopters of new technologies and applications (Subrahmanyam & Smahel, 2010). Capturing that excitement and transferring it to learning goals could create a momentum that serves teachers and students alike. Appreciating the ways in which opportunities to maximize social media use might coexist with classroom learning objectives might prove to be a valuable connection to teachers. The current study hopes to provide an initial step toward realizing this ambitious vision by examining the relationship between identity status types, social media use (i.e., Facebook) and teaching. Using Marcia's model of identity types (1966), my aim is to demonstrate how the uses of Facebook are related to identity development and the teaching/learning dynamic.

Marcia's model extended the construct of adolescence and helped to refine how researchers better understood the process of identity formation (Adams, Shea, & Fitch, 1979). His model introduced a vision of adolescence that did not conceive of development as a series of stages, but rather as an unfolding process that recognized important milestones of social experiences. The information gained from this research intends to demonstrate how "the digital media practices of contemporary youth can have predictive value" (Buckingham, 2008, p. 87) for classroom uses, particularly, in my content area of Advanced Placement (AP) and International Baccalaureate (IB) psychology. I selected Marcia's model for three major reasons: (a) it has become a foundational theory in understanding identity formation during adolescence; (b) the model continues to have relevancy in spheres of adolescent research today; and (c) the model

was part of our regular classroom curricular syllabus and was to be addressed during the academic year. These reasons made the choice of Marcia both a seamless and timely model to select for this research.

Marcia's model continues to draw the research interests of developmental theorists (Bosch, Serido, Card, Shim, & Barber, 2016; Laghi, Baiocco, Liga, & Baumgartner, 2013; Ryeng, Kroger, & Martinussen, 2013a). Modern applications include areas of personality development, self-esteem, and perspectives on time orientation. Marcia's model provides a language to explore patterns of adolescent development that is not restrictive and creates space for variation of experiences.

Marcia's model has been criticized as being ethnocentric and elitist (Cote & Levine, 1988). The model assumes that over the course of development, the adolescent experiences a series of life challenges that give reason for reflection and contemplative decision making. While adolescent experiences vary across contexts and culture, the criticisms of the model suggest that only citizens of industrialized nations have been afforded opportunities for reflection and thoughtful life-assessment. In fact, this is a challenge to the entire construct of adolescence (and not just Marcia's model alone) as a time for exploration and identity development. Developing nations tend to emphasize rites of passage—transitions from child to adult (King, 2000). The current study may face similar criticisms because the sample is comprised of mostly Caucasian, IB students, in an affluent school. The nature of this qualitative study however, embraces a social constructionist approach. Therefore, I am interested in the individual perspective of each participant, no matter their demographics. Each person's perception of his/her experience is valuable to answering my research questions. Despite the possible limited applicability in developing nations or even simply across different school settings, Marcia's model continues to

offer a meaningful viewpoint on adolescence in industrialized countries that can help in the examination of social media use among students reflecting its different identity types.

Trends of adolescent Internet-use are well documented, but aside from race and gender differences, research into psychological effects are slowly emerging. The empirical studies that have been published are “few and their inconsistent findings render uncertain whether using the Internet has any influence on social outcomes for teens” (Jackson, Eye, Biocca, 2010, para. 7). A considerable body of research has examined the effects of computer use on academic outcomes (NSF Report, 2001; Roschelle, Pea, Hoadley, Gordon, & Means, 2000; Subrahmanyam, Kraut, Greenfield, & Gross, 2000). These studies have examined cognitive effects and neurological changes (Giedd, 2012). The research questions of this study aim to examine the patterns of an Internet behavior (Facebook use) through a psychological framework (Marcia’s identity types). This study helps to fill a need that investigates Internet behaviors from a psychological framework.

### **Purpose of the Study and Research Questions**

This study focused on social media platforms and identity formation among adolescents in a psychology class. The study investigated potential relationships between online Facebook behaviors (such as manipulating personal profiles, instant messaging, uploading photos, using Facebook applications, etc.) among adolescents from industrialized nations who characterize Marcia’s four identity statuses (1967). This study also questioned possible ways Facebook behaviors might better serve my classroom instructional practices.

I drew from Marcia's model (1967) of adolescent identity in order to frame patterns of adolescent development. I used Marcia’s lens to discover behavioral patterns among adolescent Facebook users. Marcia’s model was also an attractive choice because his content was part of the

regular curricular objectives students would experience as part of their senior-year psychology education. I was interested in documenting the ways students who occupy any of Marcia's four adolescent identity types utilize social media platforms, like Facebook, in order to negotiate issues related to identity formation. Marcia assumes that each of his four identity types relate to and experience social expectations differently because of his/her own sense of personal commitments and experiences with crisis (1980). I wanted to know how these differences might be reflected in social networking patterns like Facebook use.

Any potential themes that emerge may help illuminate the attraction to social networking sites and carry implications for classroom teachers of psychology. The research questions are as follows:

- Question 1- Social media: How are students using their social media platforms during their senior-year of high school?
- Question 2- Identity: In what ways does Marcia's model of adolescence identity type help to explain potential differences in Facebook use among adolescents?
- Question 3- Pedagogy: In what ways are students' Facebook practices and teaching practice that relies on social media responsive to one another?

The first question was broad and allowed me to learn which social media the participants found valuable and how they were using these platforms in their academic and/or social spheres. The second question focused on identity using Marcia's model of adolescent identity types to reveal patterns of social media use among participants. These research questions provided me

with opportunities to explore students' Facebook use tendencies and expression of different identity types.

The third question afforded me a chance to explore how my philosophy of teaching (psychology) would be affected by student engagement with social media. I wanted to learn if the Facebook interactions I facilitated as part of my instructional practices were responsive to students' engagement with Facebook. Teachers are regularly encouraged to infuse aspects of technology into their instructional practices (Mumtaz, 2000). This study provided me an opportunity to reflect upon the ways in which Facebook might be better used as part of my classroom teaching. Although there are several creative ways that teachers might be able to incorporate social media platforms into their curricular requirements, the focus of this study will draw on the possible opportunities for Facebook, particularly in the content area of psychology.

### **Background of the Researcher, Curriculum and Teaching with Facebook**

My interest in this research project should also be addressed in illuminating the rationale of the study. I began teaching IB and AP Psychology at my current high school as my first teaching job. Having grown weary of my work in the private sector, I shared my feelings with the principal of the high school who was once my former teacher and who had become a friend and mentor. He suggested that I apply for the available teaching position that had become recently vacant. As a former IB student, I was familiar with the curricular demands of the program and my undergraduate background in psychology was an asset to needed content-specific area. I interviewed and eventually was offered the position as IB psychology teacher.

The curriculum of the IB program is integrative and encourages teachers to intersect with other content areas in a spirit of international-mindedness and critical thinking. To complete the program (IBO, 2010):



students must choose one subject from each of five groups (1 to 5), ensuring breadth of knowledge and understanding in their best language, additional language(s), the social sciences, the experimental sciences and mathematics. Student may choose either an arts subject from group 6, or a second subject from groups 1 to 5. At least three and not more than four subjects are taken at higher level (240 teaching hours), while the other subjects are taken at standard level (150 teaching hours). Students can study and take examinations, in English, French or Spanish. In addition to disciplinary and interdisciplinary study, the Diploma Programme features three core elements that broaden students' educational experience and challenge them to apply their knowledge and skills. (para. 1).

The following illustration depicts the student-centered philosophy supported by the interdisciplinary approach of the IB program.

Students who take psychology in the IB program will have me for two consecutive school years. This affords me a great deal of opportunity to establish meaningful relationships with each of my students and to take full advantage of Daggett's (2014) model of instructional practice.



*Figure 2.* Philosophy of the International Baccalaureate program. The diagram illustrates the holistic approach that is intended to capture the curricular expectations of the program. Students experience an integrated strategy that builds upon an interdisciplinary, liberal arts approach to education.

While the overall focus across the two years with me emphasizes the IB curriculum, I utilize a hybrid approach that integrates the curricular demands of both the AP and IB programs. Generally, the AP program requires a great deal of breadth and the IB program requires a great deal of depth. While a simultaneous approach of two separate curricula poses a precarious situation for both the teacher and the student, I have been able to maintain a passing rate for both the AP and IB exams at 95-100% for over ten years.

During their junior-year of psychology, I teach students the essential content needed to successfully pass the Advanced Placement (AP) exam in psychology. At the completion of the junior year, students sit for the AP psych exam. During the senior-year, my returning students

then sit for the IB psychology exam at the completion of the year. However, this sequence begins during their sophomore year and involves Facebook. At the end of their sophomore year, IB students interested in taking psychology during their junior and senior year receive a notification from me regarding a summer assignment that is due the first day of school of their junior year. The notification includes a QR code that directs students to information about the assignment and an introduction to the purpose of the class Facebook page and social networking philosophy (Appendices L & M).

The introduction explains that the Facebook page is intended to enrich the class conversation and is not required. The effort to invite students to the Facebook page begins an early socialization process for students to know me as their teacher and for me to begin to know them (Gray, 2007). With an average course load of approximately 180 students per year, beginning to identify names with faces helps to establish the first stages of student-teacher relationships. This makes the move from pre-diploma IB (ninth and tenth grade) to official diploma-status IB (eleventh and twelfth grade) more manageable and supportive. A majority of the students in the IB program have attended the same school since their freshman year and have had shared classes with their peers. Still, in a large public high school with over 2500 students, providing a cyberspace for students with a shared class to collaborate and feel welcomed helps to cultivate a sense of academic community and benefits student learning (Dougherty & Andercheck, 2014).

Students are also told to make sure that their profile settings are set to private before friend-requesting me through Facebook. A friend-request means that students actively request to make the class Facebook page part of their regular social network. Every time, he or she logs into his or her Facebook page, information, posts, and bulletins about the class page will

populate the student's newsfeed. “Social networking provides a powerful platform for learning and connecting. This is important not only as a part of the 21st-century educator’s toolbox, but also as a vehicle to provide more opportunities for students to use real-world tools” (Nielsen, 2013, p. 20).

If students choose to join the class Facebook page, they are instructed to send a message along with their request to join that they are student enrolled in psychology with me. This is an effort to make sure that any non-students (i.e. any one not part of my class roster) are not able to view or comment on the virtual posts/conversations. This is a practice to try and maintain student privacy and confidentiality. Students are also encouraged to tell their parents to request to join the class Facebook page. This information is also shared with parents who attend back-to-school night. The effort to include parents is meant to accomplish two primary goals.

One, per school board policy (Appendix N), teachers and students are explicitly not allowed to establish Facebook relationships with one another. Instead, all electronic communication with students must be carried out across school board servers and official teacher email addresses. The purpose of such a policy is to discourage inappropriate communication between teachers and students and to always maintain a public record of exchanges for both student and teacher protection. I share this process with students and explicitly discuss how to contact me via my school-sanctioned e-mail address and not the Facebook page. The same information is shared with parents so that they may observe Facebook posts should they desire to monitor their student's activity.

Second, parents are encouraged to join so that they are abreast of content discussed during psychology class. The hope is that parents will be able to initiate conversations with their student about curricular-relevant information gained from the Facebook page. This serves to

reinforce student learning of psychology outside of the classroom. As a former IB student and long-time teacher in the IB program, I am aware that it is common for parents to distance themselves from questions about homework or classroom discussions as their son or daughter advances further into the IB program. Trying to help his or her student with homework during the senior year is problematic unless the parent is well-versed in advanced concepts in chemistry, physics, mathematics, literature, anatomy, and philosophy. It may be the case that it has been several years since parents were familiar with the nuances of these subject areas (if at all). As a result, it has been my experience that parents tend to distance themselves from asking what the student covered that day at school or if the parent can help with homework. Rather than propagating a continued alienation of the parent, I remind parents that psychology is very accessible to the student and the parent. I invite parents to come back to school-related conversations with their students by using psychology as a portal. Families are connected to the classroom content and inclusion is promoted (Nilesen, 2010). In my philosophy, each person, both student and parent, already know the characteristics of psychology simply by experiencing the everyday unfolding of life. What happens in the classroom is a critical examination of which researchers named a phenomenon and what method of investigation was used to support their claims. Aside from these curricular details, students and parents can still have a conversation about their opinions on topics of psychology and the stories and news items I post to the Facebook site.

I use the profile name of Phineas Gage for my class Facebook page. The name itself is a reference to a famous case study in the field of psychology with which students will become familiar (and some students research this case study even before class has formally begun). A recent image of my Facebook page is included (Appendix O).

There is a reciprocal dynamic that has evolved from using Facebook as an enrichment tool for psychology class. When I post a story about a current curricular unit, some students are apt to 'like' the story or post a comment in response. The virtual dialogue that follows reveals to me deficiencies in content-understanding and/or reveals a heightened interest in a specific topic. Thus, the Facebook exchange becomes a formative assessment tool that I can use to improve, review, or elaborate on instructional practices back in the classroom. Additionally, the Facebook exchange has the added benefit for the student to see relevant connections to psychology in real-world applications that move from the theoretical to the practical and reinforce student engagement for deep understanding.

Although not currently in place as one of my active strategies, some classes that utilize Facebook have integrated its technology features into the course curriculum. As part of a class assignment for Introduction to Sociology at Baylor University in Texas, students were asked to post a photograph or video of themselves violating a social norm (Dougherty & Andercheck, 2014). This practice of integrating Facebook into course instruction makes the completion of the assignment much more likely since students do not need to log into a traditional online course management infrastructure like WebCT or Blackboard. They are instead simply using a social media tool that was already part of their normal daily activity.

After establishing a two-year relationship, the use of the Facebook page also provides former students with an opportunity to maintain contact with me. Of particular interest are the numerous examples former students post regarding their continued study in psychology through post-secondary studies and the comments former students post about how they are learning information in college that they previously learned in high school. I enjoy these posts as they

tend to provide evidence to my current students that the information they are studying is indeed relevant to a continued education in the field of psychology.

I also use Facebook page to post professionally-related pictures that demonstrate my continued and genuine interest in psychology. I hope that by modeling my authentic excitement for the subject area, students will also become energized about psychology and will be motivated to further their studies. Following is an example of such a post with 62 likes from students.



Figure 3. Photograph posted to Phineas Gage Facebook account documenting my attendance at a psychology conference over winter break.

## **The School in the Study**

In the school district in which the site of the study is located, the 2014-2015 District Strategic Plan includes goals to increase digital learning services and electronic resources such as digital content, e-textbooks, and mobile devices in school, after school, and out-of-school (Pinellas County School District, 2014). The site of the study was a public high school situated in the western portion of central Florida that houses three programs: the IB program, a biomedical program called the Center for Wellness and Medical Professions, and the traditional general education program. According to the school district's website (2016) the school in my study has the highest rate of graduation of all high schools in the county, the school has never received any grade other than an "A", and was listed in U. S. News & World report of best high schools. The IB program at the school has consistently maintained the second highest percentage of awarded diplomas in North America since its beginning in 1997 (pcsb.org, 2016).

The school has approximately 2,500 students enrolled annually with about 120 full-time teachers (K. Gonzalez, personal communication, March 17, 2016). The majority of its students are White (82%), followed by Hispanic (8%), Asian (6%), and Black (2%). As an economic indicator, 14% the students receive free lunch and 4% receive reduced lunch (high-schools.com, 2016). This means that about 18% of the total student body on free or reduced lunch assistance, which was significantly lower than the state average of 51% (high-schools.com). At the time of the study, 53% of students were female; 47% were male (high-schools.com, 2016). The school also provides campus wide wireless access to the school's network for all staff and students. Students are welcome to connect their wireless devices to the school's signal. There were five computer labs and three mobile computer carts on campus which means that approximately 240 students can be online at once independently of one another. As a teacher in the school, I found



the funding to be generous in that funds for classroom resources/materials either came from the principal's discretionary budget, the Increase Literacy Awareness funds, IB-support funds, school-enhancement funds, or PTA funds. If there was any equipment, book, technology, or professional development activity I needed, access to monies at school was granted.

The school was fortunate to have a great deal of financial support from parents and community businesses. The school has experienced only minor incidences of behavioral disruptions among the student body and generally, maintains a very safe campus. These characteristics are typical for the school side and provide a context that is important in order to understand my research questions and the identity process my students' experiences.

Students in our program remain with the same teachers during their junior and senior years. This affords a great deal of relationship building with students and curricular scaffolding year-to-year. In addition, our program operates on a block system with a rotation of three days; meaning, I do not see my students every day, but rather I see them once or twice a week depending on the schedule. The schedule is what we call an A, B, C-day: Monday is A-Day, Tuesday is B-Day, Wednesday is C-Day, Thursday is A-Day, and Friday is B-day—the sequence continues in succession onto the following weeks. This means that while in-class time is almost two-hours of instruction, it also means that each class session is days apart at a time. As a new teacher, this seemed problematic to me for my instructional goals. I find value in the block schedule approach, but was weary of having infrequent contact with students.

### **Teaching Philosophy**

My philosophy of teaching was heavily influenced by my former teacher-cum-mentor. He was the principal of the school and was very supportive of professional development. At our monthly faculty meetings, he would invest several minutes to review a research study about

effective pedagogies or best teaching practices. He encouraged data-driven instructional techniques, creative classroom management approaches, and each school year he would purchase a book for the entire faculty from a researcher/educator that we would eventually complete by the end of the school. He was a fantastic, thoughtful, and patient administrator. As one of his former students, I can also attest that he was humorous, challenging, and clearly offered unconditional regard for his students. If I had only known then that I was to be a teacher, I would have paid greater attention to his strategies and classroom practices, but I was a freshman so paying attention to anything at all was not yet one of my strengths. Eventually what my former principal impressed upon me as a teaching philosophy for my IB students was to emphasize: rigor, relationships, and relevancy (Daggett, 2011). This means clearly articulating high academic expectations of success for each student and helping him or her to accept accountability of his or her educational experience. It means learning to build positive and meaningful connections with students that convey patience, empathy, and visibility in their academic spheres. Finally, the approach emphasizes the need to connect curricular demands with real-world applications and to help students to understand why what we learn matters to them. The Daggett model (2011) emphasizes the role of the teacher to facilitate learning in a student-focused environment that supports student needs and flexibility to meet shared learning goals. It was the Daggett model, by way of the mentorship of my former principal, that truly informed my teaching methods. In order to honor the triarchic framework that constitutes the Daggett approach, I was excited to take advantage of emerging social media platforms. The ease of virtual connections provided by social media sites meant that I could readily support relationship building. The ability to share content with friends also meant that I could offer news stories with students that were related in any way to our studies. I would be able to continue, at least

virtually, the classroom discourse of psychology with my students outside of class and offer them opportunities to think about our content at various times and on various topics thereby following the Daggett framework of rigor, relationships, and relevancy.

One obstacle to relationship building was the three-day block rotation. Relationship building needs time and shared experiences. My effort to help engage with my students before regular class was to take advantage of the Facebook platform. I knew my students were on Facebook exchanging help and sharing status information. I was hesitant to use my personal Facebook profile page as a means for student communication. My sense of professional ethics understood the need to separate teacher/student familiarity. I had no content on my page that was especially embarrassing or inappropriate. What concerned me most were my adult friends who were not teachers. Their posts or comments to my profile, while always intended with love and humor, may have been perceived as aggressive and/or suggestive to my students. I wanted to make sure I was modeling a professional and academic atmosphere to my students so that I retained a sense of authority. The best course of action then was to create a separate Facebook page unique and separate from my personal and private life.

I should also confess that the Facebook terms of use expressly forbid a user to create a profile with a false name or under an identity that does not accurately represent the user (Facebook, 2016). I was clearly violating the terms of agreement and subject to administrative removal and/or account deactivation. As I explored the Facebook landscape, I learned I was able to create a fan page that could be used as a sort of landing page where I could post comments and articles for students. I was allowed to name it something innocuous like Mr. Valdez's Psychology Page or IB Psych. The problem with this option however was that the fan page would be made public to the entirety of Facebook users. This meant that anyone with a Facebook

account would be able to read my comments intended really only for my personal students. Further, anything my students posted on the fan page would be visible to all users. Again, my sense of professional ethics alerted me to the violation of student privacy that could result from this option. While I was sure that a majority of students and parents would find it acceptable to join the fan page for the purpose of classroom connections, I thought it inappropriate to ask students to risk such violations of privacy. I wanted only my students from my school in my program to be part of the group so that there was freedom to share esoteric references and provide the safety of known users who commented and posted. My only option therefore was to opt for a more restrictive page that meant I would need to create a user profile.

Initially, I thought of using my first and last name as the name for the profile, but I did not even use my real first and last name for my own personal Facebook page. I was not enthusiastic about leaving digital footprints in a growing and uncertain virtual landscape where identity concerns and personal data tracking were still uncertain. What name to use if not my own? This reasoning led me to finally settle on an infamous case study well known in courses of introductory psychology, Phineas Gage.

Throughout my undergraduate education, the story of Phineas Gage seemed to continually emerge. His story was part of my high school experience, then again in college in introduction to psychology, again in biological foundations of psychology, cognitive theories of psychology, developmental psychology, research methods in psychology, and abnormal psychology. I remember thinking, “Why is everyone making such a big deal about this guy? I get it already!” Phineas showed up again during the completion of my first master’s degree in Boston. Another cognitive psychology class included his story and by then I had resolved to forever despise his case study forever more. Fast forward, I begin teaching high school and the

bitter irony of the situation is that I am hired to teach psychology—a part of which includes me having to talk about Phineas Gage! Each year, as I covered the unit on biological bases of behavior and I knew that the story of Phineas Gage was soon approaching. Year and year, begrudgingly, but with humor, I shared with each class the back story of Phineas and I and our tumultuous relationship. Pedagogically, this aspect allowed me to share with students that even as a psychology teacher, there are some topics we discuss that I did not really enjoy. I think it served to make me more approachable and real. I am excited about our topics in psychology, but even I have limits to my enthusiasm about what we learn. I felt as if students appreciated this. Maybe it was my inner-Buddhist, but I decided to embrace the thing that I despised most in psychology and make Phineas Gage my online identity for our class (Appendix O). He became our class mascot in a way and has seemed to acquire his own personality over time. He is also incidentally the inspiration for our class Twitter account as well. The Twitter account I created is open to any user worldwide and not restricted to my students only. I felt it was inappropriate to include as part of this study. In addition, the Twitter account is used exclusively to disseminate AP psychology information and review questions for three months of the school year. The content, the time frame, and the audience made its consideration discordant for this particular sample of senior-level students. Social media has become a way to support learning in my class because it can easily connect me with students on the several days that I do not have face-to-face encounters. The material I post/send are gentle indications of how applicable psychology is to each of our lives. It serves, I hope, to remind students about how relevant the content we read about in a textbook is actually alive and given texture in the real world outside of our classroom.

Although not a requirement, students with Facebook accounts generally friend request Phineas. I never accept friend requests from students who are not in our class. After graduation,

many students continue to stay friends with Phineas. Our IB program is a college-readiness curriculum and former students continue to post to Phineas' page about their encounters with the story of Gage when they take psychology classes in college. A majority of the IB students who remain in the program to completion are accepted to an undergraduate program.

Because this study engages a sociocultural perspective, it is necessary to provide background about the context of the participants. The perspective assumes behavior is best understood within the context of the individuals' lives, habits, and values (Vygotsky, 1934/1987). It was helpful therefore, to provide some context about the school site and its typical characteristics. A sociocultural perspective values the dynamic interaction between individuals and their society. While the physical and biologically-related changes that take place are fairly universal, the social and psychological dimensions of adolescence are highly dependent on culture and context. With regards to this study, the aspect of adolescence most salient, is identity formation.

### **Conceptual Framework**

I selected Marcia's (1966) conceptualization of identity as a theoretical framework to provide clarification of terms, constructs, and data collection methods. This model offers a description of identity, not as a stage process, but rather as different types that can change as the adolescent continues to accrue various life experiences.

An adolescent's identity type is determined by two major influences. In Marcia's model, the "construct [of identity] is based on independent dimensions of exploration and commitment. Exploration represents the search for a revised and refined sense of self, whereas commitment represents the choice to pursue a specific set of goals, values, and beliefs" (Schwartz, 2002, p.610). Each dimension is characterized as being either high in attainment or low in attainment

within the adolescent. The result is four identity statuses that are conceived as "individual styles of coping with the psychosocial task of forming an ego identity" (Marcia, 1966, p. 558). As adolescents mature and encounter these statuses, I want to learn how (if at all), their social networking behaviors may change, differ, or manifest. Do these status types typify specific networking behaviors that might better inform my instructional practices or provide me with helpful information about how to structure my classroom.

Table 1

*Marcia's Matrix of High and Low Dimensions of Commitment and Exploration*

		Exploration	
		HIGH	LOW
Commitment	HIGH	Achievement	Foreclosure
	LOW	Moratorium	Diffusion

*Note.* From "Development and Validation of Ego Identity Status" by J. E. Marcia, 1966, *Journal of Personality and Social Psychology*, 3 (5), 551-558.

The four identity statuses represent different patterns of adolescent identity expression. Marcia theorized that adolescents could change their statuses as they altered their commitment and exploration levels. These statuses have been associated with distinct personality characteristics, but there is no clearly established developmental sequencing of statuses (Waterman, 1982).

The identity statuses are characterizations of types, not developmental stages. They encapsulate patterns of behaviors and tendencies of adolescents as they navigate a personal identity.

Table 2

*Marcia's Four Identity Status Types*

<u>Identity type</u>	<u>Explanation</u>
Achievement	represents the consolidation of a sense of self following a period of exploration
Diffusion	represents a pattern of apathy, disinterest, and lack of direction
Foreclosure	represent adopting goals, values, and beliefs from parents/other authority figures with little critical thought
Moratorium	represents active exploration without commitment; often serves as a precursor to achievement status

*Note.* From “Development and Validation of Ego Identity Status” by J. E. Marcia, 1966, *Journal of Personality and Social Psychology*, 3 (5), 551-558.

Researchers, however, have not investigated how these four different statuses might exhibit various behaviors while in virtual spaces and digital landscapes. Of particular interest to this paper, is how the behavior of different status types might manifest when adolescents engage on social networking sites, including Facebook.

Research concepts draw from Marcia. A broader theoretical context situates the research in social constructivism. This foundation is explored more deeply in the subsection of assumptions that follow. Social constructivism honors the personal experiences of the individual as important constructs of reality. Our perceptions of reality are informed by beliefs and interactions we encounter throughout our lives (Burr, 2015). The theory suggest that our shared understanding of the world creates common perceptions of reality; meaning is shared constituting a consensual notion as to what comprises knowledge (Andrews, 2012). The social



constructivism approach is an appropriate fit for the research of my research questions because it recognizes that each user engages with social networking platforms, like Facebook, for different reasons, each one a legitimate and accurate perception of reality for that individual person. The approach does not chastise participants for being wrong or misperceiving some system of culture, instead, it respects that each person's reality is the result of their experiences. Given the highly personalized and customizable nature of social networking, social constructivism provides a broad epistemology to capture rich and detailed data about how my participants see the world of Facebook.

Employing sociocultural learning theory, social constructivism, allows me to focus on how participants understand their Facebook use and in what ways, if any, it is situated as part of their identity construction. I honor the voices of my participants and seek to reveal the possible ways in which their interpretation of reality holds meaning for them. According to Burr (2015), identity originates from the social realm, not from inside the person. By exploring these social influences and how they are understood, my research questions can illuminate insights into classroom practices and implications of social media use. My teaching philosophy of social constructivism coupled with the teaching about social-psychological influences of personal identity supported this exploration of *individual* identity as involving the *social* construction of knowledge of subject via social media. Although individual users may experience and understand their Facebook usage in different ways as they construct their realities, there are shared practices that are common to many people. Each individual's perception of social media helps to create the larger social narrative about this technology. I wanted to understand how identity is influenced as a person contributes to and learns from this shared perception.

## Assumptions

According to Benner (2008) “researchers should take note of their assumptions coming into the research with the aim of making them as clear as possible” (p. 462). I held five significant assumptions in order to execute this study. The first assumption was that the concept of adolescence is indeed a real and valid concept of developmental life span even though cultural considerations challenge the position that adolescence is understood or even experienced in the same way (or at all) around the world. Parental separation, gender socialization, and social norms vary across dimensions of culture, which make the experience of adolescence different for many youths (Papalia, Olds, & Feldman, 2009, p. 607-608). In this body of research, I contend that although adolescence is a varied experience, it is indeed a valid concept that is worthy of investigation. To this end, I rely on Marcia’s (1980) theoretical framework of adolescence as a construct characterized by a period of identity exploration before assuming adult roles in which experiences of crisis and a degree of commitment must be resolved.

Second, I assumed that Marcia's characterization of adolescence was the most viable for the purpose of exploring my research questions of identity (Marcia, 1967). Although there have been several definitions of adolescence, Marcia's conceptualization was originally inspired by Erikson (1968). I make the assumption that Marcia's framework is the most appropriate by which to examine adolescent identity.

My third assumption was that the ways in which adolescents use social networking platforms might vary according to their different identity statuses across their lifespan process. Fourth, I assumed that the digital behaviors of adolescents while engaged on Facebook reflect meaningful patterns of identity. Finally, the fifth major assumption was that the theoretical

approach to learning guiding analysis of the data would be a social constructionism (i.e., sociocultural learning theory).

This approach assumes that culture is the filter through which all human experience and phenomena should be understood (Bruner, 1990). The way in which the world is perceived is one's reality. People construct their own sense of reality and use aspects of culture (language, traditions, values, emotions, etc.) as the tool to give a narrative to their lives. This theoretical approach respects the belief that all meaning reflects an individual's point of view and that the nature of meaning is relative, social and inductive (Raskin, 2002). This view of learning offers a useful grounding for a qualitative study because I am seeking to learn how adolescents (who are maturing with a growing awareness of social expectations) experience social networking technologies.

### **Limitations of the Study**

While the study provides useful information about the behaviors of online adolescents, there are several limitations that should be noted. The problem of investigating how Facebook behaviors might reflect identity is cumbersome. Facebook continues to expand and new features and applications continue to be included in Facebook upgrades. This fluidity of Facebook improvements poses a challenge to capture a picture of how users employ Facebook into their lives. There is a need to take a static record, a metaphorical snapshot, of how adolescents utilize Facebook in the dynamic landscape of social networking. Further, some adolescents use Facebook in ways that are relatively passive—having perhaps only a profile, but checking their page infrequently or not at all. For a variety of reasons, there are adolescents who have no interest whatsoever in social networking sites. They continue to remain offline and leave no digital footprints. Finally, the issue of investigating Facebook behaviors is complicated by the

fact that adolescents who choose to engage with the Facebook platform might do so via different forms of hardware. With a particularly smartphones or tablets, it is possible to interface with Facebook without access to a personal desktop computer. This kind of cloud computing itself poses new challenges for research methodologies and collection tools since the mobility and portability of integrated technologies has made much of the early hardware needs invisible (Zhang, Cheng, & Boutaba, 2010).

Another limitation is the small sample size. The sample of four students is intended to give close examination of what Stake (2006) calls “the ordinary happenings for each case” (p. 29). This limitation is best mediated by efforts to ensure transferability. Transferability is the similarity between contexts that connects shared common human experiences that are congruent with one another; what Patton (2002) calls fittingness. Careful documentation and thorough analysis will help to address potential opportunities for transferability that may exist between and among my sample participants. My concern, therefore is not about greater generalizability, but rather detailed descriptions of student experiences that authentically reflect student experiences.

The small sample size (n=4) may increase the risk of maintaining anonymity. This potential limitation and the extent of my ability to guard against it was shared with all willing participants and their parents during the solicitation process in order to provide them with a complete understanding of associated risks and privacy limits. Pseudonyms were employed to address this concern. In addition, Facebook photos/content obtained from participants’ profile pages were obscured and/or had specific details redacted when possible to protect each student’s privacy. I made earnest efforts protect the visual confidentiality of each participant of the study both verbally during the recruit process as well as in written format in the informed assent

obtained from each student (Appendix H) as described in the IVSA Code of Research Ethics and Guidelines (Papademas, 2009).

Concerns over a potential digital divide, student-socioeconomic differences, and digital literacy skill sets may have discouraged some participants from creating online profiles in order to participate in the study. Because this study emphasizes the behaviors of adolescents who are already actively engaged on social media, some narratives may be skewed toward a particular segment of the adolescent population. For example, those adolescents who are likely to be included in this study are those whose households have disposable incomes that permit Internet access (i.e. dial-up, cable, wireless, etc.) and/or the luxury of networked computers/mobile devices. As part of the research process, I have an ethical responsibility to accurately report each participant's narrative of his/her social media practices. Potential differences in online accessibility, hardware availability, or knowledge of social media features are important to document. Each student's experience with social media is valuable for me to record so any differences I might discover do not weaken the study, but serve to enhance each unique narrative, thereby strengthening credibility and increasing the likelihood of transferability. Potential socioeconomic status differences were explored with participants during the semi-structured interviews. Data analysis was conducted in such a way as to be mindful of this possible demographic feature.

Another limitation concerns the methods of the semi-structured interview portion of the study. The interviews (Appendices E, F, G) I conducted run the risk of social desirability among participants. This is generally a concern for any interview approach (Coolican, 1999). I relied on my established trust and rapport with each student in order to discourage social desirability. As part of the purposive sampling method, I was careful to select participants whom I felt would

provide trustworthy responses and understood that as part of the research process, I was not looking for any particular responses. This was explained as part of the initial recruitment process and reiterated to each of the four participants after the purposive sampling criteria was met. It was also helpful that the participants themselves, had been trained in methods of data collection (both quantitative and qualitative) as part of the IB psychology curriculum. Each of the participants had conducted a single true-experiment across several months as part of an IB requirement and were well aware of the issues that researchers face as they collect meaningful data. Before each interview, I read a standardized script (Appendix E) reminding participants that I was not expecting anything in particular. I explained that I was interested in their experiences online in their own words to whatever extent they felt comfortable sharing. To this end, I felt confident that I was able to elicit honest and fruitful responses from my students.

### **Definitions of Terms**

The scope of the research question includes several constructs that need to be addressed. Significant terms important to the study should be given attention so that the reader is clear about their use in this research. The literature review in the following chapter will provide greater background, but for the purpose of an introduction, the following terms are defined here to better direct the reader about the nature of the research: adolescence, identity, social networking site, and digital behaviors.

Typically, in industrialized nations, adolescence is a considered a period of transition between childhood and adulthood (King, 2000). During this moratorium, youth generally explore different aspects of their identity since they have not yet assumed adult responsibilities. While the concept of adolescence is indeed a cultural luxury for youth, the delay has the benefit of providing a psychosocial space for adolescents to consider vocational opportunities, educational

possibilities, relationship concerns, as well as social expectations. This developmental period varies in range, but generally is thought to begin at the onset of puberty (Susman & Rogol, 2004) and extends to the age of 18 to 21 years of age. I will draw from a definition of adolescence that sees this as a "period of development characterized by biological, cognitive, emotional, and social reorganization with the aim of adapting to cultural expectations of becoming an adult" (Susman & Rogol, 2004, p.16). The theoretical approach of this paper draws from the developmental paradigm of adolescence as researched by Erikson (1968) who posited that adolescence was a time of self in transition for the purpose of exploring the identity process. This early approach is central to the definition of adolescence as another researcher, Marcia (1980), later expands upon this construct. It is Marcia's model that provides the identity status that I rely upon to address the research questions.

The definition of identity poses its own set of challenges. Identity is the sense of self a person constructs, but this sense of self can change depending on the context. Generally, researchers discuss identity in one of three forms: personal identity (which includes unique biographical stories about past events and historical narratives), social identity (which includes those categories a person belongs to by virtue of membership like ethnicity, gender, religion), and ego identity (which is a subjective sense of how we think of ourselves as a person and how we feel about ourselves in relation to the world) (Goffman, 1969). The current study draws from the latter dimension of identity which focuses on ego development, but this is not ego as in, an inflated sense of self, but rather a personal development of self. My study draws from the model of identity originally proposed by Erikson (1968) and then further detailed by Marcia (1966). Marcia's conceptualization of identity proposes that adolescents are wrestling with their developing ego through a series of commitments and crises they encounter as they navigate adult

roles and social expectations (1966). For Marcia, "identity refers to an existential position, to an inner organization of needs, abilities, and self-perceptions as well as to a sociopolitical stance" (Marica, 1980, p. 159).

Identity, therefore is a changing and personal conceptualization of one's sense of skills, one's place in the world, and one's understanding of internal motivations. This definition will provide a foundation for the intent of this study's research questions. As I explored the use of social networking sites, such as Facebook, the definition of identity posited by Marcia guided the interpretation of data and influenced the construction of stems on the interview instruments (Appendices E & G). I am drawing from a constitutive definition of adolescent identity that purposes identity is a cohesive sense of self that reflects one's roles and responsibilities into the society; concretization of values and of those things which are important to self. Psychologically, Marcia's framework of adolescence distinguishes between four identity statuses: achievement, diffusion, foreclosure, and moratorium. For the purposes of this study, I will distinguish participants by their identity status relying on the Ego Identity Process Questionnaire (Appendix C) (Balistreri, Busch-Rossnagel, & Geisinger, 1995). The score achieved by participants on the instrument will determine the status type.

A common understanding of what comprises a social network should be outlined. The digital landscape changes so frequently, that it is important to settle on a definition that situates the context of this study for the reader. To that end, I rely on the definition of a social networking site as described by Boyd and Ellison (2013) social networking sites are:

Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a



connection, and (3) view and traverse their list of connections and those made by others within the system. (p. 1)

In their description, a social network is a web-based service whose infrastructure permits users to create personal profiles and connect with other users who share interests. Specific to this study, I will focus on the experiences of participants and their engagement with Facebook as a social networking site. The continued popularity of Facebook among teens (Pew Research Center, 2015) relative to other networking sites and the varied communication features that comprise the Facebook infrastructure justify its investigation with regard to the research questions.

Finally, the concept of digital behaviors needs to be addressed. Digital behaviors refer to a host of skills, abilities, and patterns of outwardly demonstrable actions that reveal some degree of digital literacy. Understandably, the term can lead to misconceptions and areas of ambiguity. In this paper, digital literacy involves an awareness of not only of hardware/software components, but goes further to include an understanding about how to evaluate, organize, and create with these tools (Buckingham, 2008). A complete and exhaustive list of specific behaviors is unlikely to be constructed. Technologies continue to rapidly evolve and devices continue to become more integrated. Still Bawden (2001), has assembled a description of digital literacy that captures the spirit of the current research aims:

- “knowledge assembly,” building a “reliable information hoard” from diverse sources
- retrieval skills, plus “critical thinking” for making informed judgments about retrieved information, with wariness about the validity and completeness of internet sources
- reading and understanding non-sequential and dynamic material
- awareness of the value of traditional tools in conjunction with networked media

- awareness of “people networks” as sources of advice and help
- using filters and agents to manage incoming information
- being comfortable with publishing and communicating information, as well as accessing it

The current research will draw on this understanding of digital literacy as adolescents are observed and interviewed about specific Facebook behaviors. Holistically, a firm definition of digital literacy includes complex cognitive, motor, sociological, and emotional skills that are used in order to navigate effectively in a digital landscape (Eshet-Alkalai, 2004). The expression of digital literacy skills as revealed through Facebook use are my point of interest. These Facebook behaviors include any kind of activity in which the adolescent engages while accessing the Facebook social networking site. These behaviors include, but are not limited to, posting status-updates, bulletins, updates, and comments/"likes" to profile pages. In addition, activities also include uploading videos, photos, and hyperlinks to Facebook pages. Facebook behaviors include instant messaging with other users, utilizing any number of Facebook applications, joining or starting fan pages, and/or joining and starting Facebook groups. I also investigate how adolescents access Facebook—whether from a computer at home or other place of interest, or whether by a mobile phone or combination of these. These behaviors demonstrate, in part, a degree of sophistication and understanding adolescents use in order to successfully maneuver through the digital infrastructure of the 21<sup>st</sup> century.

## Chapter Two: Review of the Literature

### Conceptualizations of Adolescence and Identity

My research concerned the process of identity formation. The research questions were:

Question 1- Social media: How are students using their social media platforms during their senior-year of high school?

Question 2- Identity: In what ways does Marcia's model of adolescence identity type help to explain potential differences in Facebook use among adolescents?

Question 3- Pedagogy: In what ways are students' Facebook practices and teaching practice that relies on social media responsive to one another?

Traditionally, the search for personal identity is understood as a task that begins during adolescence. During this time, adolescents are transforming physically, cognitively, and experiencing new social situations. These changes provide adolescents with opportunities to problem-solve, assume responsibilities, and explore dimensions of identity.

The literature review begins by highlighting relevant conceptions of adolescence from the major psychological approaches. This review focuses primarily on the research of identity formation and the seminal work leading up to the model proposed by Marcia (1966). Marcia's identity status types are essential to fully develop responses to the research questions. The literature review on identity status examines ethnic and gender differences, modern applications of Marcia's model, and the survey tool used to determine adolescent statuses.

Following an examination of Marcia's theoretical base, the literature review discusses digital natives and their immersion in technology in a modern age. The numerous forms of technology hold implications for adolescents given the way they learn. Additionally, this consistent exposure to the vast array of technologies may also affect classroom instructional strategies. The literature examines how these students adapt to classroom demands and the practices teachers employ.

Finally, the literature review discusses social networking trends and the representations of online identity that are possible. In particular, the review examines Facebook properties and the convergence of identity and technology. As a popular social networking platform, the literature review outlines how teens are using Facebook.

An early and historical conceptualization of adolescence was posited by G. Stanley Hall. Traditionally accredited with being the first psychologist to purpose a scientific study of adolescence, Hall described adolescence as a period of '*Strum und Drang*'—storm and stress (Hall, 1904). Hall was alluding to a German literary movement as a metaphor to characterize the psychological processes he saw occurring during adolescence. For Hall, both were filled with an excitement for idealism and passion to execute a goal; there was a rejection of what came before and a prolific expression of angst and suffering. Hall described adolescence as a new birth that occurred beginning with puberty, about 12 years of age, to between 22 and 25 years old. He suggested a psychological theory of recapitulation predicated upon Darwin's theory of evolution. During adolescence, the individual experiences several states that directly correspond to those that have occurred during the history of mankind. The individual "relives the development of the human race from early animal primitivism, through a period of savagery, to the more recent civilized ways of life that characterize maturity" (King, 2000, para.3). The turmoil that youth

experience is therefore best understood as extreme oscillations between what are often contradictory tendencies. Hall proposed that during adolescence the peer group has considerable influence over the youth. "Hall described the adolescent as wanting solitude and seclusion, while he finds himself entangled in crushes and friendships" (King, 2000, para. 4).

Since Hall, theorists have outlined numerous approaches to define and explain adolescence. These perspectives have focused on characteristics researchers believed were the most meaningful and illuminating to the investigation of adolescence. Researchers tend to align with approaches, that are categorized as belonging to psychoanalytic, cognitive, behavioral/social, ecological, or an eclectic theoretical orientation. At times, there is overlap among some of the assumptions of these approaches, but each has its own unique sense of epistemology that brings added empirical value to the body of research on adolescence.

Historically, each of the major approaches in psychology have attempted to characterize adolescence through their respective theoretical lenses. Psychoanalytic (Freud, 1995), cognitive (Eysenck & Keane, 2005; Piaget, 1954), social learning (Bandura, 1977), behaviorist (Skinner, 1938), and constructivist (Engler, 2003) theorists have each outlined a framework of adolescent development. While each of these foundational approaches have established important methodological, theoretical, and epistemological value to understanding lifespan psychology, the approach that carries the most relevance to the current study comes from the psychosocial approach.

The intersection between adolescence and identity formation is best understood through the early research of Erikson (1950). Erikson's seminal work on adolescence in the psychosocial approach explores development in stages (rather than through a discontinuous construct) and allows for the flexibility of change throughout the lifespan (rather than being stabilized by

puberty). His work inspired further investigation from fellow developmental psychologist, Marcia (1980), who's research in adolescence is central to this study's aims.

Erikson focused on the psychosocial dimensions of development, rather than the psychosexual features highlighted by Freud. Erikson's (1950, 1968) eight stages of psychosocial development provide a general framework by which to consider the growth of the individual. Erikson's stages are normative and embedded within a given culture. Rather than emphasizing the sexual energy that Freud outlined, Erikson posits that the true motivation for human behavior is the need to belong and connect with others in society. This cultural framework provides a context for the goals each person is expected to accomplish. For Erikson, the struggle to accomplish each task is characterized as a crisis—a necessity that each individual must resolve in order to move forward. Within each stage, the individual must resolve a crisis with possible positive or negative outcomes. Each stage builds on the previous ones and influences later stages. If the person is unable to resolve each crisis satisfactorily, the individual will continue to struggle with his or her sense of identity later on in life. Erikson's model emphasized the task of ego formation throughout the lifetime of an individual. As such, identity formation is a significant characteristic of all of Erikson's stages, but has a specific role in stage five: identity and repudiation versus role diffusion. According to Erikson this stage is typically encountered between the ages of 12 to 20; a period broadly described as adolescence (Erikson, 1968). Erikson (1959) previously described adolescence as:

The process of identity formation emerges as an evolving configuration—a configuration which is gradually established by successive ego synthesis and resynthesis throughout childhood; it is a configuration gradually integrating constitutional givens, idiosyncratic

libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles. (p. 116)

According to Erikson (1968), during stage five, the individual typically has the explicit task of wrestling with his or her identity during adolescence. In this the period, the adolescent experiments with properties of identity in order to enter society as a young adult. He or she must resolve this crisis to have a cohesive and well-developed sense of self. Erikson maintains that the individual and society create the identity together. The adolescent seeks his or her true self in part by social referencing his or her ambitions, motivations, and desires against peer groups, family members, and other institutions within his or her society. During this stage, the adolescent has a preoccupation with and commitment to being genuine, honest, and faithful to oneself and to others (Markstorm & Marshall, 2007). Successfully resolving the crisis of identity means that the adolescent is able to demonstrate commitment and service to an ideological source. "Identity is the understanding and acceptance of both the self and one's society" (Miller, 1993, p. 159). The adolescent emerges from this stage adjusted to the expectations of his or her society and possesses inner conviction about his or her role and value. According to Erikson (1959):

The period can be viewed as a psychosocial moratorium during which the individual through free role experimentation may find a niche in some section of his society, a niche which is firmly defined and yet seems to be uniquely made for him. In finding it the young adult gains an assured sense of inner continuity and social sameness which will bridge what he was as a child and what he is about to become, and will reconcile his conception of himself and his community's recognition of him. (p. 111)

The adolescent period provides a moratorium for the youth. This is not a withdrawal from society, but a profound interaction with others, ideas, and experiences. "Relatively consequence-

free experimentation facilitates the development of a 'core self', a personal sense of what gives life meaning that Erikson called identity" (Turkle, 1999, p. 644). This openness to possibility and identity exploration as adolescents navigate the digital landscapes of social media is relevant to my research questions.

Erikson did not offer much detail about the process of identity formation during adolescence (Sokol, 2009). Inspired by his work however, Marcia undertook the task of investigating significant developments of adolescence. During this period of transition, Marcia argued that adolescents are in an active struggle to explore and experiment with different roles and responsibilities (Marcia, 1967). This period is characterized by two major themes: crisis and commitment. In Marcia's (1967) model "crisis refers to times during adolescence when the individual seems to be actively involved in choosing among alternative occupations and beliefs...commitment refers to the degree of personal investment the individual expresses in an occupation of belief" (p. 119). Interviewing students between 18 and 22 years of age, Marcia conceived of identity as being composed of three central domains: choices about future occupations, religious and political beliefs, and personal values. Adolescents were then categorized into one of four categories devised by Marcia. These statuses (not stages and therefore not sequential) considered whether or not the adolescent had experienced an identity crisis as defined by Erikson and the degree to which they were dedicated to an occupational choice and the resulting attitude toward a set of values/beliefs (King, 2000). The identity crisis is a time of upheaval where old values are reexamined. The outcome of the crisis leads to a commitment or fidelity to a particular role/value. The four statuses, as described by Marcia (1966) include:



- Identity Diffusion - the status in which the adolescent does not have a sense of having choices; he or she has not yet made (nor is attempting/willing to make) a commitment.
- Identity Foreclosure - the status in which the adolescent seems willing to commit to some relevant roles, values, or goals for the future. Adolescents in this stage have not experienced an identity crisis. They tend to conform to the expectations of others regarding their future (e. g. allowing a parent to determine a career direction) As such; these individuals have not explored a range of options.
- Identity Moratorium - the status in which the adolescent is currently in a crisis, exploring various commitments and is ready to make choices, but has not made a commitment to these choices yet.
- Identity Achievement - the status in which adolescent has gone through an identity crisis and has made a commitment to a sense of identity (i.e. certain role or value) that he or she has chosen.

The focus of the current research seeks to examine if these statuses are correlated with particular types of social media use and/or behaviors and determines identity type by use of the Objective Measure of Ego Identity Status questionnaire, OMEIS (Adams, Shea & Fitch, 1979) (Appendix C).

Marcia's model of identity status has been applied to several domains of developmental psychology. According to Marcia (1966), identity development is a function of exploration and commitment. Exploration refers to how much an individual has considered various viewpoints within a particular realm of his or her life. For example, a person may consider liberal ideals or conservative policies. This person has explored within the realm of political identity.

Commitment refers to whether or not an individual has decided which viewpoint suits his or her outlook best. Perhaps the same person decides that conservative politics is best aligned to his/her worldview and therefore commits to that ideology. Identity development is really the process of decision making about issues of the self through exploration and commitment.

### **Patterns of Personality, Family, and Ethnicity across Identity Types**

Two significant areas that bear the most relevant influence on the current study are family/personality and ethnicity. Kroger (1993) conducted a number of correlational studies that documented patterns of family interactions and associated personality characteristics of adolescents.

Table 3

<i>Family and Personality Characteristics across Identity Types</i>				
Factor	Identity Achievement	Foreclosure	Moratorium	Identity Diffusion
Family	Parents generally foster independence and encourage connections with mentors/teachers. Parent-adolescent conflicts are explored within a context of discussion and explanation.	Parents tend to be overly involved in the personal life of the adolescent. Expressing conflict between parent-adolescent is discouraged/avoided.	Adolescents find themselves in a struggle to assert individual autonomy against a strong parental authority.	Parents tend to approach child-rearing with a laissez-faire approach. These parents are generally unavailable to their children.

Table 3 (Continued)

Factor	Identity Achievement	Foreclosure	Moratorium	Identity Diffusion
Personality	Adolescents tend to demonstrate higher levels of moral reasoning and self-esteem. They also exhibit improved performance under stress and stronger intimate connections to peers. Adolescents in this category tend to be more socially competent.	These adolescents tend to demonstrate obedience to authority figures. They exhibit low levels of anxiety and form dependent relationships, generally with a strong parent; tends to follow a powerful leader.	Adolescents exhibit high levels of moral reasoning and self-esteem but are most fearful of successfully accomplishing life-goals.	These adolescents demonstrate poor cooperative abilities and diminished levels of moral reasoning and cognitive complexity. Generally, adolescents in this category have lower life-satisfaction scores.

*Note.* Adolescent identity status was determined utilizing the Extended Objective Measure of Ego Identity Status-II.

Kroger (2005) has outlined research that demonstrates how identity-achieved adolescents tend to show high levels of self-esteem, low neuroticism, high conscientiousness, high extrovertedness, and high levels of an internal locus of control. Further, identity-achieved individuals manifest the fewest number of defense mechanisms and have the lowest level of shyness relative to the other identity types.

Adolescents in moratorium exhibit greater levels of anxiety (Marcia, 1967). This is most likely due to the process of searching for identity-defining commitments. Moratoriums tend to use denial, projection, and identification defense mechanisms in order to abate their anxieties (Kroger, 2005). In terms of interpersonal relationships, moratorium individuals "are most likely

to have established close friendship relationships which are characterized by respecting the integrity of others, being open and nondefensive, but have not yet committed themselves to a partner" (Kroger, 2005, p. 212).

Those adolescents in the foreclosure identity status generally display high levels of conformity, authoritarianism, and low anxiety (Kroger, 2005). These adolescents are not typically open to new experiences and are accustomed to using an external locus of control relying on outside forces for their primary decision making (Clancy & Dollinger, 1993).

Diffusion identity adolescents tend to show low levels of autonomy and self-esteem (Kroger, 2005). These adolescents tend to score on the preconventional level of morality and score the highest of all identity types on measures of hopelessness (Selles, Markstrom-Adams, & Adams, 1994). Without a firmly established identity, these adolescents tend to 'go wherever the wind blows' and are influenced a great deal by their immediate circumstances.

It is important to remember that these are statuses of identities and not fixed stages; they are likely to change in any direction given the life experiences of adolescents as they continue to explore and/or make commitment to their worldview (Marcia, 1967). According to Marcia (1979), during late adolescence, individuals tend to exhibit those characteristics of moratorium or achievement, that is, seeking or finding their own identity. Stability of identity status is low for younger children (aged 12-14 years), but gradually increases into adolescence (14-20 years) (McCrae et al., 2002; Meesus, Iedema, Helsen & Vollebergh, 1999).

As adolescents continue to explore and establish their social identities, Phinney and Ong (2007) have researched how Marcia's identity statuses are related to an adolescent's ethnicity. In their work, the researchers interviewed 940 African-American male and female adolescents, college students, and adults. They found evidence of each of Marcia's identity types across all of

their samples. The identity achievement group of adolescents was 27%, as compared with 47% of college students and 56% of adults. In the identity achievement classification, these adolescents were more likely to view their race as a central part of their social identity. Researchers found the effect to be greater for males than for females, but had positive health effects for both genders with decreased risk of, depression (Mandara, Gaylord-Hayden, Richards, & Ragsdale, 2009). The results of the moratorium identity status among adolescents were much higher at 42%, meaning that these adolescents were still exploring what it meant to be African-American. The foreclosure identity status had 25% of the adolescents from the sample, meaning that their opinions about what it meant to be African-American was heavily influenced by their family upbringing and parental values. Finally, 6% of the adolescents interviewed were classified as diffusion. These adolescents were neither interested nor motivated to learn about their African-American heritage.

Table 4

<i>Participant Quotations about Race by Identity Status Type</i>	
<u>Identity Status Type</u>	<u>Quote</u>
Diffusion	"Why should I learn about who was the first black women to do this or that? I'm just not too interested."
Foreclosure	"I don't go looking for my culture. I just go by what my parents say and do, and what they tell me to do, the way they are."
Moratorium	"There are a lot of black people around me and it gets pretty confusing to try and decide who I am."
Achievement	"People put me down because of my race, but I don't care anymore. I can accept myself more."

*Note.* Phinney (1988) used a semi-structured interview to collect quotations.

Marcia's work continues to have contemporary application in modern research. Personality theorists Ryeng, Kroger, and Martinussen (2013a), used Marcia's model to investigate the relationship between identity types and tendencies toward authoritarianism. Investigating 565 empirical studies of Marcia's identity statuses between 1996 and 2005, the

researchers conducted a meta-analysis of Marcia's theoretical framework. The analysis revealed that those participants in the foreclosure identity status scored higher on measures of authoritarianism. In the foreclosure status, individuals construct an identity which is based largely on the identification with others without serious consideration of the values they are accepting. Ryeng, Kroger, and Martinussen (2013a) suggest that this relationship is important to understand intolerant and rigid political attitudes. The work of these researchers validates the usefulness of Marcia's model.

Another meta-analysis explored the relationship between Marcia's identity status theory and self-esteem (Ryeng, Kroger, and Martinussen (2013b). Researchers investigated global self-esteem which was characterized as the degree of one's positive or negative attitudes towards oneself, the degree of self-respect, self-worth, and faith in one's capacities. Erikson (1968) did not elaborate directly on the construct of self-esteem, but he did recognize the role of others in the process of identity formation. Because Erikson is best categorized as a psychosocial developmental theorist, it is important to acknowledge the influence that other individuals have on the developmental process. There were some inconsistent findings in the meta-analysis presented here, but the researchers concluded that there was a relationship between the development of high self-esteem and the identity statuses of both achievement and moratorium. The constructs of self-esteem and identity are valuable to my role as a teacher as I come to better understand the students in my classroom. These discoveries guided by Marcia's model continue to illuminate important aspects of personality.

Another study (Laghi, Baiocco, Liga, Guarino, & Baumgartner, 2013) examined the relationship between Marcia's identity status type and orientation toward time perspective. In their cross-sectional analysis, researchers had 1300 adolescents complete self-reported measures

across constructs of identity and time perspective. The researchers determined that those adolescents who were in an identity achievement status were more likely to adopt a future-oriented time perspective and a more positive view of the past. Those adolescents in the diffusion status however, were more likely to exhibit a lower future-oriented time perspective and exhibit a greater propensity toward fatalism. Using Marcia's model as an indicator of time orientation may be useful as a way to appreciate the developmental processes at work as adolescents transition into adulthood. Knowing how to address different adolescents in the classroom can help teachers to promote interventions that increase motivation, planning, and decision making. These are valuable skillsets that social studies teachers can turn into pedagogical practices. Here again is the timely and relevant application of Marcia's work and its connection with classroom goals.

As adolescents grow into adulthood responsibilities, they also learn to manage their financial responsibilities. In 2016, Bosch, Serido, Card, Shim, and Barber examined the connection between identity status and financial self-sufficiency. Using Marcia's identity status model, the researchers conducted a longitudinal study of over 1,500 college students from their freshman to senior year. Of significance, the researchers found that students who were in the foreclosure status during their first year of college remained in the foreclosure status as they matriculated into their senior year and those in the moratorium status during their first year were likely to end their last year of college in the foreclosure status (Bosch, Serido, Card, Shim, & Barber, 2016). The researchers concluded that several factors such as perceived parental socioeconomic status, parental communication, and financial education were important considerations to the identity process. The characteristics of the foreclosure status suggests that

as these college students transitioned into adulthood, they developed an ongoing need to rely on parents for financial support and investment advice.

Exploring the stability of identity status is also a question of interest to developmental psychology. The aims of my research focus on the period of adolescence that are experienced during the senior year of high school, but Marcia posits that identity status is fluid and insists that his framework is not a series of progressive stages (Marcia, 1993). In order to explore the question of stability and change, Fadjukoff, Pulkkinen, and Kokko (2016) conducted a longitudinal study that followed the identity status of 172 participants at four different ages. The researchers employed Marcia's Identity Status Interview and explored five domains: religious beliefs, political identity, occupational career, intimate relationships, and lifestyle. In their conclusions, Fadjukoff, Pulkkinen, and Kokko (2016) discovered variability in identity status across Marcia's domains at each of the four age levels. Participants tended to trend toward the achievement status as they matured with women more likely to identify in the achievement status before males and the diffusion identity status decreasing for both genders across time. The study brings attention to the theoretical claim that identity status can change over time. As individuals work through issues of the identity process, they are able to reassess their commitments to different ideologies and personal value systems. Because Marcia allows for changes in identity status types, I am very interested in how this characteristic will show itself among my students at a salient time in their development, namely the lifespan challenges that occur at the end of their high school career.

Other researchers continued to explore and describe adolescence in terms of developmental patterns. One such theorist, Spranger, claims adolescence is not only the transition period from childhood to physiological maturity, but it is also the age during which the



relatively undifferentiated mental structure of the child reaches maturity (King, 2000). Spranger characterizes adolescence by three developmental patterns. The first pattern is experienced as a period of upheaval and results in a basic change in personality. The second pattern is a slow and continuous growth process that is typified by a gradual acquisition of cultural values and ideas held in society. The third pattern involves the active participation of the individual. The adolescent consciously improves him or herself and exerts greater self-control and self-discipline in an effort to achieve goals and assert power in the society.

Another developmental psychologist, Havighurst argues that adolescence was a period in which individuals define skills sets, acquire knowledge, and adjust attitudes about his or her life (Havighurst, 1972). These developments occur because of physical maturation, a change in social expectations, and a because of the personal and conscious effort exerted by the individual. Havighurst outlined adolescence from 12 to 18 years of age. During this time, the adolescent has a series of developmental tasks to complete in order to avoid social disapproval. According to Havighurst (1972, para. 6), the tasks include:

1. Achieving new and more mature relations with age-mates of both sexes. The goal is to learn to look upon girls as women and boys as men; to become an adult among adults; to learn to work with others for a common purpose, disregarding personal feelings; and to learn to lead without dominating.
2. Learning to accept a socially approved adult masculine or feminine social role.
3. Accepting one's physique and using the body effectively. The goal is to become proud, or at least tolerant, of one's body; to use and protect one's body effectively.

4. Achieving emotional independence of parents and other adults. The goal is to become free from childish dependence on parents and to develop affection for parents without dependence upon them.
5. Achieving assurance of economic independence. The goal is to gain the ability to make a living, if necessary.
6. Selecting and preparing for an occupation. The goal is to choose an occupation for which one has the necessary ability and to prepare for this occupation.
7. Preparing for marriage and family life. The goal is to develop a positive attitude toward family life and having children.
8. Developing intellectual skills and concepts necessary for civic competence. The goal is to develop concepts law, government, economics, politics, geography, human nature, and social institutions which fit the modern world and to develop the language skills and the reasoning ability necessary for dealing effectively with the problems of a modern democracy.
9. Desiring and achieving socially responsible behavior. The goal is to participate as a responsible adult in the life of the community, region, and nation and to take account of the values of society in one's personal behavior.
10. Acquiring a set of values and an ethical system as a guide behavior. The goal is to form a set of values that are possible of realization and to develop a conscious purpose of realizing these values.

Several of Havighurst's tasks are dated. They were originally worded in such a way so as to privilege males in an American society. Men were supposed to gain employment and provide for a family, while women were meant to manage a family and become familiar with child care.

Despite the antiquated and sex-typed characteristics of Havighurst's model, he provides a series of tasks that outline specific accomplishments that adolescents must achieve. His model is worth noting here because the adolescent stage includes tasks that illustrate the domains of identity: building relationships, assuming adult roles, asserting autonomy, and the maturation of social skills. These are similar to Marcia's constructs of identity and are included here as support.

Philosophically, the approaches of Erikson, Marcia, and Havighurst are connected by a common assumption that interactions with others in the environment, either covertly or overtly, have a profound influence upon the psychological well-being and development of the individual. As the adolescent experiences the world and becomes increasingly aware of the expectations of adulthood, he/she undergoes a process of maturation that begins to shape his/her identity. And while each of these approaches to understanding the adolescent has different epistemological assumptions and empirical methodologies, I am conceptualizing these approaches into a broader and more comprehensive perspective: the social constructionist view.

All of the collected data will be generated, analyzed, and evaluated through the social constructionist approach. This approach is not a monotheoretical view. Rather, the social constructionist view assumes that one's culture is at the center of how one constructs meaning and interprets the world (Bruner, 1990). The interactions the adolescent experiences with others in the world are mediated through his/her language, traditions, values, and emotions. One's reality is one's perception of it and culture frames each experience. The social constructionist views development as an ever changing transformation across the life span. It recognizes that culture is inextricably present as an influence over the developing adolescent—and because adolescence itself is a product of social construction, it cannot be separated from the adolescent's culture.

## Adolescents and Technology

The relationship between technology and identity formation is fostered by cultural influences that seem to suggest the necessity of technology in the daily lives of youths. These technologies coalesce into many manifestations, among which is a virtual domain referred to as cyberspace. Cyberspace is the shared space created by the Internet, user software, and portable devices of connectivity (like cell phones and PDAs). It is in this area that Turkle (1999) claims some people are "free to act out unresolved conflicts, to play and replay characterological difficulties on a new and exotic stage" (p. 644). The cyberspace, argues Turkle, provides a psychological moratorium which for Erikson is a central element during adolescent identity development. There are numerous ways in which the self can be expressed in cyberspace and modern technological tools help adolescents to accomplish this endeavor. To this extent, identity during adolescence may be better understood as a 'flexible self' (Lifton, 1993). The flexible self is comprised of several aspects of the person, each one changing and expanding depending on environmental circumstances and personal choices. What is perceived on the outside as a unitary, cohesive self is really a fluid and multiple composition of aspects of adolescent identity. Technology permits adolescents to construct, revise, expand, and explore these multiple dimensions.

McKenna and Baragh (1999) explain that individuals are using the internet to meet social and psychological needs that have otherwise been marginalized or unmet in their typical daily lives. There may be a fear or discomfort in expressing aspects of personality due to social constraints or expectations. Therefore, the internet provides a supportive social environment where identity needs can be achieved.

Given the crisis at hand to undergo the reflective process of ego formation, the adolescent becomes aware of his/her environment and the social cues from members of society. With the ubiquitous manifestations of technology embedded within most industrialized nations and the expanded use and technological sophistication among adolescents, educators and parents should pause to question the extent to which technology may be influencing adolescent development. In particular, stakeholders should attend to the ways that adolescent identity may be mediated through the use of technology. Technology is such a powerful feature in the lives of most adolescents that it would be a disservice not to explore the ways adolescents use technology to help create, shape, and refine their identity.

Various labels have been associated with adolescents who have grown up with modern forms of technology readily available to them. Among them is the N-generation (Tapscott, 1998), which is a name used to describe the adolescents who were born into a world already connected to the internet and for whom online accessibility and a computer hardware/software knowledge base is quite commonplace (as in the Net-generation). Tapscott (1988) claims that these youth are experiencing the world in a way much differently from the generation before them:

A new youth culture is emerging, one which involves much more than just the pop culture of music, MTV, and the movies. This is a new culture in the broadest sense, defined as a the socially transmitted shared patterns of behavior, customs, attitudes and tacit codes, beliefs and values, arts, knowledge, and social forms. This new culture is rooted in the experience of being young and also in being part of the biggest generation ever. But most importantly, it is a culture that is stemming from the N-Gen use of interactive digital media. We should pay attention because the culture which flows from

their experiences in cyberspace foreshadows the culture they will create as the leaders of tomorrow in the workplace and society. (p. 55)

The access to and infusion of digital media tools are critical in the development of adolescent identity as youth learn how to find their way in the expanding multiplicity of roles they are expected to assume in adulthood. Tapscott (2008, pp. 34-36) offers insight into the behaviors of these adolescents in the form of eight norms he feels typifies the N-generation:

- Freedom- this generation prefers flexible hours and compensation based on performance and market value; they insist on freedom of choice in media diet. In the classroom, learning should take place when/where Net-geners want it. The sage on stage is too passive and inappropriate.
- Customization- Net-geners like to get something and make it their own. They make it fit their personal needs as a display of personality. This personalization effect shows itself on online spaces, cars, hot-key buttons, and playlists.
- Scrutiny- youth have the ability to distinguish between fact and fiction. There's too much information. It is essential to differentiate between what is true and what is not. They appreciate candor and transparency.
- Integrity-these youth may be characterized as being honest, considerate, and having profound tolerance. They engage in social activism via online communities. Net-geners blog about company injustices and unfair practices.
- Collaboration- they are natural collaborators in chat rooms, online games and practice file sharing for music/school documents. They volunteer in record numbers. In the classroom, learning works best by collaboration (i.e. collaborative learning groups). They do not

thrive in isolated learning, rather they prefer to engage in student-focused teaching and customized projects.

- Entertainment- they are bored easily. Playing with modern tech devices keeps them interested. The Internet offers wide variety of entertainment channels, but not necessarily the passive side of the Internet. Instead, they prefer interactive (web 2.0) sites.
- Speed-Net-geners prefer instant responses 24/7. Instant messages (IMs), text messages, and Facebook status updates keep them connected. Net-geners do not being put on hold. Loyalty is strengthened when Net-geners receive feedback that helps them feel successful and on track.
- Innovation- these youth have grown up in a culture of invention. Because computers/cell phones change every few months, this rapid technology evolution is reflected in their social behaviors. They are hungry for innovation and novelty. Having the newest gadgets elevates social status.

Of course these norms are broad. Not every youth will fit neatly into Tapscott's outlook, but he does provide a way to characterize to some degree the changing faces of adolescents in the classroom. Educators will want to be familiar with these faces of their students to better provide meaningful and authentic learning opportunities. Indeed, these same students are gradually entering the field of education themselves and teaching pedagogies may begin to reflect this evolution. Given these norms, Tapscott proposes a new and emerging model of the adolescent brain. It is this Net-gen brain that draws the focus of educators and holds potential promise for research that connects youth with meaningful technology experiences.

The Net-gen brain has developed in ways that have changed how adolescents experience the world. According to Tapscott (2008), Net-geners have expectations and needs that have been

influenced by copious video game play. One estimate documents that 81% of teens (or about 17 million American adolescents) have played online games (Pew Research Center, 2005). This exposure has turned game play into a social, rather than a solitary experience. Net-geners are excited to work together to problem solve. They do not always work in sequential ways however (Tapscott, 2008). They tend to work a problem from several perspectives-- they Google, cut-and-paste, revisit sites, and search a variety of multimedia data sources. Some of these activities of course are fruitless, but these youths are learning by error and these mistakes serve to broaden the learning experience. This reflects a principle of Vygotsky who values this kind of interaction with the learning environment in order to foster cognitive development (Vygotsky, 1987).

This adolescent has different instructional needs. According to Prensky (2010), Net-geners have grown up in a digital world that has allowed them to read images, pictures, graphs, and icons much better than from text ones. This should be reflected in teaching practices that value visual representations and/or graphic organizers. They are also accustomed to scanning for key words, relevant information quickly on a screen. But Prensky warns this is not the same as critical reading. He claims that while digital immersion has given the Internet generation superior scanning skills, this does not necessarily mean that they have mastered reading comprehension. Reading online is different from reading a book. Online, students scan for key words and follow links to possibly relevant content. Prensky claims that in this context, students need to quickly determine if the information they are reading is significant. They analyze the content, synthesize it into some greater meaning, and determine the legitimacy of the source. For Prensky, reading online is a complicated task that should not be underestimated. He calls this "problem-based learning" (Prensky, 2010, p. 190) because it reflects an authentic experience of what 21<sup>st</sup> century learners encounter in their daily lives and in the modern workplace. It is a real-world learning



experience that echoes Dewey's philosophy of education who believed active learning for real-world encounters in the community was paramount (Dewey, 1916). Still, Prensky agrees that students need practice in traditional scholarship and improved traditional literacy skills. Without the traditional framework upon which to scaffold information, youth have difficulty knowing how to separate the relevant from the irrelevant. He cautions that what garners the attention of the net-gen youth is often times what is the brightest and loudest sensory content. This wow-factor simulates the experience of learning, but is not true learning unto itself. This is where the role of the teacher is essential and the teacher's knowledge about the student critical.

### **Net-Geners in the Classroom**

The evolving digital landscape is having a tremendous impact upon the modern classroom, influencing both the student's sensibility and the teacher's pedagogy. The student has particular needs, interests, skills, and talents that need to be recognized and encouraged by the classroom teacher. Teachers can help net-generation students by providing guidance on how to search for information, analyze it, and critically examine its worth. In the sage-on-stage model, students are expected to be passive receivers in a one-way delivery of content. Teachers of net-geners instead should use a more appropriate model that draws on student-generated inquiry and permits students to actively explore content, discover meaning, and construct meaning. This kind of learning is facilitated by modern uses of technology and allows for greater student autonomy.

Net-geners have grown up in a digital environment where they share, collaborate, and create content together in virtual and real spaces (Prensky, 2010). This characteristic means that collaborative learning approaches are better suited for net-geners. They appreciate the social nature of collaborative learning and are given chances to foster individual skill sets and promote personal strengths. These students are eager to show what they know—they just need the

opportunity. Teachers who are able to harness the techniques of collaborative learning in their classrooms are providing a much needed change for the modern student. Collaborative learning is inclusive, respects diverse student skills, and gives students space to safely engage in intellectual discovery.

For Gardner (1993), traditional classroom instruction is a product of the industrial age. It is a mass production idea that was born of the zeitgeist of the industrial economy. The pedagogy is based on the idea that the best way for students to learn is to group students of similar chronological age together in intentionally constructed learning experiences. This approach however tends to marginalize different learning styles and ways of knowing to which net-geners have become accustomed. Material is learned in a variety of forms, including combinations of kinesthetic, visual, and auditory. The one-size-fits-all approach to teaching does not value the contributions the net-gener comes to the class already possessing (Tapscott, 2008). A pedagogy that appeals to the various ways in which the brain encodes, stores, and retrieves information helps students to flourish in a classroom environment. A differentiated classroom appeals to net-gen students because it affords them the chance to apply skills they have developed and create meaningful frameworks as they encounter content (Tomlinson, 1999). The teacher of the net-gener must be flexible and attentive to the attitudes and characteristics of this emerging student.

As teachers gain greater awareness of the net-gener student, they will be able to accommodate their teaching methods in order to ensure student success. Understanding, in part, the role of adolescent identity and the interaction with social networking is one small step toward accomplishing this goal. It is unlikely that teachers can avoid the growing presence of technology in the classroom. Perhaps, one central piece of technology common to many classrooms is the computer. Computers are not being used to their utmost potential in typical

classrooms because they are still utilized within the old model of teaching to deliver content, rather than to encourage student-discovery (Prensky, 2010). Instead teachers need help developing web-based curricula that appeal to the net-gen student and the developing adolescent. This approach takes advantage of emerging 2.0 web tools that are not unidirectional, but are instead interactive and rely upon input from users. This shift values the contribution that net-gen students can bring to the class. It incorporates a variety of learning approaches and collaborative activities that permit students to be *prosumers* of their education. That is, the students themselves become part of the design and creation of their education as well as the ones who consume and use the information.

This means that teachers are no longer the gatekeepers of knowledge who dispense content to receptive students. There is a paradigm shift now that empowers students to communicate, create, and collaborate on products. This power shift is a new age of participation that moves from a traditional hierarchical power to a new model where each individual contributes (Tapscott, 1998). Teachers need to be made aware of the expectations net-geners have about their classroom interactions. In doing so, the students are allowed to infuse what they already know about how they best learn content. This is a kind of partnering that draws on both the teacher and student to work collaboratively in the new age of participation. If net-geners are able to find classroom environments that value how they learn, they will become more engaged in the content. Prensky (2010) notes that many students who are unwilling to sit during a single class lecture are enthused to sit for hours at a computer game. They will pay attention to what is of interest to them in a way that respects their abilities. Net-gen students succeed when they have partnering teachers who can make effective use of technology. Prensky (2010) has assembled a list of characteristics that are typical of net-gen students.

Net-gen students: do not want to be lectured to  
want to be respected, trusted, and have their opinions valued  
want to follow through their own interests and passions  
want to create using the tools of their time  
want to work with peers on group projects  
want to make decisions and share control  
want to connect with peers to express opinions  
want to cooperate and compete with each other  
want an education that it not just relevant but real (pp. 3-4)

Teachers can better serve their students if they learn the profile of the net-gen adolescent. This research aims to elaborate on this student and his/her relation to the use of technology in social media. The numerous forms of technologies have amazing potential to enable students to learn curricular content. Yet, teachers need to provide guidance and critical skills to enable net-gen students to actively use these technologies in beneficial ways. Because these technologies are continually evolving and integrating into one another, it is difficult to claim that there are best practices for teachers to follow. Superlatives cannot be placed upon technologies that continue to change. Instead, there are habits of evaluation that teachers must practice in order to determine the utility of technologies and appropriateness for the classroom. Among these technologies is the role of social media sites and is the focus of this research.

Below are several modern forms of technology that enable communication and are the tools through which adolescents negotiate identity in a modern world (adapted from Subrahmanyam & Greenfield, 2008).

Table 5

*Common Forms of Digital Communication*

<u>Communication Form</u>	<u>Supporting Hardware/Device</u>	<u>Enabled Functions</u>
E-mail	Computers, mobile phones, Personal digital assistants (PDAs)	Write, store, send, and receive e-mail; includes attachments of documents, pictures, audio clips, and video
Instant messaging (IM)	Computers, mobile phones, PDAs	Allows synchronous exchange of private messages with another user; messages are primarily text but may include attached documents, photos, audio, etc.
Text messaging	Mobile phones, PDAs	Short text messages sent using mobile phones and wireless hand-held devices
Chat rooms	Computers	Synchronous conversations with more than one user that primarily involve text; can be public or private
Bulletin boards (BBS)	Computers	Online public spaces, typically centered on a topic where users can post and read messages; may require registration, usually screen names are visible
Blogs	Computers	Websites where entries are typically displayed in reverse chronological order; entries may be public or private for users authorized by the blog owner/author
Social networking sites	Computers (and some mobile phones)	Online utilities that allow users to create profiles (public or private and form a network of friends; allow users to interact with their friends via public and private means (such as instant messaging and private e-mails, or public posts); allows for the posting of user-generated content such as photos or videos

Table 5 (Continued)

<u>Communication Form</u>	<u>Supporting Hardware/Device</u>	<u>Enabled Functions</u>
Video sharing	Computers, mobile phones, wireless cameras	Allows users to upload, view, share, and sometimes comment on video clips; may be public or private
Photo sharing	Computers, mobile phones, wireless cameras	Allows users to upload, view, share, and sometimes comment on photos; may be public or private
Massively multiplayer online computer games (MMOG)	Computers	Online games that can be played by large numbers of players simultaneously; includes role player games
Virtual worlds	Computers	Online simulated 3-D environments inhabited by players who interact with each other via avatars

*Note.* Computers may include desktops, tablets, or more advanced smartphones.

Adolescents who take advantage of these technology forms are able to explore fluid forms of identity. They are free to negotiate new dimensions of their developing personalities. Often this identity exploration comes in the form of online play (Turkle, 1999). In various gaming roles, blogging sites, or virtual communities, adolescents create a virtual persona that reflects who they are and their interests (Turkle, 1999).

### **Social Networking**

Social networking sites are virtual environments that allow users to interact with other members through a variety of options such as private e-mail messages, public bulletin board posts, and instant messaging features. In addition, users create a personal vanity page about their interests and characteristics. Typically, such front end homepages have pictures, video clips, music clips, and personalized information about the user like his or her name, birthday, age, sex, relationship status, and/or geographic location (or school). Beyond the front page, the user may

restrict accessibility to more personal content such as journal entries or blogs and collections of photo albums/videos. Users can find other members who share similar interests in hobbies, music, schools, or geographic regions for example. Popular networking sites like Twitter and Facebook are venues where people are expanding their social ties. Facebook has over 200 million users and is one of the most popular networking sites among college students (Buffardi & Campbell, 2008). Twenty-five percent of the registered users on Facebook belong to users who are 18 years or younger (Moreno, Parks, Zimmerman, Brito, & Christaki, 2009). These sites include characteristics that make them likely tools of technology that further allow adolescents to explore their personal identities by asserting their autonomy and trying out different personalities. Not only do these sites allow for connectivity to the homepages of friends, but they also embed features such as instant messaging, video/photo posting capabilities, file sharing features (music, documents, etc.), and interactive gaming. Social networking sites, like Facebook, seem to be a normal part of adolescent social interactions (Buffardi & Campbell, 2008).

According to the Pew/Internet Report: Teens and Social Media (Lenhart, Madden, Macgill, & Smith 2007), 55% of online teens between the ages of 12 and 17 have created a profile on Facebook. Further, these teens, 45% have uploaded photos and 14% have posted videos. The survey also concluded that of those teens sampled, 41% send messages to friends over their social networking site. Such data suggest the immediacy and power that attracts adolescents to utilize social networking sites. Because of this significant presence, several stems were constructed in order to investigate the ways in which such sites may mediate ego formation. Adolescence is a period of identity exploration which now includes online identity and online displays (Moreno, Parks, Zimmerman, Brito, & Christaki, 2009).

Adolescents have been documented to engage in an activity known as *bricolage*, the process of reconstruction and original creation of a product that utilizes various forms of digital technology currently at hand by the user (Weber & Mitchell, 2008). *Bricolage* is a kind of construction of something new, but comprised of already existing materials into a novel product. This reinforces the prosumer characteristic of net-gen students described by Prensky (2010). This behavior suggests that youth do not consume products (or identities) as they have been presented or suggested, but rather they recontextualize and transform them using digital media tools. The pages of adolescents therefore are better understood as efforts of assembly, reflecting trials of putting together, taking apart, and reconstructing. Perhaps it is this practice of *bricolage* that is the truest practice of identity formation during web page design. According to Chandler and Roberts-Young (2000), there are several key elements that are included in the practice of *bricolage*: the inclusion of particular elements; the indirect allusion to others; the omission of what goes without saying/of what is noticeable by its absence; the adaptation of cultural symbols that are borrowed and then added to, subtracted from, or transposed in some way; and finally, the overall organization, sequencing, and arrangement of the elements. Chandler and Roberts-Young cite Jenkins in that "*bricolage* involves more than simply the appropriation of materials: it also involves the construction of the *bricoleur's* identity" (2000).

According to the Pew/Internet report on teens and social media (Lenhart, Madden, Macgill, & Smith 2007), 26% of online teens between the ages of 12-17, reported remixing content they find online and make it into their own creation. Adolescents consume as a way of marking and forming their identity and technology becomes the mechanism through which adolescents present and police their identities (Willet, 2008). These forms of technology are



accessible to adolescents in a variety of formats and range from very high-end products to relatively inexpensive ones making them attractive to adolescents across SES levels.

Adolescents reflect their life questions and their exploration of identity via multiple channels-- not just text, but in posted song lyrics/music, video clips, or pictures of personal artwork/visual media. Thirty-nine percent of adolescents who access the Internet report having shared artistic creations online such as art, photos, stories and videos (Lenhart & Madden, 2007). The sharing and communication of these productions are dynamic. Such efforts are also expedited by the use of instant messaging. The fluidity of instant messaging (and social networking sites) permits the adolescent to share a thought or idea and then invite feedback from other users. The Pew/Internet report on teens and social media (Lenhart, Madden, Macgill, & Smith 2007) found that 28% of teens (from a sample of 935) used instant messaging tools to communicate with their friends on a daily basis. The use of instant messaging itself may be a reflection of identity negotiation. Adolescents have reported that using instant messaging made them feel as if their social status was enhanced, that it gave them greater social currency (Lewis & Fabos, 2005). Lewis and Fabos suggest that when adolescents instant message, they are enacting a temporary attachment in order to be recognized as a particular kind of person. In a study which documented the exchange and use of instant messaging, Lewis and Fabos (2005) documented comments from a user who said that the use of instant messaging gave her the courage to take risks she would not have otherwise taken, specifically, talking to boys.

In addition to engaging in traditional instant messaging dialogue, adolescents also practiced a behavior called posing. "Posing involves the user in an attempt to take on the identity of someone else (another gender or another specific person)" (Lewis & Fabos, 2005, p. 491). The researchers make that claim that because the physical body of the user is not present in Internet

communication, that adolescents have greater space for identity play and performance. "They manipulate voice, tone, and subject matter to hide or transform their own identities and to monitor the interactions of others" (Lewis & Fabos, 2005, p. 491).

These phenomena have changed the ways in which adolescents communicate and exchange ideas since they offer multi-modes of interface, such as asynchronous postings (public and private), e-mail, synchronous chat, real-time streaming video conferencing, and the ability to create networks of shared interests. These are the behaviors of adolescents attempting to create and transform their identities in a modern world of digital tools. They look to each other and engage in personal practices in an effort to find their self. These tasks are examples of social referencing. They are activities intended to assert autonomy and individual expression, while at the same time soliciting for opinions, alternatives, or comments about the product. Because of the myriad of channels available to adolescents by way of these tools, Bargh, McKenna, and Fitzsimmons (2002) cite Turkle's claim "that the Internet affords a panoply of interaction domains in which alternative forms of the self can be expressed" (pp. 46-47). Turkle (1999) asserts that if the Internet constitutes a unique opportunity for self-expression, then a person would use it to express his/her true self not often or easily expressed to others.

The idea of identity exploration has also been conceptualized as play (Sweeney, 1999). Sweeney suggest that because the online presentation of self is malleable, that adolescents are able to bring their creative vision to fruition fairly quickly and with a great deal of flexibility. The "Internet's greatest asset to teendom [is] access: the confidence to slip in and out of personalities, the ability to try on identities, [it is] the adolescent equivalent of playing dress-up in the attic, standing before the mirror in heels and lipstick long before you own your own" (Sweeney, 1999). This characterization of online behavior makes allowances for adolescents

who choose to play with their sense of identity. The question of whether this sense of play actually reflects a developmental milestone as suggested by some theorists however remains to be explored. "The question may therefore be whether there is any evidence for the proposition that adolescents' online identity experimentation and pretense is developmentally specific. More broadly, there is a need for more data on the extent and nature of adolescent identity play and pretense on the internet" (Gross, 2004, p. 635).

Research from a survey and data collected from a detailed documentation tool found evidence to challenge the assumption that adolescents engage in identity exploration online (Gross, 2004). Investigating the ways in which adolescents might use the Internet as an identity playground, Gross (2004) collected data on 175 7<sup>th</sup> and 10<sup>th</sup> graders from suburban public schools across four consecutive days. Among her findings, Gross found that of the 89 participants who acknowledged pretending behaviors online, 82 admitted to pretending to be someone older, while seven pretended to be someone younger. Further, 17 participants (19%) pretended to be someone of another gender or sexual identity. When Gross explored the reasons why adolescents pretended to take on characteristics of another persona, 48% of participants claimed that it was for a practical joke and 16% claimed that they were trying to hide their identity and/or protect their privacy. According to Gross's findings, only 2% of adolescents in her sample explicitly mentioned a desire to explore a new self or identity.

Gross's research poses a significant challenge to the proposition that adolescents engage in identity exploration online. However, Gross's methodology collected data over only four days. In addition, the self-reported data collected from the participants includes limitations since it is suspect to social desirability and small sample size. Further, Gross did not collect data on the quality of online time nor did she examine trends or the practice of *bricolage* among the online

presentation of the participants' digital selves. There remain therefore several methodological considerations to address before Gross's data can be interpreted as a significant challenge to the idea of adolescents' exploration of identity online.

Among the digital behaviors in which adolescents engage, researchers should continue to investigate how blogging reflects identity exploration. In a survey of various blog sites, researchers examined gender similarities and differences among weblogs created by teenagers (Huffaker & Calvert, 2005). From content analyses of adolescent weblogs, researchers examined how adolescents presented their identities online, as well as how they use language to express their experiences and feelings. Of particular interest to the researchers was to examine the extent to which personal information, such as name, age, or location, was disclosed; how emotive features were conveyed; how sexual identity was intimated; and how language was used to express ideas and feelings. The researchers found that adolescents used language to create a consistent public face as they engaged in the construction of a stable cohesive set of representations of who they are. Huffaker and Calvert argued their data is supported by adolescent bloggers' choices to reveal personally identifying information about themselves (such as name and sexual orientation). Huffaker & Calvert (2005) concluded that:

"identity has been approached in terms of the relationships between the internal experience, such as personality and self-definition, and the external world, such as social relationships and shared values. The Internet has provided a new context for identity exploration, as the virtual world provides a venue to explore a complex set of relationships that is flexible and potentially anonymous. Language on the internet represents a new type of discourse that is shaped by the creativity and innovation of its

communities of users. This emerging discourse can then be used to express the identities of its adolescent users" (para.73)

Another digital behavior that warrants consideration in adolescent identity is the construction and use of avatars in virtual environments. According to Nielsen-NetRatings, the average American internet user spends 80 hours a month online at work and 30 hours at home (Noguchi, 2005). Avatars are digital representations of the users that allow the user to interact in a virtual environment. "They usually reflect their real-life counterpart's personality, while keeping the real identity-- and appearance-- hidden. Sometimes that serves as a mask for deception or to distort reality; teenagers for example sometimes create avatars to explore different parts of their personality" (Noguchi, 2005, p. A1). Certainly, greater research that investigates the function avatar construction has in adolescent identity development should be encouraged. These virtual representations can give researchers clues as to the interests and motivations of adolescents as they negotiate their identities.

Where once in the infancy of the web, users might have constructed (often with rather cumbersome effort) a personal homepage, newer software applications of Web 2.0 better enable users to fabricate personal sites using ready-made web-enabled tools. These tools, such as those available on Facebook provide basic construction while still allowing the user to modify and personalize graphics, music, details, etc. These are the new personal homepages of youth.

In an attempt to explore identity on social networks, Hargittai (2008) focused attention on ethnicity. Hargittai found that race, ethnicity, and the education level of the adolescent's parents can predict which social network site used by the adolescent. According to the findings, Facebook was the social networking choice for Caucasian adolescents; Hispanic adolescents tend to use MySpace. Asian-American adolescents were found to prefer Xanga and Friendster more

so than adolescents from any other ethnic groups. Hargittai found no dominant preference for a particular social networking site among African-American adolescents. In addition, the data demonstrated that those adolescents who live with their parents (such as college students) were less likely to belong to a social network site than those adolescents who lived away from their parents.

Following data from an ethnographic study of personal sites on adolescents in Wales, Chandler and Roberts-Young (2000) argue that personal sites are evidence of a behavior called self-presentation and that this presentation is especially important for adolescents. Also referred to as personal portrayal or impression-management, these behaviors typically manifest in behaviors that attend to clothing trends, hairstyles, and slang terms. Chandler and Roberts-Young (2000) claim that modern personal pages in effect reflect the same behavior. Adolescents are creating a digital presentation of the self utilizing multi-media resources. The connectedness of social networking sites however mean that the presentation of Self expands far beyond the immediate friends of the youth and instead opens personal pages to considerably larger audiences of unknown people.

Using an interview technique and naturalistic observation, Chandler and Roberts-Young (2000) note that in exploring the theme of personal identity, adolescents tend to include six major elements on their personal pages: (1) information regarding biographical data and personal statistics, such as age, sex, and location; (2) current and/or past roles, such as student, volunteer, athlete; (3) personal qualities, such as friendly, outgoing, shy, or attractive; (4) personal interests such as hobbies, talents, likes and dislikes; (5) ideas/values/beliefs/and important causes such as religious, political, or philosophical opinions; and (6) references to and/or photos of friends, acquaintances, and/or cultural icons such as musicians, actors, writers, etc.

According to findings from the Pew/Internet & American Life Project (2007), teens post a variety of elements on their profiles, but a first name and a personal photograph are usually standard. Of all online teens, 55% claim to have a profile. At least 82% of these include their first name and 79% post a personal photograph. Other findings that focuses on Facebook specifically found that of 9000 profiles examined, only eight percent of users revealed a first name, four percent revealed their instant messaging screen name, and one percent included their personal e-mail address (Subrahmanyam & Greenfield, 2008).

In related research about self-presentation on the web, Buffardi and Campbell (2008) investigated the extent to which characteristics of narcissism are projected through a user's Facebook profile. Arguing that the initiation, creation, and use of social relations is central to self-esteem and self-concept, the researchers examined how Facebook might be utilized as a tool for the presentation of self. While the primary aim of the research was to question instances of narcissism, the value in Buffardi and Campbell's work remains in their conceptualization of identity and social networking sites. They argue that online communities are shallow contexts where users are under no obligation to reveal personally deep information or to engage in meaningful, intimate relationships. While some users certainly do utilize Facebook for such activities, the benefit of a social networking site is that it allows the user to maintain relationships with hundreds of friends with little effort. Communication can be completed with brief and multiple wallposts (on Facebook) or mass notifications (on MySpace). Further, social networking sites, like Facebook, are highly controlled environments. "Owners have complete power over self-presentation on web pages, unlike most other social contexts. In particular, one can use personal web pages to select attractive photographs of oneself or write self-descriptions that are self-promoting" (Buffardi & Campbell, 2008). As the intention of the current research

hopes to document, these behaviors reflect the process of identity formation that adolescents experience. Their posts, pictures, comments, and video document their adolescent experience.

According to Stern (2008), "documenting emotional ups and downs, experiences, convictions, and preferences is another self-oriented role that personal sites play for adolescent authors. In this way, sites may serve as a point of stability during a period of flux" (pp. 102-103). The ability of social networking tools like Insta-gram, Twitter, and in the current study—Facebook, provides adolescents the chance to capture their struggles and/or joys of identity formation.

Developmentally, this may reflect a psychological phenomenon of adolescent egocentrism, but moreover, Stern (2008) hypothesizes that this self-documentation reflects the adolescent's desire to witness their personal growth and to look back at a later date in order to reflect how far he/she has advanced. "Expressing oneself online becomes a way for [adolescents] to explore their beliefs, values, and self-perceptions, and thereby to help them grapple with their sense of identity"(Stern, 2008, p. 102).

While Chandler and Roberts-Young (2000) caution that personal sites may misrepresent users or include falsified information, they maintain that youths who construct personal web pages are engaged in "an education about the self and its relation to the world and others in it" (Chandler and Roberts-Young, 2000). The researchers warning about false representation of self is certainly a limitation to conducting online research and future endeavors should strive to account for the authenticity of claims and descriptions made online and mediated through personal web pages.

These pages, when represented truthfully and with accuracy have been correlated with the user's actual personality. Arguing that individuals make identity claims in their environment,



Vazire and Gosling (2004) examined how individuals choose to decorate their office space, bedrooms, cars, and book bags. All of these personal spaces allow the individual to convey an identity message to an observer. The researchers then questioned how e-perceptions conveyed through a user's personal profile page construct a representation of the user. Using 98 personal homepages, 11 observers rated the website authors' personalities. The website authors then completed a self-report for the same characteristics. The researchers then compared the two sets of survey data to determine correlational relationships. In their findings, Vazire and Gosling (2004) found that there was indeed a high level of match between how authors perceived themselves and how they were perceived by unknown observers based on information only viewed from a personal homepage. The researchers also found that the observers inflated the authors' ratings of extraversion and agreeableness. Vazire and Gosling concluded that identity claims represented in electronic format (such as webpages) are used to convey valid information about the personality of the author.

“Some young people view personal sites as avenues to participate in, or respond to, a culture that valorizes publicity as an end in itself. Indeed, they feel that personal sites can serve as symbols to others and themselves that they belong to and in the public culture” (Stern, 2008, p. 101). The web authorship permitted by social networking sites allow any user to create content and to distribute it with minimal effort or filtering whether it be in complete and honest disclosure or reserved and misleading hesitation. This is likely to influence the extent to which adolescents engage in self-disclosure online. But the fact that they may do so at all is evidence of the extent to which they are using technology to explore identities. Features of networking sites, like blog tools, allow users to document their lives and make them public or at least accessible to selected friends. According to Stern (2008):

Nearly all of those [youth] who sustain these works for any length of time identify their utility for self-reflection, releasing pent-up feelings, and witnessing personal growth. In this sense, personal sites are reminiscent of private diaries which have frequently been considered as objects for self-examination and engagement. They appear to be particularly meaningful during adolescence, when young people consciously search for a sense of who they are and how they fit in with their social worlds. (p. 101)

These exercises are demonstrations of identity formation. They represent the search for a sense of a cohesive self that Erikson theorizes. As youths navigate and negotiate their personal sites and journal blogs, they are also internalizing their identity and reflecting on the place they have in their society. They are engaged in the process of ego formation. The impact of social networking sites carry implications for identity formation and social relationships. "The internet allows people to step out of the box for both connections and information. When computer networks connect people and organizations, they are the infrastructure of social networks" (Wellman & Hampton, 1999, p. 649). Joining organizations and feeling a sense of belonging are critical behaviors to identity formation. These groups provide security and companionship which further enable identities to flourish and expand. When defining "communities as sets of informal ties of sociability, support, and identity, they rarely are neighborhood solidarities or even densely knit groups of kin and friends" (Wellman & Hampton, 1999, p. 648), they are instead broad connections with several people beyond the proximal geographic location of the user.

A feature of several social networking sites, such as Facebook, also allows adolescents to engage in instant messaging. Dolve-Cohen and Barak (2013) found that instant messaging between distressed adolescents produced positive emotional states by affording adolescents with private intimate spaces where they are allowed to share concerns and reveal their true selves. The

researchers encourage further investigation into this phenomenon as it appears to be a valuable tool during a period of social transition, emotional distress, and attachment challenges.

The Internet and social networking sites have created opportunities for youths to make connections beyond their typical social circles and have allowed them negotiate their identity with support and input from virtual/network friends.

Having interviewed over 800 youth and adults, Ito (2008) and her colleagues determined that modern adolescents are "coming of age and struggling for autonomy and identity amid new worlds for communication, friendship, play, and self-expression" (p. 1). Ito contends that time spent on social networking sites allow adolescents to engage in self-directed learning and to assert their independence. The features of many networking sites permit users to share private information publically. Adolescents can share with their friends and strangers news that they are in a relationship or seeking one. Turkle has noted that the internet has created a space for individuals to try out personalities in a kind of virtual lab where they are free to explore and experiment with different versions of their identity (Bargh, McKenna, & Fitzsimons, 2002).

### **In the Classroom**

Understanding the changing face of technology and the ways in which adolescents interact with it carries important implications for educators. The adolescents who enter the classroom are technologically sophisticated (Tyner, 1988). They spend their non-instructional time in a variety of activities including the use of digital online behavior. The adolescents are creative, imaginative, and enthusiastic. While teachers strive to encourage critical thinking skills, adolescents are already refining a set of executive cognitive functions that could be better harnessed in the classroom. Their engagement with technology enables them to multitask and think differently, perhaps even more efficiently (Tapscott, 1998). These students are regularly

using the Internet and related technologies in such a way so as to focus attention, practice theory of mind principles, and execute decision-making skills. According to Tapscott (1988), adolescents come to class with a great deal of technology literacy. They are aware of a host of multimedia, digital practices that they use to help structure their lives, engage in social discourse, and negotiate identity. Educators would be well served if researchers would continue to investigate adolescent use of technology since their brains are exposed to a great deal of digital information.

Recent fMRI findings conducted by researchers examined the brain activity of 24 individuals as they performed a simulated web search, and again as they read a page of text (Small & Vorgan, 2008). When comparing the fMRIs of participants with high Internet use and low Internet use researchers found an appreciable difference. Those participants who reported regular Internet use on a daily basis demonstrated twice as much cognitive activity in the frontal lobe of the cerebral cortex, an area of the brain associated with executive functions such as decision-making and complex reasoning tasks.

The findings from the research of Small and Vorgan suggest that regular internet use enhances the brain's ability to be stimulated and activates greater portions of the brain than reading traditional printed text. This research supplements a claim from Interlandi (2008) that:

previous studies have shown that the tech-savvy among us possess greater working memory (meaning they can store and retrieve more bits of information in the short term), are more adept at perceptual learning (that is, adjusting their perception of the world in response to changing information), and have better motor skills. (para. 3)

Beyond brain-based influences, and more to the point of the research questions of this study, is the concern for classroom based practices in light of this digital landscape. Today's

student benefits from the modern digital revolution, which provides increased access to streams of information (Bowen, 2013). The ease of this accessibility carries implications for educational practices as students must still learn how to critically evaluate sources, discern entertainment from legitimate news, and how to synthesize content for real-world problem solving.

The research questions investigate how participants construct their understanding of social networking and how I might foster the critical thinking skills students need in this overload of information. In the classroom, some movements to introduce social networking have included Twiducate, Edmodo, and Ning (Mirabolghasemi & Huspi, 2012). These are closed networking systems maintained by the teacher in order to protect student privacy and retain autonomy over the infrastructure's content while still being able to take advantage of networking features like chat rooms, video conferencing, and supported e-learning technologies.

Unfortunately, despite their popularity, these options have never garnered as many users as Facebook (Thongmak, 2013). This is likely due to the fact that some of the platforms charge users to take advantage of features or do not offer the flexibility to interact with the site across various mobile platforms. Facebook continues to offer its infrastructure at no cost to users and is accessible through all mobile platforms and operating systems thereby casting a wide net.

Technology in the classroom has taken many forms. More than simply introducing the Internet into instructional practices, Web 2.0 tools have enabled a hybrid-style learning space that means the classroom is no longer limited by geography or time. Web 2.0 is a term that describes both a platform onto which innovative technologies have been created as well as a description of a space where users collaborate and share with others (Greenhow, Robelia, & Hughes, 2009). This includes social networking platforms like Facebook. Lenhart, Madden, Macgill, and Smith (2007) have found that teenagers prefer multichannel communication, such

as text messaging, instant messaging, and communication through social network sites to traditional e-mail and face-to-face communication.

By welcoming, rather than resisting the inclusion of collaborative technologies into the classroom, teachers are afforded an opportunity to model appropriate practices to students. As a teacher in the field of social studies, this opportunity is a welcome challenge. The use of technology in the classroom creates a dialogue to explore social and ethical practices that are part of a greater educational initiative (Taraborelli, 2008). Technologies that embrace the Web 2.0 approach further the idea of social scholarship. Social scholarship connects traditional formal academic practices (such as creating a peer-reviewed, print-based journal) with more informal, social Internet-based practices (such as hosting an online video or audio conference) (Cohen, 2007). Social scholarship capitalizes on Web 2.0 practices by taking advantage of tools that enable collaboration, sharing, and archiving. The research questions posed in this study help me to better refine my role as a teacher whose social studies curriculum involves more than content; it includes personal and social development as well.

Students are familiar with a large base of technology before they enter the classroom (Tyner, 1988). Certainly, educators should always be sensitive to issues of the digital divide that might create gaps in experiences and familiarity with domains of technology. But there seems to be general trend that some forms of technology remain ubiquitous, such as the mobile phone. Researchers and educators alike should strive to keep abreast of the ways in which adolescents utilize the various forms of technology to which they have access.

All of these studies have illuminated the essential characteristics of adolescents as they engage with and are surrounded by an expanding landscape of digital novelty and Internet accessibility. What has not been addressed however are the potential ways that the different

adolescent identity types mediate these experiences of Internet activity and in particular social media use. As adolescents continue to experience the typical demands of developmental growth, research has given attention to the effects of technology on neuromaturational changes. Yet these considerations fail to understand the psychological characteristics that Marcia suggested were part of the adolescent experience. This study is an attempt to acknowledge the identity status patterns that typify adolescents as well as the Internet experience of adolescents as they manipulate social media tools.

Research on representations of adolescent identity online has been considerable. But my interest considers the specific representation of self on Facebook. Participants in this study have experienced my teaching approach for almost two academic years. In that time, they have connected with me through a classroom-specific Facebook account. I am interested in learning how these particular students may have benefited from the Facebook posts that I populate into their newsfeed. I want to learn how student perceive this classroom practice as I model Facebook posts and comments. As students see my engagement of Facebook for the purpose of connecting to topics and issues of psychology, I question if students are motivated to pursue similar interests or areas of study. The aims of this research will help me to understand if my continued practice of a classroom Facebook page is worth maintaining.

### **Chapter Three: Methods**

This study presents an opportunity to capture how identity types (an individual psychological construct) perceive a social phenomenon like Facebook through an epistemology grounded in the social construction of knowledge. The use of social networking data from Facebook reflects an emic behavior revealing participant's personal situations and representations of online identity. The examination and evaluation of collected data proceeded from the social constructionist approach in an effort to address research questions of social media use, identity development, and instructional practices.

#### **Research Design**

The qualitative approach gave me the most appropriate research tools to investigate my questions. According to Denzin and Lincoln (1994):

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that makes the world visible. These practices ... turn the world into a series of representations including fieldnotes, interviews, conversations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. (p. 3)

I employed techniques of a qualitative design in order to address my research questions:

Question 1- Social media: How are students using their social media platforms during their senior-year of high school?



Question 2- Identity: In what ways does Marcia's model of adolescence identity type help to explain potential differences in Facebook use among adolescents?

Question 3- Pedagogy: In what ways are students' Facebook practices and teaching practice that relies on social media responsive to one another?

The nature of my research focused on the naturalistic use of Facebook. By examining individual students and their Facebook use, I was better able to inform my classroom practices and analyze data that addressed my research aims. These individual student cases were situated in a meaningful context of IB psychology, Facebook use, and adolescent development. By drawing from a naturalistic approach that respected a collective case study, I was able to document individual student experiences and examine potential themes that emerged from my research questions. The lived experience of each participant as he/she engaged with Facebook was the primary focus of this collective case. By examining the behaviors of different identity status types and their Facebook use, I was able to record the experiences of participants in their own words and through their own interpretation of the digital experience as is the most appropriate to a collective case study approach (Stake, 2006).

An advantage of employing a qualitative approach was that I was able to hear the narratives of the participants in their own words as they created meaning from their Facebook experiences in their own phenomenological experiences. A qualitative approach respects the interpretative nature of each individual's experience as he/she constructs his/her own social reality (Denzin & Lincoln, 1994). In this particular study, the nature of social reality included both a real and lived space as well as a distinct virtual landscape created from social media

practices on Facebook. Because the variety of ways in which users might use social media platforms varied, I approached the research questions mindful of each participant's individual engagement with technology, the extent of their digital literacy, and respectful of their subjective experiences of Facebook. The lived experience of each participant as he/she engaged with Facebook was the primary focus of this collective case study. In particular, I was intent on documenting meaningful descriptions of Facebook use by different identity statuses in different contexts. The characteristics which place greater emphasis on the experience of the participants (in this case, identity development and Facebook use) are most appropriate to a collective case study approach (Stake, 2006).

### **Collective Case Study Approach**

I will utilize a qualitative approach to my research questions drawing on Stake's framework for collective case studies. In a collective case study, Stake (2006) describes:

individual cases in the collection may or may not be known in advance to manifest the common characteristic. They may be similar or dissimilar, redundancy and variety each having voice. They are chosen because it is believed that understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of cases. (p. 237)

According to Creswell (2007), "a collective case study involves one issue selected, but the inquirer selects multiple case studies to illustrate the issue" (p. 74). A collective case study is conducted at one site, in this case, a public high school in Florida, and is comprised of several units which are studied as part of a collection (Denzin & Lincoln, 1994). The units of study for this research are comprised of individual student participants from my senior psychology classes. The phenomenon of investigation is Facebook use among my purposive sample.

A purposive sampling technique is generally used in a naturalistic context where participants are selected “based on specific purposes associated with answering a research study’s questions” (Teddlie & Yu, 2007, p. 77). In qualitative studies, participants are selected purposefully because they have a particular characteristic pertinent to the study (Patton, 2002). In this case, I relied upon seven criteria to determine who would be followed for further investigation:

- 1.) Gender of participant
- 2.) Ability to commit to the documentation protocol
- 3.) Ability to commit to the research collection period
- 4.) Availability to complete interviews after school
- 5.) Results of technology-use survey
- 6.) Strength of student-teacher rapport
- 7.) Diversity of identity status type

### **Recruitment and Participants**

Recruitment of participants came from my own senior-level psychology classes after appropriate permissions were granted through IRB, the school site’s district office, and the school principal (Appendix J). Senior classes were selected for two primary justifications. One, the students I had as seniors were the same students I had also instructed during their junior year. This means, that I had established a strong relational foundation with senior students. I had invested time in getting to know the students and building rapport with them. Many seem to have become accustomed to my teaching style, classroom management practices, academic expectations, and sense of humor. The second reason for selecting my senior classes was because there was a seamless introduction to Marcia’s model as part of our curricular map. I was able to

begin the recruitment process for volunteer students naturally as a part of a multi-day lesson on developmental psychology, in which Marcia was featured. The advantage here was that I was able to solicit volunteers without interrupting in-class instructional time. Since the class was going to explore Marcia's model anyway as part of the IB curriculum, this made my solicitation for volunteers a natural conversation for our classroom.

The recruitment process of the study had two phases. In the first phase, I placed a general call to all of my students enrolled in higher-level and standard-level IB psychology. In total, my initial solicitation included 50 students, the number of seniors in my classes. Seniors were selected because as part of their regular curriculum they were going to learn about Marcia's model in fulfilling learning objectives for a unit of developmental psychology. I was planning to administer Marcia's identity status questionnaire (Appendix C) as part of a classroom activity. All 50 students received the questionnaire to complete (which I then scored for them) as part of a classroom activity that was used later used facilitate a classroom discussion. I explained the nature of the research and distributed consent/assent forms (Appendix H) to any student who volunteered. We read through the documents and I paused frequently to clarify passages and entertain questions. I made particular effort to carefully explain that students were under no obligation to volunteer and that participation in my study would not impact their academic standing in our class, nor would it have any adverse effect on our personal student-teacher relationship. I explained my efforts to maintain confidentiality and to respect their privacy. I took care to emphasize that students could withdraw at any time and made sure to explain the obligations to which they were beholden should they continue in the study. Students were given a week to return the assent and consent forms. During this week, I reminded students once of the approaching deadline and again offered to answer questions. I received no questions (by

telephone, email, in-person) from parents. I also made myself to answer any of their questions or to clarify the procedures before and after school in case students wanted to address me privately. The following week, once the consent/assent forms deadline had expired, I administered Marcia's identity status questionnaire as part of the normative lesson plan to all of my 50 senior level students since this was naturally part of the coursework.

Of the original 50 students who were solicited, 41 returned with parental consent and student assent documentation (Appendix H). Five of the nine students who did not return consents expressed that they did not use social media tools like Facebook. The remaining four students did not explicitly share their reasons for non-participation. The sample of 41 students who returned assent and consent forms had minor variations of race.

Table 6

*Distribution of Ethnicity among Responding Participants*

<u>Ethnicity</u>	<u>(n)</u>	<u>%</u>
White/Caucasian	33	80.5
Asian	6	14.5
Black/African American	2	5

*Note.* Of 50 solicited participants, a total of 41 successfully returned consent/assent forms

The majority of the returned assents/consents (80.5%) were from participants who self-identified as White/Caucasian (n=33). Asian students in the study (n=6) represented 14.5% of the total and students who self-identified as Black/African American (n=2) represented 5%. This distribution of race closely reflects the composition of students in my senior classes.

These 41 students were then asked to complete a technology-use questionnaire (Appendix D) that I used to capture their level of technology literacy (e.g., familiarity with

uploading photos, posting status updates) and their degree of Facebook use. Given the research aims of this study, it was important to include students who were literate with various forms of social media technologies and had regular engagement with a personal Facebook profile.

With Marcia's identity status survey and the technology-use questionnaire in hand, I needed to focus my sample to size to four. This was the second phase of the recruitment process. Originally, I had planned to use four participants because there were four identity types in Marcia's model. I thought I would discover at least one identity achievement status type, one identity foreclosure status type, one moratorium identity type, and one diffusion identity type. Upon consultation with the dissertation committee, I was encouraged to consider a more explicit list of characteristics for inclusion since I did not know how many identity types I would eventually discover in my class. According to Stake (2006), a collective case study of four is manageable for a single researcher to collect rich data that provides opportunities to learn about the complexities of a phenomenon. Stake (2006) considers a sample size of four to be embraceable, meaning that the researcher can successfully approach each research case with an integrated and holistic comprehension. If a case is not embraceable, the researcher risks a shift to quantitative tools that rely on direct measurement and statistical analysis. This consideration justified the need for purposive sampling that would drive my participant selection.

### **Building the Collective Case Study of Four**

The sample size of four allowed me to gather rich and detailed field data about participants in such a way as to better illuminate the practice of Facebook behaviors through the lens of identity status. The prior teacher-student relationship between participants and myself was a benefit. According to Gall, Gall, and Borg (2007), sample size is largely a matter of judgment where considerations of depth, breadth, and saturation must be taken into account.

Because the objective of a purposeful qualitative sample is to achieve information saturation or redundancy, where adding to the sample would not reveal new insight (Patton, 2002), four participants over four weeks was agreed upon as a reasonable data pool among myself and the committee. Purposive sampling permitted me to select participants who would be most likely to contribute credible and meaningful data to the aim of the research (Jupp, 2006). Four case studies permit enough variation to carefully compare activities, but is not unnecessarily unmanageable for one analyst (Stake, 2006).

The four participants came to comprise my multiple case study approach drawing from Stake's framework (2006). I employed a multiple case study approach for this qualitative investigation because it allowed me to deeply examine the rich content offered from each participant as well as to carefully make comparisons among individual cases. In a collective case study, Stake (1994) describes:

individual cases in the collection may or may not be known in advance to manifest the common characteristic. They may be similar or dissimilar, redundancy and variety each having voice. They are chosen because it is believed that understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of cases. (p. 237)

For my class size and research questions, a collective case study of four was manageable and realistic. The data collection of the research project would occur during the academic school year so focusing my efforts on four participants, I felt I was acting responsibly with regard to my students' time as well as respecting their personal boundaries. With four students, I would be able to capture their individual Facebook experiences and honor their stories with care without overtaxing them or my roles as their teacher and the researcher. This small sample size permitted

close investigation by me and the opportunity to collect rich data on each participant. This wealth of thick data better informed my themes and give greater authenticity to my qualitative approach. Each of the four participants will therefore comprise what Stake (2006) calls a 'quintain'. The quintain refers to some organizing characteristic to which all of the case studies share in common. In a qualitative approach, the quintain provides a way to collect data around some central theme or activity. An archer who aims directly at a bull's-eye is like a researcher who goes into a study with a focused intent on what to study and what to expect. Such an attitude delimits the potential for a rich qualitative study that could reveal new or emerging theories. Still, the archer cannot simply aim in the general direction of the bull's-eye as this would overwhelm a researcher with all kinds data and units of analysis. There would be such an overwhelming collection of information that it would be difficult to corral the data into anything meaningful for research purposes. Instead, the archer aims at the target; not necessarily at the bull's-eye, not simply in the cardinal direction. Aiming towards the target with a quintain provides an organizing agent to the researcher's efforts. In the current study, the four participants share several significant demographics: high school seniors, adolescent-age students, social network users, but the quintain in this study is Facebook use.

The way the quintain shows itself may differ however in the way participants use Facebook applications and/or by the identity status of participants. These differences may be significant to my research questions which are concerned with social media use, adolescent identity, and pedagogical influences. This means that I will need to engage in some degree of cross case analysis. Stake (2006) warns against directly comparing too frequently among participants in a multiple case study analysis. "Multicase study is not a design for comparing cases" (Stake, 2006, p. 83). Each case or rather, each quintain, should be able to stand on its own



and give an embraceable illustration of each person's experience. Comparing cases diminishes the integrity of each case as if it were lacking something or possessing something that the other did not have (Stake, 2006). I will respect the individuality of each case and honor the phenomenological experience of each participant. Although Stake's caution is indeed a valuable warning about the integrity of multiple case study analysis, some notable differences should be illuminated. This is in no way intended to suggest generalizability among classes of adolescents which would be disingenuous to the qualitative framework. Instead, this research draws heavily from a theoretical base of Marcia's assumption that adolescents can fall into one of four categories (1966). I feel that carefully examining some of these differences in light of Marcia's categories is essential to the main research questions. The experiences collected by this research tried to capture the ways in which each individual saw how he or she represented themselves through their Facebook profile and the ways Facebook may have enabled each participant to explore his or her identity. The comparisons were necessary, but were carefully articulated to still respect each participant's experience.

In order to determine which of the four identity statuses each participant would fall, I utilized a well-established survey tool (Appendix C) called the Measure of the Ego Identity Process Questionnaire (Adams, Shea & Fitch, 1979). The tool is comprised of brief stems that examine domains of dating, friendship, occupation, philosophical life style, politics, recreation, religion, and sex roles. This validated survey tool well-established which of the four statuses each participant was currently experiencing.

Using the data from Marcia's identity status questionnaire, I recorded the distribution of identity statuses across the 41 willing participants. There were 18 male students and 23 female students who comprised the participant pool. These students were then placed into their

respective identity status according to the Marcia questionnaire. None of the 41 participants were identified as being in the Foreclosure status nor the Diffusion status. All of the participants were either in Achievement or Moratorium status.

Table 7

*Distribution of Identity Status and Gender among Participants*

<u>Gender</u>	<u>Achievement</u>	<u>Moratorium</u>	<u>Foreclosure</u>	<u>Diffusion</u>	<u>Total</u>
Male	10	8	0	0	18
Female	13	10	0	0	23
Total	23	18	0	0	41

*Note.* No participants in the study were categorized as being in the Foreclosure identity status nor the Diffusion identity status.

From this pool of 41 participants, I used purposive sampling to select four participants to follow much more closely for the period of investigation. A purposive sampling technique is generally used in a naturalistic context where participants are selected “based on specific purposes associated with answering a research study’s questions” (Teddlie & Yu, 2007, p. 77). Because none of my students were in the foreclosure or diffusion status, this meant, I would need to select students from the achievement and moratorium groups. According to Stake (2006), a collective case study of four is manageable for a single researcher to collect rich data that provides opportunities to learn about the complexities of a phenomenon. Stake (2006) considers a sample size of four to be embraceable, meaning that the investigator can successfully approach each research case with an integrated and holistic comprehension. If a case is not embraceable, the researcher risks a shift to quantitative tools that rely on direct measurement and statistical

analysis. For my class size and research questions, a collective case study of four was manageable and realistic.

The data collection of the research project would occur during the academic school year so focusing my efforts on four participants, I felt I was acting responsibly with regard to my students' time as well as respecting their personal boundaries. With four students, I would be able to capture their individual Facebook experiences and honor their stories with care without overtaxing them or my roles as their teacher and the researcher. This small sample size permitted close investigation on my behalf and the opportunity to collect rich data on each participant. This wealth of thick data better informed my themes and gave greater authenticity to my qualitative approach. Because I had intended to select a student from each of the four identity status types, I needed to outline the criteria that would make up this intimate group. This determination was influenced by several considerations: gender, commitment to the documentation process, dedication to the research period, availability for interviews/discussions, depth of technology skillset, and teacher-student rapport.

### **Gender as a Purposive Criterion**

A literature review has documented well-established gender differences in the online behavior between men and women suggesting that women tend to be more socially oriented placing value on interpersonal interactions and relationship maintenance, while men tend to be more task-driven displaying information-seeking behaviors (Guadagno & Cialdini, 2002; Jackson, Ervin, & Gardner, 2001; Weiser, 2001; Williams, Consalvo, Caplan, & Yee, 2009).

The large body of gender investigations made me consider the necessity of having both male and female students equally represented, that is, two achievement status and two moratorium status students. In my effort to explore potential patterns of Facebook use thorough

my research questions, I felt having some diversity of gender was an important consideration. Later, as part of the cross-case analysis, gender differences were examined between and among male and female students.

### **Commitment to Documentation as a Purposive Criterion**

As part of the data collection process, I asked participants to complete online diaries about their Facebook use. These diaries were intended to prompt participants to be reflective about the Facebook use and to increase dependability. They provided a space for participants to share their intentions/thoughts about whatever it was they were posting, uploading, searching on Facebook. It was a place for them to privately reveal to me their reasons for their online activity. I used these entries to not only learn the motivations of my participants from their subjective view, but I also followed up with these entries for clarification during interview times in order to increase the trustworthiness of data.

The entries were used to establish dependability of data collection. Dependability, in part, involves participants reviewing data collection findings and interpretations in order to ensure that conclusions are supported by the informants (Cohen, Manion & Morrison, 2011). I used the entries to create an audit trail that I used to document whenever a participant went online and would then check this entry against any online activity that showed on the participant's profile page. Participants were free to elaborate on their motivations as much as they choose, although I encouraged them to include as many details as possible (feelings, thoughts, how they imagined others reacting, etc.). Participants were encouraged to share their personal reflections about what they are posting/downloading not just to document what they have done. For every Facebook post, the participant's entry was examined for meaningful content as part of the data collection. Not knowing the potential usefulness of the data in advance, I employed a content analysis to the

entries and coded each participant's comments. In order to strengthen the credibility of the study, I made certain to employ member checks by allowing the participants to review my notes and codes of the diary entries. Member checks honor the voices of the participants in the interpretation of the data and help to eliminate researcher bias (Guba, 1981). The entries were a valuable part of corroboration between the participants' motivations and my interpretation of the Facebook activity. To adequately assemble my purposeful sample, I needed to have participants that were likely to follow-through on my requests for diary entries and rich documentation.

### **Dedication to the Research Period as a Purposive Criterion**

I determined that a four-week period of data collection would be appropriate given the nature of the research questions. As their teacher, I knew that disposable free-time during the senior year of an IB student was a luxury. Ethically, I wanted to respect the participants' time commitment to the study while at the same time, making sure I was able to do my best to achieve saturation of valuable data content. Saturation is the effort of the researcher in qualitative studies "to look for instances that represent the category...until the new information obtained does not further provide insight" (Creswell, 2007, p. 160). It was my informed opinion that a single month was an adequate time sample to capture possible Facebook features that my students might use. Over the course of a month, the student was afforded several weekends that might reflect different social plans on Facebook, school sporting events were likely to be attended, a variety of academic responsibilities were also likely to be encountered over the course of the month. The month time sample was intended to be a snapshot of my students' academic year. The events that occurred in one month were, in my teacher opinion, likely to appear again in almost any other month, save certain holidays or extended weekends. For this reason, I was confident that a one-month sampling period was sufficient to document Facebook saturation behaviors. Because of

the time commitment needed to achieve saturation, I was interested in participants who would be able to manage additional responsibilities outside of required classroom demands so as not to adversely affect their grades. In addition, I was concerned that the participants would follow-through with the study to its completion. Attrition from a sample size of four would leave me in a precarious situation. Therefore, I was careful to include those students who had demonstrated successful time-management skills and consistent completion of assigned work.

### **Availability for Interviews as a Purposive Criterion**

My methodology included two semi-structured interviews (Appendices E, F, G). One interview was scheduled two weeks into the one-month time period to follow-up on diary entries and Facebook activity. The interviews were scheduled several weeks in advance to respect student time availability as well as to reserve a private room in the media center room. In order to assemble the four participants, I was careful to consider those students who were likely to meet during the after-school hours when the interviews were to be conducted. In addition, the participants I considered were those whom I had as prior students and whom had shown themselves to be articulate in class and expressive in their writings. They were students who could answer questions thoughtfully and thoroughly.

Student interview dates and start times were flexible to accommodate incidental disruptions, but I made certain to adhere to administering the interviews at week two and week four. Because the narratives of each participant was valuable data to answering the research questions, it was critical to include only students who were willing to sit for the two conversations after school.

### **Technology Literacy as a Purposive Criterion**

The research questions for this study were grounded in the use of technology, specifically the use of Facebook as a social networking site. Because my questions depended on familiarity with social networking technology, interested participants were asked to complete a technology questionnaire (Appendix D). The questionnaire queried participants about a host of technology literacy skill sets such as, uploading and downloading content, posting status updates, and familiarity with various social networking platforms. Feedback on this questionnaire was important in helping to shape the purposeful sample of four in this study. I wanted to make sure that I included students who were knowledgeable about the technological features of social networking platforms, like Facebook. If there was any possibility that different identity status types of adolescents used Facebook in different ways, I needed to make sure that I included participants who were aware of the numerous features Facebook offered users. The frequency of use of these features might be revealed during the observation period or during the interviews, but I needed to make sure that students were at least aware of the features. I confirmed the students' responses with them to make certain they understood the questions the way I intended them and that the participants had answered in a way that was authentic for them. My purposeful sample of four was comprised of students who reported that they were familiar with the numerous Facebook features.

### **Teacher-Student Rapport as a Purposive Criterion**

The last criterion I used to collect the sample was my familiarity and rapport with the participants. According to Spradley (1979), rapport refers to:

a harmonious relationship between ethnographer and informant. It means that a basic sense of trust has developed that allows for the free flow of information. Both the

ethnographer and the informant have positive feelings about the interviews, perhaps even enjoy them. (p. 78).

Selecting students with whom I had sufficient rapport was necessary to ensure that the interview data I received was obtained without coercion and reflected the honest perspectives of participants. After all, the theoretical approach of socioconstruction relies on the individual's perception of reality. In order to truly obtain the individual's honest perception, I needed to make the best efforts to select participants with whom there was mutual trust and rapport. Further, my data collection included accurate documentation of Facebook activities. I did not want participants to censor their activities or feel any degree of trepidation about their behaviors. This made the student-teacher relationship a very important and salient element in narrowing the purposive sample of four. This decision was predicated on shared interactions with participants both in and out of the classroom over our time together.

All of my senior students had been in my class during their junior year for IB psychology I. They again return to me during their senior year for IB psychology II. At the point of the research in the academic year, the students and I had known each other for more than a year and a half. The extent of this time made for a high degree of familiarity and comfort-level between myself and the students. As one of their classroom teachers, I was comfortable being able to assess the thoroughness of responses, likelihood of completion, and commitment of follow-through with my students. I was aware of who was more likely to complete assignments on time, express themselves clearly in both verbal and written form, and who was comfortable with me having a small window of insight into his/her personal life. These considerations made the issue of rapport important in my purposeful sample. I wanted to include students who would share openly and honestly. I wanted students who would give their best effort at consistently



completing my requests documenting Facebook use and creating diary entries. I wanted to have a sample that understood that their participation was valued by me. In addition, I wanted to ensure that the sample of four were students whom I felt would also be able to differentiate between me as their teacher and me as a researcher. I wanted to be certain that participants knew that they could indeed withdraw from my study without any ramifications to their classroom grade or our personal relationships. These were to be students who understood from our interactions in psychology, that there would be no hard-feelings or unfavorable consequences from dropping out of the study. Simultaneously, these students would know that they would not win favor or classroom advantages with me because they participated. Although thankful and appreciative, helping me to provide data was an activity that was independent of anything happening inside or outside of the classroom. Each of my students had a background in research methods and were excited to help me complete my research. My students had completed an original quantitative study as part of their IB curriculum. It is an aspect known as an internal assessment (IA). This true experiment was conducted from literature review to final conclusions over the course of about six months. Students were very well trained in efforts to control for threats to internal validity as well as ethical considerations. Because my students had conducted their own research, I feel that they were empathetic to my request for participants in order to complete my personal research. I was confident that the sample of four knew I respected their time and efforts and would make their obligations to my study realistic and manageable.

Each of these considerations informed my decisions to seek four specific participants for the study. I selected one male and one female in the achievement identity status as well as one male and one female in the moratorium identity status. Each of these four students and their parents agreed to participate (Appendix H) in the study. I was also able to receive IRB approval,

permission from the county's Department of Assessment, Research, and Accountability, as well as permission for the study from my immediate school principal (Appendix J).

### **Data Collection: Identity Survey Instrument**

Marcia's survey is called the Objective Measure of Ego Identity Status questionnaire, OMEIS (Adams, Shea & Fitch, 1979) (Appendix C). This survey establishes the identity type of the user. The OMEIS has been used for decades to investigate identity status. Determining identity statuses have been a major focus of investigation within the research of identity formation and development for over 30 years (Marcia, 1964; Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993). The construct of identity proposed by Erikson (1968) is closely linked to Marcia's model (Cote & Levine, 1988). "The most popular paradigm used in empirical investigations of the identity formation process described by Erikson has been the identity status model developed by Marcia (Kroger, 1997, p. 748). The four identity statuses outlined in Marcia's model and the object of investigation of the OMEIS show predictive validity (Waterman, 1988). Waterman (1988) draws from a number of empirical studies which demonstrate relationships between statuses and correlative qualities which are variables from other psychological constructs. Construct validity of the OMEIS have been supported by a number of studies outlined in the book, *Ego identity: Handbook of psychosocial research* (Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993). The contributions outlined support the following claims:

- (a) The construct validity of the statuses has been amply demonstrated.
- (b) The utility of the constructs has been demonstrated across a wide range of ages as has its applicability for both genders.

- (c) An excellent start has been made on demonstrating the utility of the constructs cross-culturally.
- (d) The identity statuses have been found to be appropriate for the understanding of identity formation across a broad range of life domains, including vocational choice, religious beliefs, political ideology, sex-role attitudes, sexuality, friendship, dating, the role of spouse, the role of parent, and family versus career priorities.
- (e) The pathways of identity status development have been delineated and substantial research data have been obtained supporting the relevant hypotheses regarding direction and timing.
- (f) A good start has been made on identifying the antecedents of identity change.
- (g) There is substantial research evidence regarding the social context of identity formation, particularly family and educational variables.
- (h) Substantial research exists regarding the cognitive skills associated with, and perhaps necessary for, the successful exploration of identity alternatives.
- (i) Evidence supportive of Erikson's views on epigenesis have been obtained.
- (j) The conceptual and empirical links between identity formation and the development of intimacy have been extensively explored.
- (k) A start has been made on identifying the links between identity processes and the content of the goals, values, and beliefs comprising a person's sense of identity.
- (l) Consideration is being given to the intervention strategies available for helping to facilitate the process of identity formation. (p. 201).

In addition, a study conducted at Utah State University determined the OMEIS to have acceptable reliability and validity (Bennion & Adams, 1986). The researchers administered the questionnaire to 106 male and female participants enrolled in psychology and human

development classes. Participants completed several instruments in order to examine the OMEIS. Estimates of reliability were determined from various forms. Bennion & Adams focused on estimates of internal consistency through the computation of Cronbach *alphas*. Data indicated a good to strong internal consistency for scales of ideological and interpersonal identity measures.

Discriminant validity examines evidence that a given scale measures a construct independent of other instrumental constructs. Researchers (Bennion & Adams, 1986) determined that identity diffusion was negatively correlated with identity achievement. This conclusion is reasonable given that the behavioral characteristics of these scales are in opposition to each other. Further, diffusion was determined to be positively correlated with moratorium scores. The researchers concluded that these scales were measuring distinct but overlapping constructs.

In another study by Adams (2010), a random sample of 2000 entering university students was contacted using an online approach. Of the 2000 students contacted, 1620 completed a validation study of the four identity statuses. Survey items measured occupational, political and religious ideological aspects of ego-identity and were used to compute a participant's scores into a diffusion, foreclosure, moratorium, or identity achievement status. A factor analysis of the items revealed four factors reflecting the four identity statuses. Alphas ranged from .84 to .90 for the four ego-identity status factors. Predictive validity revealed that moratorium and achievement status adolescents had significantly higher global identity and lower authoritarianism scores than diffusion and foreclosure students. Foreclosed and achieved identity students were significantly more self-accepting than diffused or moratorium identity status peers. Identity achievement students were significantly lower in rigidity of thought than the remaining three identity status students. Analyses were computed to test for gender, age, program, and living arrangement

differences for students on their identity status scores. No significant main or interactions effects were observed.

The classroom discussion about the OMEIS is generally centered around questions of stem construction and the interview methods Marcia originally devised to collect the data that provided the foundation for his stems. It was during this developmental unit that I began the informed consent process to recruit interested students. Earlier, I had previously obtained permissions to recruit students and collect data from my principal, the school district's research office, and appropriate IRB personnel (Appendix I). Throughout this process, I gave particular attention to making sure that students were not pressured or coerced into feeling anyhow obligated into agreeing to participate in my research. I explained my interests and the reasons for my having come to them as potential participants. Students were aware that whether they choose to participate in my research or not, there would be no extended privileges, favoritism, or adverse consequences to their academic standing in class. Further, because I had already established a friendly relationship with several students outside of class (some students and I had volunteered at the same organizations, had attended similar places of worship, have seen one another at local professional sporting events, have been at restaurants at the same time, etc.), I made certain to convey to students that I would still enjoy seeing them and would always be certain to say hello.

### **Data Collection: Construction of the Technology Questionnaire**

As part of the purposive sampling selection, I administered a self-created technology questionnaire (Appendix D). The stems on this questionnaire were each designed to capture meaningful data across several digital literacies. The constructs for the survey were carefully crafted drawing from studies that investigated the role of modern forms of technology and the influence these tools have on adolescent identity development (Lenhart & Madden, 2007; Lewis

& Fabos, 2005; Weber & Mitchell, 2008). The stems questioned participants' knowledge of technical skill sets such as posting, uploading, sharing, archiving, and deleting content. These basic abilities are part of a rudimentary understanding of digital competencies (Boyd, 2014).

Additional stems focused on familiarity participants had Facebook features like creating a status, deleting posts, uploading media like photos and videos, as well as friending/unfriending individuals in their social network. Because the research questions of this study focus on Facebook use, it was important to ensure that participants understood these terms and expressed a degree of proficiency with each of them.

Finally, stems on the questionnaire captured familiarity participants had with various platforms of social media. Research questions in this study are embedded within a larger understanding of social media so it was important to select participants who were knowledgeable about social media terms and trends. Later, during the interview process, I intended to have participants reflect on their social media behaviors so having experience that extended beyond just Facebook was a salient feature I felt was important for comparison and provided perspective of use.

While creating a survey that could capture all of the above behaviors as teens engage with tools of modern technology is ambitious, the present research hoped to capture a sense of pattern among a selection of adolescents in order to illuminate potential habits and proclivities among specific identity status types as outlined by Marcia. Results on this survey helped me to further narrow my purposive sample and to recruit participants who displayed technology skills that would best illuminate my research questions.

## **Data Collection: Interviews**

My methodology included two semi-structured interviews (Appendices E, F, G). The nature of the semi-structured format also allowed me to follow-up with additional questions that I hadn't originally planned during the course of the interview. This afforded me the opportunity to capture the online experience of the student as carefully and authentically as I could. One interview was scheduled two weeks into the one-month time period to follow-up on diary entries and Facebook activity. The second interview was scheduled at the end of the one-month period for member checking purposes of the earlier diary entries as well as the transcript from the first interview. The second interview also included the debriefing process and plans for any additional follow-up with participants and/or parents as needed or requested. The interviews were planned for approximately 20-minutes in order to not overly burden the participants. As part of the ethical standards I set forth, I did not want to add undue time pressures to my participants' schedules. Per school district guidelines, the study should not interfere with student learning expectations during the school day.

The ethical practices used during the semi-structured interviews drew heavily from the work of Danah Boyd (2015) in the chapter "Making sense of teen life: Strategies for capturing ethnographic data in a networked era". Boyd outlines several strategies that have been useful for conducting interviews with adolescents regarding their engagement with various forms of technology. Her ethnographic techniques for interviewing adolescents emphasize that researchers cannot reliably "interpret online content without understanding the context in which it is produced" (Boyd, 2015). As a public high school teacher in Florida, I am also a mandated reporter. Accounts of abuse/neglect or intentions to hurt one's self or others must be reported to appropriate personnel as per state guidelines and IRB protocols. Boyd suggest that while she

wishes she could speak openly with adolescents about anything, she has strategically decided to avoid conversations that might lead to issues of abuse or injury. In addition, Boyd recommends relying heavily on pseudonyms for interview participants as well as for any individuals mentioned by the participant during the interview. In her effort to respect the privacy and anonymity of her participants, Boyd also elects to obscure data she collects from Facebook profiles by blurring photos of individuals, by redacting recognizable addresses or other personally identifying information, and by altering quotes to maintain the meaning but to prevent the quote from being searchable. Her efforts are consistently employed whether she is citing a private profile page or a public one. I modeled Boyd's protocols in the current study in order to ensure ethical best practices and the safety of participants.

As an ethical precaution to safeguard student privacy, I used pseudonyms for each participant. Audio recordings were used to capture interview data with verbal assent documented from each participant at the beginning of each interview. I transcribed the recordings in their entirety and later coded the interviews for potential themes utilizing ATLAS.ti 6.2 software. Transcripts, audio recordings, and diary entries were secured offline on my personal password protected hard drive. Additionally, the interviews were held in a private room in the media center of our school. This particular room while enclosed and secured with a door was outfitted with a window that looked out into the interior of the media center. This meant that while no one was able to hear our discussions, both the student and I were able to be publically observed by anyone who happened to be in the media center, including the school's staff librarian. This precaution was an ethical safeguard that protected both the student and myself. I provided transcripts of the interviews to participants as a means of member checking to increase the



trustworthiness of the data. The interviews were scheduled several weeks in advance to respect student time availability as well as to reserve the media center room.



Figure 4. Media center room

Note. The room is enclosed with a window looking out to the exterior courtyard and another window looking to the interior of the media center.

Table 8

*Pseudonyms of Four Participants by Identity Status and Gender*

<u>Gender</u>	<u>Achievement</u>	<u>Moratorium</u>
Male	Alex	Jim
Female	Sara	Jennifer

Note. Pseudonyms were used in order to protect participant privacy.

Alex, Jim, and Sara, self-identified their ethnicities as White non-Hispanic. Jennifer was the only participant in the sample of four that self-identified as Asian. The four participants were

already connected to my online class profile for Phineas Gage. As part of the data collection method, I activated a Facebook feature that allowed me to turn on notifications. The notification feature alerted me whenever one of the four participants updated a status post, commented on a story, or uploaded any content. These alerts were captured and coded for type of activity and time of day for analysis and later compared against the diary entries participants were maintaining in order to maintain credibility. The content of the status post, comment, and/or uploaded content was itself also coded for analysis. I captured screen shots of participants' posts and comments for analysis. When capturing Facebook images, I obscured participants' faces and redacted personally identifiable information. These screen shots were maintained securely on my password protected hard drive. After the four-week data collection process, I deactivated the alert notification system from each of the participants. The online diary was also closed so that no further entries could be created. The four-week period was an adequate time sample in order to collect thick data and achieve data saturation.

### **Data Collection: Duration of Research**

I had originally planned to recruit participants, secure informed consent forms, and train participants by the end October 2014 with data collection beginning in November and running for four weeks; until December, concluding prior to the students' Winter break. A delay in the curriculum made it necessary to push the timeline back until 2015 as the developmental unit (in which we would discuss Marcia as a natural part of our studies) was not yet appropriate to start. Forcing the study to begin at the original start dates would have, I feared, run into midterm exam week. Students may be especially overburdened and/or taxed for time during these consecutive days and I did not want my requests for online diary documentation and after-school interviews to disrupt their academic work. In light of the students' academic schedules, I choose to alter the

timeline of the study. I waited until after the new calendar so as not to inconvenience students with interview schedules near their winter break holiday. I therefore postponed the start of the study following the holidays until Spring of 2015, when the second semester had begun and the regular pace of school was back to normal. The change in the research period was authorized by IRB (Appendix J). Initial requests for volunteers occurred in February and four participants were examined closely as case studies for the four-weeks of March.

Moving the data collection process later into the school year better aligned our classroom curriculum with the current study's theoretical framework in identity status across the lifespan. Students learn about the research of Marcia and his identity statuses as part of their IB learning objectives for developmental psychology (Appendix P). This knowledge background in the education of my psychology students made my research theory particularly salient to both the recruitment, informed consent, and eventually the debriefing process of the study.

Data collection, which ran for four weeks, was intended to be a snapshot of my students' academic year enabling successful saturation of data. Saturation refers to data adequacy, that is, the extent to which the researcher collects enough data so that no new information is obtained (Morse, 1995). "Data saturation is reached when there is enough information to replicate the study, when the ability to obtain additional new information has been attained, and when further coding is no longer feasible" (Fusch & Ness, 2015, p. 1408). The question I wrestled with is how long is long enough to adequately document each participant's authentic experience? I need to capture valid data that reflects each user's experience and to make sure that I capture enough of it—that there is both quality and breath. My multiple case analysis was comprised of four participants. According to Fusch & Ness (2015), studies with a smaller sample size are likely to achieve saturation sooner than larger sample sizes. This cautionary rule provided guidance in my

decision making process. In addition, Morse (1995) explains that in order to achieve saturation, the researcher should value variation of incidences, rather than the frequency. In my study, this meant that I should provide adequate time for participants to engage in a variety of Facebook features such as posting, uploading, sharing, etc. and not just focus on the number of times a participant posted a status update or the number of times a participant 'liked' a page. While these behaviors are indeed important for coding, saturation values the variety of behaviors. Drawing on my personal experience with Facebook and the major features available to users during the data collection period, one month was allotted to reasonably provide opportunities for all participants to demonstrate their digital behaviors. Saturation is the effort of the researcher in qualitative studies "to look for instances that represent the category...until the new information obtained does not further provide insight" (Creswell, 2007, p. 160). A single month time period was an adequate time range to capture possible Facebook features that my students might use. Over the course of a month, the student was afforded several weekends that might reflect different social plans on Facebook, school sporting events which were likely to be attended, and a variety of academic responsibilities that were also likely to be encountered over the course of the month. It was my expectation that one month was an adequate time to avail participants of major Facebook features so that no new behaviors would emerge. "If one has reached the point of no new data, one has also most likely reached the point of no new themes; therefore, one has reached data saturation" (Fusch & Ness, 2015, p. 1409).

### **Analysis and Rigor in Qualitative Methods**

In this study, I utilized two semi-structured interviews (Appendices E, F, G) conducted individually with each participant coordinated two weeks apart during the one-month observation period. Interview stems examined the ways in which adolescents use Facebook and

Facebook-related applications in their social experiences as well as questioning participants about activities related to their online diary entries. With participants' permission, the interviews were audio-recorded and later transcribed for participants to verify. The interviews were utilized to construct the narrative of each participant's experience of Facebook use so as to accurately capture an illustration of each case study member (Stake, 2006). Part of the interview process was to provide me with the opportunity to corroborate findings in each participant's diary and allowed me to probe deeper into each participant's experiences. Such methodology may inspire future research aims and better clarify potential emic use of Facebook features that may be unknown to me in connection to identity formation. I completed the semi-structured interview by debriefing participants about the research aims and tentative findings about their individual patterns of Facebook use (Appendix F). The semi-structured interview approach afforded me the opportunity to establish a degree of reliability among the small qualitative sample size of four. Additionally, the semi-structured approach had the strength of approximating of a natural conversation much more closely than a structured interview. This provided the participants with feelings of trust and comfort and helped to maintain a positive rapport.

I utilized ATLAS.ti 6.2 applying a technique of content analysis in order to develop a coding system from data collected from the transcripts of the two semi-structured interviews and participant journal entries. This procedure allowed me to code Facebook behaviors, track individual student habits as evidenced by each journal, and generate themes which might illuminate differences among participant exemplars.

The ATLAS.ti software program was accessed through the USF application gateway made available for USF student research. The software enabled me to track and manage themes that began to provide insights to the research questions. Using analytic memos, I was able to

effectively code portions of interview data and Facebook activities for examination between and within participants. Additionally, the software better permitted me to extract key portions of interview data to support research conclusions and illustrate participant narratives. Pseudonyms were created for each of the four participants in order to protect their identity from being readily identified. Initially, during the first phase of transcript analysis, I applied general codes to each of the participant's data. During the second phase, I examined the codes more critically to observe potential similarities and differences. I returned again to each participant's set of data in order to make certain I had captured as much of the participant's experience as I could. I wanted to make sure that my research notes had reached a saturation point and no new codes had emerged. After repeated analysis of the transcribed interviews, themes began to develop from the research.

I employed a variety of qualitative measures such as confirmability, credibility, dependability, and transferability in order to generate meaningful and robust data and to increase trustworthiness of the multiple case studies. These four criteria establish the rigor of qualitative research (Lincoln & Guba, 1985).

Confirmability refers to the accuracy of the data and dependability refers to the stability of the units of data (Tobin & Begley, 2004). In qualitative research, dependability is often compared to reliability in quantitative research. The strategies for establishing both concepts are similar. I used a text search query when examining interview transcripts and Facebook diary entries. This content analysis allowed me to identify themes or patterns among participants during the data collection period. It also enabled me determine what concepts may be worthy of additional follow-up or greater examination. I reviewed surrounding transcript paragraphs in order to confirm the accuracy of the content and validate the context of the participants' meanings. For example, if a participant mentioned the desire to keep some Facebook posts

private from adults, I reviewed the transcripts to discern whether the participant intended the meaning of adults to be teachers, parents, coaches, or indeed all adults.

To further ensure confirmability and dependability, I maintained a reflexivity journal. Because the researcher is generally considered part of the research process in qualitative approaches, a reflexivity journal will capture the researcher's personal history and decision-making process and how (if at all) this may have an impact on the data collection and/or data interpretation (Rodgers & Cowles, 1993). The journal was intended to document rationale for decisions and challenges I encountered during the study. This transparency of biases and decision making helps to establish confirmability and dependability to the reader.

Credibility refers to the believability of the research findings (Lincoln & Guba, 1985). I maintained a prolonged engagement and persistent observation with each participant in the study. "These skills require the researcher to spend sufficient time in the field or in case-study sites to gain full understanding of the phenomena being investigated. The lack of any new emerging data is evidence that saturation has been reached" (Houghton, C., Casey, D, & Murphy, K., 2013, p.13). I followed participants for thirty days, capturing a brief snap-shot of the Facebook activities a small sample of adolescents during the time period. This prolonged engagement of thirty days was intended to achieve sufficient saturation.

Persistent observation was achieved by monitoring the Facebook pages and journal entries of participants. The four participants were already connected to my online class profile for Phineas Gage. As part of the data collection method, I activated a Facebook feature that allowed me to turn on notifications. The notification feature alerted me whenever one of the four participants updated a status post, commented on a story, or uploaded any content. These alerts were captured and coded for type of activity and time of day for analysis and later compared

against the diary entries participants were maintaining in order to maintain credibility. The content of the status post, comment, and/or uploaded content was itself also coded for analysis. I captured screen shots of participants' posts and comments for analysis. These screen shots were maintained securely on my password protected hard drive. After the four-week data collection process, I deactivated the alert notification system from each of the participants. The online diary was also closed so that no further entries could be created. The four-week period was an adequate time sample in order to collect thick data and achieve data saturation.

Photographic images captured from the participants were carefully obscured in order to preserve personally identifiable features. I was careful to protect the visual confidentiality of each participant with respect to the research aims of this study and the informed assent obtained from each student as described in the IVSA Code of Research Ethics and Guidelines (Papademas, 2009). As described in the guidelines, I have taken reasonable precautions to protect the confidentiality of participants in Facebook photos by employing the use of blackened ovals to hide defining facial features.

Although obscuring facial features may be perceived as limiting the reader's interpretation of what the researcher claims to perceive, such a procedure is necessary to accommodate ethical considerations. Hiding participants' faces may add difficulty in allowing readers' ability to interpret emotional cues from the image (Wiles et al., 2008). Further, hiding a participant's face (and name) may have the unintended consequence of objectifying the student by eliminating his/her facial identity (Wiles et. al., 2008). In a concentrated effort to respect the well-being and rights of research participants however, I took care to anonymize information that might specifically single out specific characteristics of students. While obscuring facial



features/names may not in itself be enough to ensure anonymity, the attempt was made nonetheless to adhere to informed assent obligations.

Frequent checks on participants helped to maintain the richness of the data and strengthen the study's credibility. By correlating the activities participants recorded in their journals against their actual Facebook posts, I was helping to establish confirmability which strengthened the study. I also employed the strategy of member-checking in order to establish credibility. Member-checking allows participants to read the transcripts of their interviews in order to ensure the accuracy of what was said and to avoid misrepresentation (Houghton, C., Casey, D, & Murphy, K., 2013). Because I planned two semi-structured interviews throughout the thirty-day observation period, I was able to clarify with the participants any ambiguous journal entries and/or identify any erroneous posts/comments.

My research questions centered around Facebook use among different adolescent identity status types and how this use might inform my teaching practices. Because qualitative research does not explicitly strive for external validity and broad generalizations like quantitative research methods, I needed to examine the ways in which in any of my potential discoveries might transfer to the experience of other students. Transferability refers to whether or not findings from one situation can be applied to another similar situation while still maintaining the original meaning or inference (Leininger, 1994). To determine transferability, the context of the research must be sufficiently detailed so that the reader can make reasonable judgments about the findings and their contexts (Lincoln & Guba, 1985). In order to accomplish this goal, I had the responsibility to provide thick description of each participant's experience. In the current study, I provided detailed context about participants' posts and Facebook comments. Examining participant quotes, discussing social obligations at work and school, and detailing common

Facebook use provided a landscape that brought similarity and shared themes to four otherwise distinct participants. The nature of the research questions was important to examine in light of transferability among the four participants. Although cross case analysis in a collective case study should be done carefully so as not to imply that any one case is lacking (Stake, 2006), it was important to find any valuable applications of the Marcia identity status model and Facebook behaviors among psychology students in my class. The subjective experiences of these four participants might also reflect the similar experiences of other students in my classes.

Transferability has the added benefit of also incorporating triangulation into the study. "Triangulation refers to the use of multiple data sources and/or methods to measure a construct of a phenomenon in order to see if they converge and support the same conclusions" (Bickman & Rog, 2009, pp. 22-23). Such a practice is intended to ensure that what is observed and interpreted by the researcher accurately reflects the nature of the situation. Triangulation can be achieved by multiple observers or researchers examining the same phenomenon or content (Stake, 2006). Methodological triangulation, specifically within-methods, is achieved when the researcher collects data using more than one procedure (such as diary analysis and interviews) thereby decreasing the weakness of an individual method and increasing confirmation of findings (Bekhet & Zauszniewski, 2012). In this study, triangulation will be achieved by examining a participant's diary entry against what is actually posted on his/her Facebook wall, and then using one of the semi-structured interview to verify the content. The interviews were also used to expand upon the meaning of each participant's intentions of their respective posts and comments in order to enrich field data.

## Chapter Four: Findings

My aim in this research was to better understand how participants characterized their use of Facebook social networking through a series of interviews and participant documentation. The following research questions are addressed in the findings:

- Question 1- Social media: How are students using their social media platforms during their senior-year of high school?
- Question 2- Identity: In what ways does Marcia's model of adolescence identity type help to explain potential differences in Facebook use among adolescents?
- Question 3- Pedagogy: In what ways are students' Facebook practices and teaching practice that relies on social media responsive to one another?

Each participant's vignette begins with a general introduction and a characterization of the teacher-student relationship that is critical to authentic data. The data is presented across the three themes of the research questions: social media, identity, and pedagogy.

### **Case: Identity moratorium- Jim**

Jim is an 18-year old male student who was both a student in my psychology class for two years, as well as my teacher's assistant during his Senior-year of high school. Jim identifies himself as White non-Hispanic and following the result of his questionnaire, Jim was determined to be in the status of identity moratorium following Marcia's theoretical model. He occupies a great deal of his time with theatre productions that occur on campus and outside of school. He is

comfortable calling himself a ‘theatre kid’ and says that he has become more comfortable working behind the scenes on lighting and music. Jim was diagnosed with anxiety disorder during his Freshman year and has been off and on medication to control his attacks. Over the course of his two years with me, Jim has had one episode of a major panic attack that required me to stop instruction and attend to his condition. Typically, Jim is able to control for himself the anxiety brought on by his attacks with breathing exercises and sometimes simply by just leaving the classroom and walking for a bit. He has told me that this is a condition that does not bring him embarrassment and that he has been happy to recount his experiences and treatment openly with anyone who asks. I think that Jim has a particular affinity for psychology class because he is very familiar with the mental health care system.

Jim’s panic attacks were already well known to staff and peers by the time I first met him in his Junior-year. It was never a major distraction, at least not for me, but on occasion, one of Jim’s peers would approach me privately to share that Jim had had a panic attack earlier in the day and would probably not make it to class. Some teachers began to suspect that Jim’s attacks were correlated with the due dates of major assignments or tests. A few of Jim’s teachers were concerned that his attacks were an excuse for Jim to delay exams and academic responsibilities. Indeed, the stress brought on by major assignments could trigger Jim’s attacks, but I never suspected that he was using his condition as a way out of his school demands. It was discouraging for Jim to have some of his teachers carry this opinion about him. I did my best to make sure Jim knew he had my support and there was flexibility in our class. I think these conversations helped to build a relationship with Jim.

Jim has had academic difficulties while at school. The considerable time required to participate in continuous theatre productions was very often a contributing factor to his low

grades. In addition, his anxiety disorder was frequently cited as a reason for procrastinating on long-term projects and homework assignments, many times resulting in failing work.

Because of these academic challenges, Jim barely managed to maintain the minimum GPA required to remain in the IB program, being placed on academic probation twice over the course of his Junior and Senior-years. Our frequent parent-teacher conferences revealed the inconsistent coursework that Jim was submitting. Yet, Jim was regularly present for our psychology class with the exception of the occasional absences; no greater in number than any other student. This was not to suggest that Jim was necessarily prepared for class. Certainly, reading assignments were incomplete and homework was not submitted, but Jim attended my class. He did not skip. He was frequently absent from other classes, but he enjoyed attending psychology. And while he was there, Jim was no wall flower. He spoke frequently, he contributed to the conversation. It was clear to me when Jim had completed the readings for class. He asked complex questions and responded to my high-risk questions. When Jim was prepared, he made insightful connections and was able to synthesize material. In fact, when Jim asked me write a letter of recommendation for him as part of his college application process, I made sure to describe his ability to make creative connections to our classroom material.

As my teacher's assistant, Jim was responsible, dependable, and easily took direction. Usually, teacher assistants are randomly assigned to any teacher interested in having an assistant. Jim made a special effort to speak to the staff member who assigned students and requested to be placed with me. He said he was comfortable in my classroom and knew I would be patient with him.

There were also times in his Senior-year that Jim would come to my room during his lunch period. He shared that he did not want to be around people some days and just wanted to

be alone. I never pressed Jim to share more than he wanted, but let him know he was welcome to use my room. I would leave the room to run my errands or have lunch with other staff members leaving Jim in the room by himself. I trusted him. Sometimes I'd come back into the room and find Jim reading or doing work on one of the student computers.

Jim would also casually update me about his therapy process. His family was seeking a therapist that was an appropriate fit for him and his needs. Once he told me that his psychology background probably makes him a difficult client. I asked why he thought that. He shared it was because he asks several questions of the therapist at the first orientation session. He was motivated to seek therapy, but as it was known to me, Jim changed therapists with some frequency, experiencing windows of time with no therapist at all. For ethical considerations of this research, it should be shared that Jim was not at risk of hurting himself. According to school officials (Jim's administrator, school psychologist, school principal), his parents, and Jim himself, he was never at risk of attempting to hurt himself or anyone else. The panic attacks were distressing to Jim, but he did not have self-injurious behaviors because of them.

I selected Jim to observe further into the research because of the relationship he and I have developed. I knew that I could trust Jim to accurately document his Facebook use and I was confident that Jim would honestly reveal his Facebook habits without fear of my judgment. I was only slightly worried about the timeliness of Jim's entries. Given his reputation for homework submission, I had wondered if this part of the research task might have been too tedious for Jim. Upon approaching Jim for potential observation, he assured me that he would be careful to make journal entries and that they would be timely.

Jim's technology questionnaire also made him a desirable participant. He stated that he was very familiar with Facebook's many features such as messenger, video and picture uploads,

mobile call feature, and creating shared Facebook forums. In his questionnaire, Jim also shared that he used Facebook for various promotional activities. I was curious what Jim did with his Facebook account and how he promoted events. In addition to his Facebook use, Jim noted that he was a regular user of other mobile social networks such as SnapChat, Tumblr, and Reddit.

**Social media.** Jim's enthusiasm for theatre is central to the way in which he utilizes Facebook. During the four-weeks of my research observation, Jim was promoting an upcoming production. Jim stated, "I use [Facebook] for business. A lot. For like Ruth Eckerd cause it's a good way to get information out and take information in for promoting stuff". Jim also uses Facebook groups to promote music bands with whom he has friend as members. During our first interview he wondered if promotion/marketing might be a future occupation for himself. The majority of Jim's journal entries document his behavior of checking Facebook for show feedback and/or sharing script changes with cast members and coordinating rehearsals. Jim clarified, "I use [Facebook] for band gigs and theatre stuff".

In the upcoming production, student actors would share true stories about their personal lives written and performed by them. The personal narratives included vignettes of previous suicide attempts, coming out stories, lost loves, and homelessness. The ensemble cast was expressing their personal struggles of adolescence in their own words. Jim had written a small piece about his experience in the mental health care system.

Because of his penchant for theatrical and musical promotions on his Facebook account, Jim does not maintain strict privacy settings on his account. Jim stated, "I keep it open to everyone so friends can get in touch with me and so can strangers who want to know about shows and tickets".

Jim describes himself as a passive user on Facebook. He shared, “I don’t really go on to goof around or watch videos and kill time. Like, usually, I’m on Facebook to post something about a show or some social issue or I’m checking my messages and rely on Facebook as a communication tool”. Figures 5 and 6 capture the two posts uploaded to Jim’s profile page during the research observation period. These images were intended to promote two shows for a musical performance and a theatrical production.



Figure 5. Musical promotion posted to Jim’s Facebook page on March 7, 2015. Although Jim is not a member of the band, he helps to promote their performances.



**Identity.** Concerns of social justice and equity are important to Jim. In the midst of my research observation period and just prior to the start, there was a national concern over numerous publicized incidents in which law enforcement officers were video recorded in acts that seemingly treated Black males unjustly. The social dialogue that emerged over the months was not lost on Jim. He changed his profile picture to reflect his position. Rather than a photo of himself, Jim uploaded an image. In white text on black background, Jim's profile picture displayed the phrase: Black Lives Matter (Figure 7).



Figure 6. Theatrical promotion posted to Jim's Facebook page on March 16, 2015. Jim was a writer and actor in the production.

A later profile picture reflected Jim’s efforts at promoting an approaching theatrical production. His profile picture was an image of him in a pose to suggest he was shouting with the word ‘loud’ written on the outside of his right hand (Figure 8). Just over a week later, Jim changed his Facebook profile picture again. This time it was the logo to the show he was promoting (Figure 9). The image was the same picture that would be appearing on the show’s program leaflet. Jim said he had planned to change his profile picture a little more often in the coming weeks in order to get attention for the show premiere.



*Figure 7.* Posted March 1, 2015, this was the image Jim used as his Facebook profile picture. Jim says that the image reflects his socio-political position on Facebook.



*Figure 8.* Posted on March 16 2015, Jim changed his Facebook profile picture as promotional effort to advertise an upcoming theatrical production.



*Figure 9.* Posted March 25, 2015, Jim changed his profile picture again in an effort to gain attention from his followers and advertise the approaching theatrical production.

“It’s pretty obvious I’m a social activist”, Jim shares. “I use my Facebook as a platform sometimes. I don’t really get a lot of repercussions from it. I’ve got an audience so why not?” With almost 500 Facebook friends, Jim says that he has rarely had any negative feedback over any posts of social concerns. Jim believes that posting his social views are important for him to share with his audience of followers.

What Jim does not explicitly share on his Facebook account are his personal accounts of outings with friends, school-related experiences, and romantic attachments. Jim explained, “I generally keep things pretty professional. It’s business”. For example, Jim has never posted a relationship status. He shared, “Well, I’ve never ever really been in a relationship with the kind of person that has to be like—this has to be on Facebook. This has to be Facebook official or this isn’t gonna take off. Um. So. I don’t know. I mean. It really isn’t anyone’s business in my opinion”. Jim also identifies as pansexual, but has been romantically involved with a young lady for several months during the period of this research. Jim says that he has never used Facebook to express his sexuality. Jim said, “I don’t know. I’m guess I’m still figuring it out. Remember those sexual orientation scales we talked about in class last year? I feel like I kind of bounce around.” Jim says he uses Tumblr to explore his sexuality. The scales Jim mentions here was the Kinsey scale of sexual experiences.

Tumblr is a microblogging and social network platform that allows users to post multimedia content (Fleishman, G., 2013). A 2013 survey (Tan, G.) found that Tumblr was the most popular site among American adolescents 13-25 years of age. “This seems to stem from its embrace of sharing, combined with its social looseness: unlike on Facebook, real names aren't required (only an e-mail address), and users can present different personalities to the world through different blogs. Tumblr is, in a way, the anti-Facebook—a social network where you do not have to be friends with your mother” (Fleishman, G. 2013).

Jim says, “There’s more of a discussion with a wider audience on Tumblr. It’s like a real conversation and you just watch or you can join in. I think it’s a lot more interesting and there’s a lot less vitriolic feedback if you share on Tumblr rather than Facebook. I know like colleges and employers look at applicant’s pages now, so you know, I just want to be cautious”.

Jim scoffs at people who use Facebook to post images of having dinner with friends or a pet doing a trick. “Hah. I’ve never done that. I don’t get it. For me, it’s all business related or social justice”, says Jim.

The most important feature Jim utilizes is Facebook’s instant messenger. This allows users to send a private direct message to another user. Depending on the recipient’s settings, the message can be received as a text message to a mobile device or the recipient will be notified that he or she has a notification the next time his or her Facebook account is accessed. Jim has found that relying on Facebook servers to send and receive texts rather than investing in an expensive mobile plan, to be a cost efficient method of communication. Jim’s journal entries document several instances across my research observation period when Jim simply checked Facebook to read, respond, or create messages. He shared, “It’s really the most important feature to me. It’s how I communicate with friends. I constantly check messenger and respond. If both

people are on at the same time, it's basically real-time chatting. Plus, you don't really need to ask for anyone's phone number anymore. I like that, cause I don't always like to give out my number and with Facebook, no one ever has to know your real phone number".

Jim reports that his Facebook account accurately represents a small portion of his identity. Jim states, "I would say that it's the tip of the iceberg. Haha. Get it? Freud? Iceberg? But uh. I don't know. I'd say most of it...all of it is more or less true. We put on different faces in different groups, but even if a small part of it is me, then it's all me. Just not the whole picture. It's difficult to represent oneself through um, small bits of text and photography. So I think, for someone to really get to me, they'd need to sit down and talk to me in person. You know how we talk about phenomenology in class? I guess who I am is different to everybody depending on what they want to see. But, I mean, they can look at Facebook as sort of a resource, you know a small existence of who I am. I think it takes talking to me personally to get to know me. My sense of humor is really dry and super sarcastic. You can't get that impression from me on Facebook. All you know is that I have a show in May".

Facebook allows users to populate a profile page with musical interests, favorite televisions shows and movies, as well as books of interests. Jim admits that he completed this section when he first generated his Facebook account sometime in middle school, but has never really updated it. "It's not really accurate", he says, "I mean, it was true for my 13 year-old self for like a few months, but then, I never really touch it again".

Jim's interviews, journal entries and researcher observations reveal a Facebook use that reveals a public self who promotes theatrical/musical productions and social issues, but decidedly not a private self that might reveal romantic attachments or sexual interests. Of particular value to Jim is an admittedly strong dependence on the Facebook messenger feature as

a form of communication with friends. Jim acknowledges that his current Facebook profile is an accurate reflection of his identity, but only a very compartmentalized area of who he believes himself to be.

Jim's questionnaire data placed him in the identity moratorium status according to Marcia's model. In this status, the adolescent is in the midst of a crisis and has aligned with commitments to values that are either absent or are vaguely defined; they are actively exploring alternatives to accepted values (Marcia, J. E., 1966).

Jim read the description of identity moratorium as well as the other three identity statuses outlined by Marcia. Jim agrees, "I think it's pretty right on. I would say, um, yea. I'm still developing an identity. Searching for one. An identity crisis. I'd say is pretty accurate, yea. I think identity crisis might sound harsh to some people. I think often times, one wouldn't want to recognize it at all. The mere accusation that I might be going through an identity crisis could be trying for them. But, I've come to accept that, you know, I'm still developing as a person, still developing my values, and I find solace in the identities and the happiness of others. So. I kind of put myself in the backseat until I find what I like."

"The backseat?" I asked.

Jim clarifies, "Yea. You know. Just watching and seeing what other people might find exciting and then evaluating it against what I think I'd like. I'd say I'm exploring different sides of my personality. Um. There are certainly uncomfortable truths that I've had to encounter or deal with and I think that's healthy to do. I think that's nice to be able to recognize different aspects of oneself and have them coalesce in an ultimate way like that".

Marcia's identity ego scale measures adolescents across domains such as religious commitment, occupational commitment, and relationship values. An adolescent in the

moratorium status, would vacillate between alternatives and/or have little commitment to a particular set of value until he or she has resolved and reflected on his or her crisis. To this extent, Jim labels himself agnostic. He shares that while there may or may not be a God or Gods, he is open to possibilities that would also account for scientific phenomenon. As of the research period, Jim had not decidedly selected a college although he was accepted to two local institutions. He wasn't quite sure what he wanted to study, "but it seems like everyone already knows what they want to do! It stresses me out. Especially seeing other people that have already gotten into their college. It would be nice to know myself. I don't really have a more concrete idea of what I for the immediate future", he shares. Jim's identification as pansexual and his tendency to "bounce around" in light of his sexual orientation may also demonstrate moratorium characteristics.

**Pedagogy.** Jim was not actively using his Facebook profile page to engage with our psychology class. His friend connection to my profile page was incidental and was initiated earlier during his junior-year as part of my recommendation to all new students in my class (Appendix L). Of my Facebook posts, Jim shared, "I see some of the things you post when it's in my newsfeed, but not too much more than that." When I reviewed Jim's journal entries, he made no documentation about seeking about the Phineas Gage profile page. The majority of Jim's Facebook use was centered on publicizing his theatrical interests, exploring social justice issues, and taking advantage of mobile communication with friends. Aside from his suspicion about the impression colleges strive to make on Facebook, Jim made no mention of Facebook and its association to his studies or our classroom. Jim's experiences on Facebook during the one-month time period, did not include overt connections with classroom practices or curriculum goals.

Perhaps the absence of Facebook use and pedagogical connections was itself a characteristic for Jim's moratorium identity status.

Jim does not perceive his use of Facebook as a method to explore his position on religion, occupations, or relationships. He is suspicious of the Facebook pages of colleges and universities as he feels these are heavily monitored and branded to give a particular impression of the school which may not reflect the realities he would be more curious to learn. Jim utilizes Tumblr to seek out opinions about pansexuality because he finds this platform more informative than Facebook. Consistently, Jim maintains that for him, Facebook is simply a communication tool he draws upon to promote theatrical/musical productions and as a means to direct message friends.

#### **Case: Identity moratorium- Jennifer**

Jennifer has been a student with me in IB psychology class for two years. She regularly receives Bs from me with the occasional C-grade. She identifies as Asian and at the time of our first interview, Jennifer was 18. According to the result of her identity status questionnaire, she was best classified as being in the identity moratorium status.

One particularly distinguishing feature about Jennifer is her sense of humor. During instructional time, I am known to frequently make several jokes. Some attempts at humor are subtle and indirect. Only those students who completed the assigned reading or who have been paying attention would truly appreciate the comedic reference. Some jokes are just plain ridiculous and fail miserably. That's fine with me. I know that regular activation of the amygdala and nucleus accumbens helps to orient the attention of the prefrontal cortex which is essential for optimal learning. Humor at various levels can activate these neural centers and in a two-hour block period, I need to have several resources readily available to engage student learning. Jennifer laughs at everything, even the jokes I'm sure she doesn't exactly understand. It makes



me think that she must have made up her own punch line or had a completely different idea of what I intended. Jennifer is a giggler. Once she starts, it's barely possible for her to stop. It's infectious and gets those around her and on occasion, even me, laughing for some reason we don't fully appreciate. Jennifer laughs a great deal and from what I've learned, it's not just in my class. She has a kind of reputation for always smiling, being friendly, and laughing until tears roll down her face.

Jennifer has another sort of reputation as well, one not so easily dismissed in the classroom. She has, over the years of instruction with her, asked me to repeat information numerous times. I'll announce a due date for an assignment for example. Later, during a break, Jennifer will usually confirm with me privately what she heard as the due date. While this, on occasion, is an expected habit of a conscientious student, Jennifer would demonstrate this behavior regularly. I encouraged her to also verify the due date with her psychology peers or classroom neighbors, which she did, but still needed to hear it from me. When I distributed assignments with the due date printed on the paper, Jennifer still would approach for confirmation, wondering if the date was correct. She continued to check the due date as the assignment deadline approached closer. She would even write the dates in a planner she carried and entered them into her phone's calendar feature. She was organized and took clear notes, but she was consistently unsure about what she heard in the classroom. This was true not only in regard to homework reading assignments and due dates, but Jennifer would also ask clarifying questions in class that were not in sync with where I would expect the majority of class to be.

For example, once we were discussing the limitations and strengths of parsimonious explanations and reductionistic theories in class (in what ways are these characteristics advantageous to a topic of study? What might they miss? Does the scientific methodology favor

some epistemologies over others?). Two students began to approach the utility of Behaviorism in light of our discussion. I was circling the classroom as these two particular students took the lead in the developing conversation when Jennifer leaned toward me from her seat and whispered a question, “Who’s Skinner again?” In my head I was yelling, “What! How are you even following this conversation if you don’t remember who Skinner was?” I whispered a very quick reminder about operant conditioning and invited her to grab one of the basic psychology textbooks and flip through it to remind herself about Behaviorism. Now this incident by itself is not disconcerting. I appreciate that students will still ask questions about material that they know they have forgotten even if it might make them seem less studious to their peers. In an academically competitive environment like the IB program, this can amount to a sort of intellectual suicide and students would rather sit out the period in silence never asking a question than risk looking inferior to their friends. Thankfully, at least in my classroom, I feel that we have all worked to create an academically safe classroom where all questions are honored at all levels. I wasn’t bothered that a student asked me about a major researcher we studied so deeply the year before. We learn about quite a number of researchers so forgetting a few is expected. Maybe there was a need to differentiate between Skinner and Pavlov, as novice students sometimes confuse operant and classical conditioning. All of these are legitimate reasons for asking a clarifying question. The issue that was of more concern to me was that this was the kind of question that was typical of Jennifer. She frequently would ask low-level, knowledge based questions.

Jennifer needed constant assurance that she was recording the correct due date, reading the proper page numbers, remembering the right researcher. There was a kind of uncertainty, as if she didn’t trust her memory. This is in part, I suspect, why Jennifer received the occasional C on her report card not just from me, but from other teachers as well. A C-grade is acceptable. It’s

passing. In our program, however, where such pressure is communicated on students to constantly perform at levels of excellence, a C-grade (or lower) can be damaging to a student's esteem. A C-grade to Jennifer was just fine and she wasn't going to let herself feel down because of it.

Jennifer has a kind of resilience that made her grades less of a factor in how she felt about herself. It wasn't that grades weren't important to her. They were. But she understood the distance between who she was as a person and the inability of a grade to accurately capture that. She asked questions that many students may have been too embarrassed to have asked (I'm sure someone else in class that very day needed to be reminded about Skinner). She laughed out loud at jokes that were predictable, silly and dare I say, corny. Without ever explicitly articulating it, Jennifer gave to me the very mature impression that she wasn't concerned about what others thought about her. She would be proud of her C-grades. She would ask simple questions in class. She would laugh at whatever she wanted.

Jennifer had jet-black, shoulder length hair, straight and shiny. On one occasion, as I stood at the front door to greet students, Jennifer and some other students were approaching.

"Hi Jen. How was the shoot?" I asked.

"What? What shoot?" she returned.

"Isn't that you in the Pantene commercial? Where the girl spins her head around in slow motion so you can see how her hair moves".

We all laughed, but it became a kind of running joke. I'd ask how the weekend was and she'd say something about a film shoot running longer than expected. "Yea, you know how it goes Valdéz. Or—maybe you don't" as she gave glaring looks at my shoes or tie or whatever she wanted to tease me about. It was all in fun.

Jennifer was also very particular about her clothes. She wore whatever she wanted and didn't seem concerned about what others thought about it. She would mix patterns, experiment with color combinations, try different looks. Once in class, we were talking about the psychology of vanity sizing. Jennifer shared that she buys whatever she likes. She shared, "I'll buy a \$3.00 shirt from Wal-Mart and pair it with jeans from Neiman Marcus. If it looks good, I don't care".

At the beginning of her Senior year, Jennifer began to date one of my other Senior-level students. Apparently in the social hierarchy of high school, this was a major occurrence. The young man that Jennifer began to date was a soccer superstar and was regularly being scouted to play for some college teams. In addition to his athletic agility, the young man was also an academic behemoth! He was expected to be the valedictorian speaker for the IB program at the graduation ceremonies. The surprise to many of Jennifer's peers was that this relationship seemed like such a mismatch. It was the cause for much discussion among students, at least for some time, before another relationship's ending or beginning took over the lunchroom conversation.

I choose Jennifer to observe because of her established sense of self. I have always gotten the impression that Jennifer is comfortable in her skin. In particular, as an IB teacher, it was such a rarity to encounter a student who did not fall into immediate despair when he or she received a C or lower. When returning a low scoring quiz or test to Jennifer, I would hear her express relief, "I got a D? I thought I completely failed!" Jennifer was not discouraged. Several times, she would laugh about it, but not in a manner that was dismissive, rather, it was a way that seemed to realize that a low quiz score wasn't anything to take too seriously.

Jennifer's technology questionnaire was also very indicative of her Facebook use. She stated that she was familiar in posting videos and pictures to Facebook and expressed a

consistent use of Facebook for school-related activities. Jennifer indicated that she accessed her Facebook several times a day which was to me an indicator of her regular use. Further, Jennifer noted on her technology questionnaire that she was also very familiar with other social networking platforms such as SnapChat, Twitter, Pintrest, and Google+. This characteristic suggested a networking savvy that I thought might be useful to explore in relation to my major research questions.

In addition, on the questionnaire Jennifer completed, she stated that she did not feel that her Facebook profile accurately represented herself. She indicated that her Facebook posting-behaviors had declined over the past two years and I was curious to see if this was in anyway a reflection of identity development.

**Social media.** Jennifer characterized her Facebook as passive, rather than active. Jennifer shared, “I go on to chat and see who’s online. It might be a minute or two. If I’m on for a long time, then it’s something homework related. It’s just for our IB program and it’s private for just our class so people you know post questions about homework and stuff. I go on there get help or to make sure I know what’s happening. Sometimes I tend to zone out in class and forget what was happening or what was due. So I log on and see a post a question or see what someone else has posted. It’s really helpful”. Jennifer is adamant about her reliance on Facebook as a school aide. She has also used Facebook to email school-related notes and documents to friends.

She continued, “It’s really helpful for group projects. Everyone can log in whenever they want, post their share of the work or whatever and then when we get to school, we can download whatever we need. It’s easier than Google drive because you can post side notes to everyone”.

Jennifer shares that currently, the majority of her Facebook use centers around school-related

items. “I am constantly looking for help with Spanish. I just don’t get things in there sometimes and I can post questions.”

Aside from school-related activities, Jennifer admits that sometimes, she’ll go onto Facebook to distract herself. Jennifer explained, “I love cute animal videos! I can’t stop. I might spend like half an hour watching cats one day. I subscribe to a group that posts cute animal videos so I love when that pops up in my newsfeed. It’s like a surprise. When I log on, I’m always hoping there’s a cute animal video waiting for me. I don’t really go looking for them, so when they show up in my feed, I think it’s a sign that I’m supposed to take a break and laugh”.

In reviewing her journal and interviews, Jennifer accesses her Facebook account mostly from her personal mobile phone. She will access her account for a minute or two to see if there are messages for her or if anyone has responded to posts she may have left about school-related items. Jennifer stated, “I mostly go on in between classes. I just have my phone out and check my texts and Facebook while I’m heading to my next class. It gives me something to do with my hands I guess. I don’t know. It’s just a habit.” Jennifer says that what’s she accessing is the Facebook messenger application and not the Facebook application itself. She explained, “I have a lot of friends who have limited cell phone plans so they use the Facebook messenger app to text me. It’s basically just like texting, but it’s free. It also reminds me when it’s someone’s birthday so I can make an effort to say something.”

Jennifer shared a recent experience where her biology teacher asked Jennifer to post something content-related to the biology help group for her class. The teacher herself was not a member of the Facebook group, but knew that students had created it to help one another and wanted Jennifer to post an item that was helpful. Jennifer pulled out her phone in class and posted the helpful image.

“Aren’t you worried about a teacher or administrator seeing you with your phone out in between classes?” I asked.

Jennifer smiled and said, “Well if I’m walking to like the office, obviously I won’t pull it out. But teachers don’t really care if it’s during break. We all know not to leave our phones out in your class!”

Jennifer was referencing an unofficial classroom management practice that had unintentionally developed in my class. Per our school policy, students are not supposed to have phones turned on (or even out in sight) unless it’s before or after school or during lunch. On those occasions when students leave their phones out on their desk, I use some subterfuge to pick it up. Students become generally frightened when they cannot find their phones and begin to panic. On better days, I can manage to not only take the phone, but take my picture with the phone, set my picture as the background, and return the phone to the student undetected. I’ve also been known to send a text to whomever might be readily available on the student’s phone and write something like, “Psychology is the best!” or “Valdéz is the coolest!”. Students know that if I get a hold of their phone, general mischief will ensue so it’s better to put the phone away least they be embarrassed or confused.

With more serious school work or group projects, Jennifer says that she will access Facebook from a desktop. She explains, “If it’s something that’s going to take a while, I’d rather be at a computer.”

Jennifer feels as if her Facebook behaviors began to change as she moved from middle school into high school. Jennifer shared, “It was just a new time and I was meeting new friends. I was more self-conscious about what I posted because I didn’t want my new high school friends to think I was weird or something so I kind of laid back. I was definitely more of a creeper”

I wanted to make sure I knew what Jennifer meant by the use of the term ‘creeper’ so I asked her to elaborate.

She explained, “A creeper is someone who lurks on everyone else’s Facebook pages but doesn’t post or like anything. It’s almost like you’re spying on what people post without ever really letting them know you’re there. I guess I still do it sometimes though. I can be a Facebook ninja.” During the research observation period, Jennifer posted one item to her personal page (Figure 10). The image is from a school dress-up day called ‘gender-bender’ day. Students were invited to dress in clothes that were socially constructed for their opposite gender. The dress-up day was actually used as part of a classroom discussion about social constructs and gender typing.



*Figure 10.* Gender-Bender day at Jennifer’s school. Posted March 16, 2015. Jennifer appears on the left in a boy’s untucked, solid color, button-up shirt and a men’s neck tie.



**Identity.** In middle school, Jennifer admits that she was very concerned about having as many friends as possible listed on Facebook. She would get excited at the notification of getting a friend request in order to increase her total number of friends. She elaborated, “Oh God! I used to care so much. I wanted to get my number into the thousands. But now-not even. I'm always going through my account and trying to delete people so it's manageable. I used to always add just anyone, but now, not so much. It's kind of annoying to have that many people to try and to track them because they're not that important.”

Jennifer recalls a difference in how she used Facebook in middle school versus her use of Facebook today. Prior to high school, Jennifer tried to project an image that was popular. Jennifer shared, “I used to know this group of friends all through middle school and I would always look at their pictures. I would see that they were always doing something like every day. I would their pics and it would make me think like I should find a good group of friends so that I could do fun social things like them. Now I'm aware that I'm a little more introverted and I like just being with a few good friends. I don't think it's that important to be out taking pictures of everywhere you go. It just seems really silly.”

Jennifer is suspicious of Facebook pages that look too polished. She mistrusts a profile that presents a user as too perfect. She explained, “When I see perfect photos and poses, it looks like they're trying to be impressive and they're trying to be cool. I used to be like that. You can tell when someone is trying to convince you that they're cool. They post a lot and they're really active with fun and exciting photos. It's so obvious. But I know what they're doing.”

Jennifer shares that she's more inclined to keep things in her life to herself and not overshare on Facebook. She said, “I never really feel the need to do things like that. It's funny now because in class, we've talked more about qualitative research. I know that since I've tried to

post cool photos of myself to look popular, I feel like it gives me the ability to recognize when somebody else is doing the same thing. Maybe it's empathy or insight, but I feel like that's what those people are trying to do in order to project a part of themselves that isn't really authentic.”

Jennifer does not feel that her Facebook accurately reflects who she is. She recognizes that it does reveal a small part of her interests, but fails to capture many aspects of her current and growing personality. The profile characteristics that give users the ability to share favorite books, movies, or television shows are outdated for Jennifer. She has not updated her likes since she first created the page and the person she was in middle school is certainly not the person she is today. During the duration of the observation period, Jennifer maintained the same profile picture for her account. It is simply her standing alone smiling outside (Figure 11).



*Figure 11.* Profile picture of Jennifer maintained throughout the research observation period.

Jennifer shared, “I feel more confident about a part of my identity. I still have lots of things to figure out, but I’m not who I was in middle school and that’s what my old Facebook stuff reminds me of. In middle school, I would try to perceive myself through someone else's eyes and how I wanted them to see me. I would make it look like I was really cool. What do you call that again? When you see something through someone else’s perception?”

“Theory of mind?” I offered.

“Yea! Theory of mind. Now, I know a little bit more about who I am and how I feel about myself. Someone's perception of me doesn't matter because I know better.”

Here's a young lady who asks very simple questions in class, wears whatever she wants, laughs at anything she finds funny in a crowded room, and dates a young man whom her peers have suggested is not a good match. Someone else's perception of her does not matter—whether on Facebook or in her daily life, Jennifer is not concerned with how others see her. I was struck by how Jennifer can be at times insecure about her knowledge of due dates and content and yet, at the same time, confident in herself and her developing identity.

According to her performance on the identity status questionnaire, Jennifer is in the identity moratorium status. Individuals in the identity moratorium status are in the midst of a crisis and have commitments that are either absent or are only vaguely defined, but who are actively exploring alternatives (Marcia, 1980).

I asked Jennifer to read over the description of her identity status as well as the alternatives. “I completely agree. This is me. I knew it a long time ago.” As Jennifer was completing a psychology assignment, she incorporated the concept of identity status into her paper. The assignment was an autobiography that students complete for me as their last project before they graduate from high school. I had just finished scoring the project two days before Jennifer mentioned this in an interview. In her autobiography, Jennifer had already identified herself as being in moratorium before I brought the questionnaire results to her.

She shared, “I started my autobiography by saying that some days I'm just not really sure of who I am and some days I feel really good, but at anytime, everything can change even things that I strongly believe in. I can still change my mind especially in this transition from high-

school to college. I think it has to do with your environment. I know I'll be so full change in the next few months, but right now, I know it changes from day to day."

Jennifer felt aligned with the characteristics that typified the moratorium status. "It just sounded like me. I knew it. Actually I wrote about that in my autobiography assignment. Moratorium is where you haven't exactly gotten settled or committed to a particular set of personal views but you're still exploring and looking into different parts of your life, like your religion and it's how you want to figure out which one is best. In my autobiography, I talked about the possibilities still ahead and I'm okay to keep changing and to see what's still available. I really identified with that one."

Jennifer shared that she thinks that she has gone through a couple of crises. She is questioning who she is and what she wants from her life. Jennifer said, "I feel like now I have an idea, but I haven't had anything that stone yet. I'm still questioning. I'm beginning to connect to a better and stronger identity, but I'm still not sure if there's a better identity waiting for me."

I wanted to know if Jennifer had used Facebook to any extent in her exploration of her identity. She shared that she "sometimes would go on social media like Facebook to see what other people are doing and see what kind of activities they do." She would think about what she saw and how it might apply to her and if there was any interest. Jennifer would ask herself, "is that something a group of friends and I would want to do? Is that something I might be interested in doing as a hobby?"

Jennifer also shared that she follows some friends on another social networking application called SnapChat. SnapChat is a mobile application that allows users to capture short videos or images, add text to the images and then send it to friends for a limited time of one to 10 seconds after which the video/image self-destructs (Forbes, 2013). SnapChat messages are called

stories or snaps and are popular because the sender determines how long the receiver is able to view the message. And while SnapChat has not inspired Jennifer to consider what she wants to be, it has revealed what she does not want to be. Jennifer says some of her friends send snaps of what they did over a Friday or Saturday and receives videos of them drinking. She said, “I see that and I know that’s not what I want to do. They look ridiculous. I can tell that they think they’re being cool, but it’s just so juvenile. I think it’s kind of amusing to watch other people's snaps. They're entertaining. Snaps are more authentic. Like with Facebook, you can edit your picture and change it so it's perfect but with Snapchat it's more raw. You can't change things that aren't perfect. With snaps, they're funny because they're really true and everybody can relate sometimes.”

Jennifer acknowledged that her Facebook experience has influence her occupational choices to some extent. “Some of my parents’ friends are doctors and I've seen their posts about how tired they are or what they're doing at work and it made me think a little bit more about if I want to picture of myself in that kind of job or not. I wouldn't say that Facebook has been a major influence, but I have paid attention to the posts and it's made me think a little more about maybe what I don't want.”

In addition to occupational choices, Jennifer says that Facebook has also influenced to a small extent something of what she does not want in a romantic relationship. “I've noticed when I see pictures of couples that try to take really cute pictures. I've always thought that was pretty cheesy and I've said that I've never wanted a relationship like that where you can tell that the couple is really cutesy. It didn't seem real and that made me not want that. I want to make sure I have something more authentic. It's not about an image.” Jennifer shares that even since she and

her boyfriend have been together for several months, she has chosen not to update her Facebook status as being in a relationship. “It’s just not a big deal to have to post it”, she said.

Jennifer articulated how social media has influenced something of her identity by providing non-examples. From SnapChat, she does not want to be involved in excessive drinking and partying. From Facebook, she does not want a job that brings her home exhausted nor does she want a relationship might be perceived as disingenuous.

Jennifer thinks it is possible to see a connection between someone’s Facebook profile and the person’s identity. She shares, “You have to pay attention to what you want to post. It’s a sort of image. You have to be reflective. If you’re trying to project a certain personality, then that’s a clue about who you are. You have an outward identity of how you want people to see you and when you try too hard then it’s really telling. It’s easy to be whoever you want to pretend to be on Facebook, but even if it’s not really you, that fact that you faked an image already says something about you. With the right pictures and updates, you can sell yourself to anyone.”

I asked Jennifer to consider if whether her lack of active Facebook posting might be because of her moratorium status. I asked, “Are you not posting as much anymore because you don’t know what you want to post or maybe you don’t know how you want people to see you?”

She replied, “I think it might be because when I see other people’s pictures, it makes me feel like I’m being really judgmental. I don’t like to feel that way so I just don’t post much of anything to my page. Sometimes I see people post pictures that I think are trashy and then I think I’m passing judgment on them. That reflects some of the values I have about that photo and those people. In that way, I guess that gives me insight about my developing identity. I realize that’s something I wouldn’t want to do and the kind of person I don’t want to be.”

Again, Jennifer provided a non-example of a characteristic that she would not want to possess in light of her Facebook use.

**Pedagogy.** Academically, Jennifer says that her Facebook use has been focused on receiving help for her classes at high school. She is involved in private Facebook groups that share notes and provide a forum to ask and answer questions. She shared that for her particular needs, she found the Facebook group for Spanish class helpful. She did not discuss Facebook use as helpful for any needs in psychology class, with the exception of occasionally verifying assignment due dates. Jennifer characterized Facebook use as a tool during the regular school year. She used it not only to communicate synchronistically with other peers who were online at the same time about coursework, but she also used Facebook asynchronously by posting questions for others to reply to at a later time. From my conversations with Jennifer, her Facebook use transitioned from an impression management tool in middle school by trying to collect as many friends as she could to later in high school as a useful academic tool helping her to accomplish her academic goals. The research period for my study occurred in March. IB seniors have the entire month of May to take exams and are not on campus, which means April becomes a long-term review period. As such, the month of March tends to complete my prescribed IB syllabus. Jennifer shared that since her high school work load had begun to diminish, she focused more on using Facebook for college roommate matches.

Jennifer said, “I’ve finalized my college choices to two schools and I’ve been lurking on the schools’ Facebook pages to get a feel for each school. But I know those pages are really for show, so I don’t trust them too much. They have roommate pages though so you can see if you match with someone. I immediately know who I don’t want. If the profile is too polished, I think it’s fake. I like Facebook profiles that are real. I tend to believe them if the picture is sort of

ordinary and doesn't come across like the person is trying too hard. I'm suspicious when I look through their lists of favorite books and TV shows and see like lots of smart titles and boring shows. I know they are being fake to look good to the school." While not explicitly connected to my specific pedagogical philosophy in psychology class, Jennifer was sharing again how Facebook as a tool was used in her future undergraduate experience, in this case, in the search for a college roommate.

Jennifer's Facebook use has changed since her middle school years. Where once she used to occupy herself with constructing a popular image of her life, Jennifer has since become more passive. She does not post many statuses or content to her page any longer, but instead draws on Facebook for homework help. Facebook allows her to connect with school peers in order to give and receive academic assistance. Jennifer thinks that Facebook can help some people learn more about their identities, but for as far as she is concerned, Jennifer is still not sure what her identity might reveal itself to be. She is comfortable with her identity moratorium status and is excited to learn what new opportunities might make themselves available to her in the future.

#### **Case: Identity achievement- Alex**

At the time of our first interview, Alex was a few weeks away from turning 18 years-old. Alex was in my last class period of the day and we scheduled our first interview right after school. I had to go from being in teacher-mode to researcher-mode in matter of minutes and needed a moment to get my brain in the right attitude so before the actual interview, Alex and I just chatted about our day. For most of our conversation, Alex and I discussed the change in the diagnostic philosophy of the DSM-5 and its move from a categorical approach to a dimensional approach. We had been reading about and evaluating this difference for a few class sessions, and had pretty much reached the end of the unit. This causal conversation is certainly the kind of



strikingly thoughtful discussion that characterizes Alex. He wasn't just having this conversation with me because I was his psychology teacher; this is the kind of conversation that Alex would have initiated with any of his friends.

When I ask high-risk questions in class that require students to move beyond the readings to formulate a hypothesis or synthesize material in a new way, there are often times when no student will raise his or her hand. Alex, however, always has a guess. There have been times when our classroom discussions have seemingly been between Alex and me. It is with no embarrassment that I share, Alex is one of those students who, when he raises his hand in class to ask a question (rather than answer one of mine), I take a deep breath. I know that Alex is about to ask a question for which I will not be able to offer a simple answer or any answer at all. I truly appreciate these moments. On some level, students seem to enjoy with a gentle humor, when I am asked a question that I cannot answer. I never feel as if I have lost credibility, but rather, I sense that that the students acquire a kind of satisfaction in asking a well-thought out question. Alex has done this numerous times.

Alex identifies himself as White, non-Hispanic. If I could offer a physical image of Alex, I would suggest that he is not too far removed from the appearance of the young actor Daniel Radcliff from the popular *Harry Potter* movies. Following the results of his identity-type questionnaire, Alex was identified as being in the identity achievement status. Academically, Alex is a high-performing student, not just in his psychology class, but across all of his courses. He has excelled with considerable success in high school, receiving several college admission offers including one from a prestigious university located in Oxford, England (which tends to reinforce my Harry Potter connection).

I selected Alex for inclusion as part of the follow up research because of his consistent demonstration of thoughtfulness in the classroom. In his essays and submitted homework, Alex has been able to express himself with a reflective clarity and maturity of thought. Alex is not a student who necessarily reiterates what a textbook espouses, nor does he paraphrase what he might perceive to be my position on some theory or construct. He says what he thinks and supports his claims with evidence. Sometimes his comments align with something we may have read in an article or a textbook, sometimes they align with the narrative I construct in class. But what is encouraging is that Alex is not afraid to disagree with a researcher's position, with the conclusions in an article, or even with me. I know that I have done my best to create an academic environment where students can take risks to disagree if they have defensible evidence to support their position and Alex is comfortable maneuvering in this atmosphere. What I find of value for the purpose of this research is that Alex will not tell me what he thinks I want to hear. I was confident that Alex would not succumb to any demand characteristics that I might unintentionally express and that he would share with me his authentic opinions about his Facebook use and his construction of identity.

Alex was also a desirable participant for follow-up because of the data he provided on his technology questionnaire (Appendix D). He indicated that he was an active Facebook user, accessing his account at least a dozen times each day, especially to access the Facebook messenger application. Among his previous Facebook use behaviors, Alex indicated that he had uploaded videos, posted photographs, and made status updates to his account. Knowing that Alex had knowledge of these features made him an attractive participant to follow in light of my major research questions. In asking him to initially reflect upon Facebook and his identity on his technology questionnaire, Alex wrote that his Facebook account is an accurate representation of

himself, but “only provides a surface perspective very much lacking depth”. I was curious to learn more of Alex’s thoughts and given his classroom discussions and sense of personal responsibility, I was confident Alex would provide rich feedback during his interviews and careful documentation of his Facebook use.

**Social media.** Alex is very clear about his Facebook use. He says he uses it to share news items. He said, “The things that I post about are generally less about me as a person and more about things that I find interesting.” On one occasion which happened to occur during my research observation period, Alex posted a psychology-related news item in which he tagged me (Figure 12). The news item referenced a researcher we had discussed in class days earlier. Alex had taken the initiative to seek out additional information about the researcher and discovered a TED talk video he found of interest. I responded to Alex’s post on Facebook acknowledging the item and suggesting additional information.

The times that Alex goes onto Facebook he says are “just to look at things that are entertaining or funny. Really, I just kind of mindlessly go through stuff. It’s kind of more kind of a place I kind of go to look at things I think are funny or interesting or just—Like I said, I guess it’s just a kind of place to be distracted”. For Alex, his Facebook use is best understood as a distraction. He is most frequently on Facebook when he has a few minutes to read through his newsfeed and check messages.

Aside from maybe getting a sense of what he finds interesting, Alex does not feel his Facebook account accurately reflects his identity.



Figure 12. Psychology-related post from Alex appearing on his Facebook page March 25, 2015. I reply to being tagged in the post under the user name of Phineas Gage.

Alex shares, “I’m pretty multifaceted. Whatever I post is really about something I find interesting but even, then it’s usually just something I come across online and doesn’t reveal a lot about me. Like, you couldn’t go on there and really find out what I want to study academically. You might get a sense of some music I like. But whatever I post might be of some interest to some followers, but not relevant to others”.

Alex admits to not updating his profile with current music, books, or movies. He explains, “Those movies and things I said were my favorite are pretty old. It’s not accurate anymore, but no one really looks at them, so I haven’t bothered updating any of it since I first got an account”.

Unknown to me until the interview, Alex was helping to promote a theatrical production in which another one of my participants was also participating. In the days following our first interview, Alex used his Facebook account to promote the show twice by posting images on his wall on March 8<sup>th</sup> and March 25<sup>th</sup> of 2015 (Figures 13 & 14). The posts, Alex says, were items he did not really want to post to his wall. Alex explained, “It’s my personal Facebook account. I mean, I should be able to post or not post whatever I want, but the show’s producer was really insistent on asking the entire cast to help promote the show. I was pretty resistant. Then, I began to see everyone else posting their images and whatever. I began to feel that I guess I should help and I mean, what’s the big deal anyway, so I did”.

“You were resistant. Why do you think you changed your mind?”, I asked.

Alex replied, “Duh. Social conformity Valdéz. Pretty obvious, but I didn’t do it mindlessly. I knew what I was doing and why and I even knew it was because of normative pressures to be part of the in-group. I also knew that it was compliance to the request of my producer who was an authority figure. It’s funny to tell you cause I didn’t think this would ever come up, but I totally saw all of the psych going on. And I’m like, really? This is just a freakin’ Facebook post”.



Figure 13. Post #1 of theatrical promotion from Alex appearing on his Facebook page March 8, 2015.

Hearing Alex accurately explain his behavior with the concepts and vocabulary I had taught him over a year ago made me absolutely swell with pride! I'm sure a small smile came across my face and Alex laughed knowing he had correctly applied psychological principles to a real-life situation sitting directly across from his psychology teacher. This is the kind of student Alex was and will continue to be into undergraduate studies. While other students may not be able to remember the difference between conformity and compliance, Alex could not only cite the popular studies and limitations of the methodologies, but also offer a clear and accurate example relevant to the situation.



Figure 14. Post #2 of theatrical promotion from Alex appearing on his Facebook page March 25, 2015.

The first theatrical promotional post (Figure 13) depicts a scene from a rehearsal in which two teens are dressed as elderly grandmothers. The scene advertises the upcoming production, but is not personally related to Alex. He did not write this grandmother scene nor is part of the production of it. He explained, “I just wanted to post something advertising the show so later on at a rehearsal I used my phone to take a pic and then posted to Facebook”, says Alex. Days later, Alex was able to pose for his own personalized advertisement featuring himself (Figure 14). He

said, “I used a quote from the dialogue in my vignette. ‘It’s okay to put yourself first’. You know how you told us a long time ago that there would be some days [in the IB program] when we just need to relax and take a day off. You gave us permission to not feel guilty about it. I can’t do hours of homework every weeknight and also cram up my Sunday with leftover work. Sometimes I just want to watch TV or take a nap or play video games or whatever. Just talk with my girlfriend. So I don’t feel bad about doing things that make me feel better. That’s what I want the quote to express. For me it’s school”.

This was indeed a comment I had expressed early in the school year to Juniors. I tell them not to become too distressed if a homework assignment is occasionally late for me. I don’t want them to plagiarism or otherwise cheat in order to just do the work and be done. I realize that they may have to play soccer, work a job, volunteer, or simply sleep after school. I remind them that I cannot speak on behalf of their other six teachers, but for me, if they need an extra day to finish an assignment, to let me know—“Don’t skip. Don’t cheat. Just keep me in the loop” as I am apt to say. Alex’s contribution to the theatrical production was about his philosophy of balancing personal care with external responsibilities. His post and the image he used was intended to advertise his mantra: It’s okay to put yourself first.

One of the main features Alex insists is of primary importance to his Facebook use is the messenger system. He checks Facebook messenger application several times a time. The messenger application lives separately from the Facebook application. This means, a use can check Facebook messages without actually going onto Facebook itself.

Alex shares, “I use messenger a lot. I have conversations with people, with lapses of intervening periods of time, and with a couple of other people at the same time. Like, uh, if I’m messaging my girlfriend, I may message her in the morning before school and during school and



the after school when I get home kind of thing. It's just a way to keep conversations going even when you can't respond right away". Alex acknowledges that his use of the messenger service also makes it less costly to have a mobile phone. He states, "I have a really cheap cell plan cause my parents told me they'd get me a phone, but I'd have to pay for the service. So I connect to the school's wi-fi when I'm here and then message over Facebook. That way, I don't need to pay for a lot of data use or worry about how many texts I send. It's all free".

**Identity.** Alex's identity status questionnaire placed him in the identity achievement status. According to Marcia, these individuals have experienced a crisis and undergone an identity exploration forming commitments towards their values (1966). I asked Alex to consider the description I provided him about identity achievement.

Alex agreed, "Yea- it's pretty accurate. There was a crisis and then an assessment. That sounds very much like me and what I've gone through. So yea. The other descriptions don't really sound like me. I think I have a pretty good sense of who I am. Like, who I like to be around and stuff. I feel like I'm pretty well established in that."

Alex felt confident in his questionnaire outcome as identity achievement. I asked about the ways in which his Facebook use may (if at all) been part of his identity formation process. He didn't seem to think that overall, any social media, including Facebook, had much of a role in his identity formation. He did add, however, that he began to discover that he had a greater interest in psychology than he realized. When Alex began his college search sometime in the middle of his Junior year, he used Facebook to follow all of the colleges to which he intended to apply. One college in particular had a separate page for its life sciences research and Alex followed this page as well. He noticed that this particular life sciences page was very active. His news feed was regularly populated with their posts and they were about topics which Alex found of great

interest. Alex discovered that many of the re-posts he would share on his personal page were ones that were originally generated from the college's life sciences page and most of them about behavioral science.

Alex explained, "Their psychology department was really active to the life sciences stuff that was being posted. Sometimes it wasn't just about research and grants and stuff like that, but they also posted announcements for students about activities and meetings. And then later, after the event, there'd be pictures of who was there. They would also advertise upcoming speakers and public lectures and things like that so I it gave me a better perception of the school and actually made me feel like I was already a student. I was really excited to apply there and when I did I was happy I got accepted."

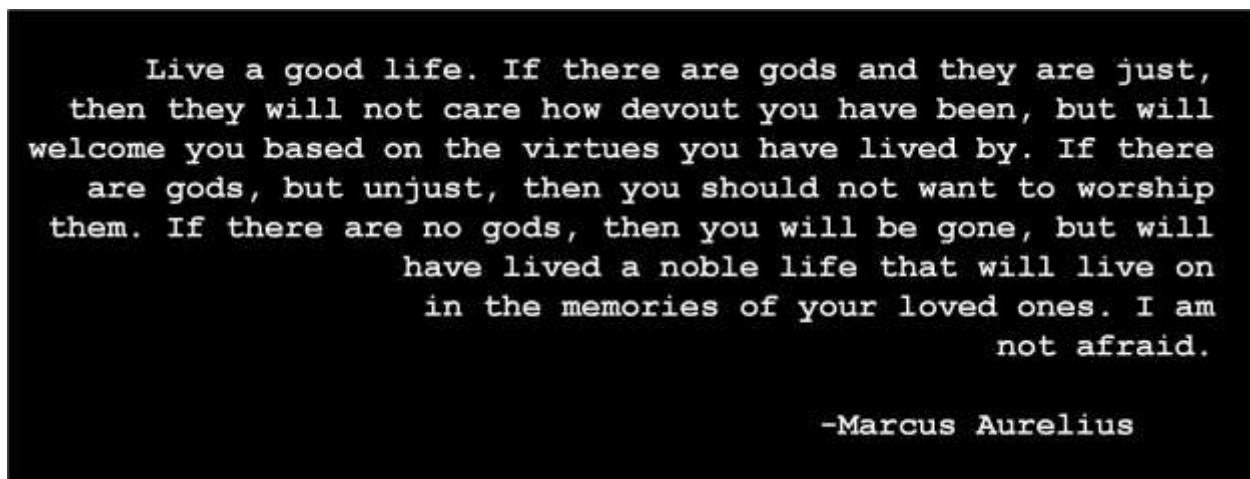
Alex continued to reflect upon Facebook use and identity formation. He began to speak of a hypothetical person, however, and not himself. He made broad generalizations referring to no one in particular. He said, "I think that you definitely could use Facebook to form your ID. There's a chance to network with people with similar interests and stuff like that. So it's easier to find groups with similar backgrounds and people can kind of use that as a basis for identity. So like, I've personally made, over the years, friendships that have been created over Facebook. And in that sense, to make new friends in different places can help someone to make an identity. It's the ability to communicate with people who have similar interests with you, but who are in different places. Facebook is a platform to discuss all of whatever matters to a lot of people. It allows for identity to develop. And it's not just even in a certain topic, but really just knowing that there are a variety of views."

I asked Alex to think about how he shows himself on Facebook. I wanted to know if he had any concerns about the number of friends that appear on his public profile. That is, as part of

the Facebook default format, visitors can see the number of friends a user has in his or her social network and the number, if any, of mutual friends the visitor and user may share in common.

Alex commented that he was never one to concern himself with increasing the number of friends he had in order to appear popular. “I was never really trying to get the number high. Everyone once and a while, I would try to just go through and delete a bunch of people I don't talk to anymore. And it's just not keeping it low or keeping it high, it's just having people that I really talk to”. Alex communicated that he wanted to really have a community of Facebook friends that he genuinely knew somehow. If he deleted a friend from his network, it was not out of anger or spite, it would be because the person was no longer active in Alex’s social network.

As we discussed how Alex represented his virtual self on Facebook, I wanted to ask him about the background to his profile picture. The background is a kind of wallpaper that users can customize behind their profile picture. So while the background is not the main visual focus of a user’s Facebook page, it does occupy a portion of considerable real estate at the top of someone’s page. Alex had selected a quote for his background (Figure 15).



*Figure 15.* Quote which served as the background of Alex’s Facebook profile page during the research observation period.

I was curious to understand why Alex had chosen this quote and what it might suggest about his identity. He explained, “I’m agnostic. And, I-- as far as like, stances on lives or actions or why you do the things you do, regardless of your religious alignment, I just think it’s a good message. I like it very much. My parents found a poster with the quote they got me for Christmas and I have it on my wall. Maybe I’m biased in this, but I feel like it’s something that would be hard to disprove.” Alex said that the quote made him think deeply and he thought he might give one of his followers the same opportunity to be reflective.

**Pedagogy.** I wanted to discuss with Alex his Facebook use and our classroom discussions. Alex was a very verbal student who would regularly offer stories or connections in class about something he had encountered online. In addition to following the Facebook group of a potential college, Alex had begun to follow psychology news sources, some of which were similar to the ones I would follow on Phineas Gage’s profile. I asked Alex about how he used the information he learned from Facebook.

Alex shared, “You know what? Actually, Valdéz, sometimes I would really get pumped up because there were times when I’d see a post about a topic that we were studying or I knew we were about to study. Then, I’d look for the names of the researchers or glance over the study and bring them up in class. I was hoping to get one-up-on-you to see if I could know about someone or some kind of research before you did.”

We both laughed. “Well, tell me. I can’t remember. Did you succeed?” I asked.

“Sometimes. But most of the time you already knew the person or you knew about the research so I couldn’t trip you up”. I explained to Alex, that like him, I also subscribe to several psychology-related pages that populate my news feed. I follow several organizations on Twitter that send me push notifications about new and emerging research that I can use for class. So

while it might look like I know all about the research someone mentions in class, the truth is, I might have just learned about it earlier that week. We spoke about this for a short while as Alex wanted to know which sites and pages I follow for psychology news and wanted to follow them too—so long as I felt they were legitimate.

Alex was cautious to suggest that he considered Facebook posts as legitimate news sources. He explained, “It’s more of a barometer of what’s happening. If stories keep coming up in my news feed that have to do with the same event, then I know this is a trending topic. But I rarely click on any of the actual posts. Instead, I’ll go to a source I trust for technology or science or politics or whatever and then search for the same story.”

I wanted Alex to consider again if his Facebook use had any influence over his religious, political, or occupational values. He shared, “I guess you could say that Facebook has helped me to appreciate the kind of work and jobs you can do in psychology. I know I want to study something in psych, but I’m not sure what. There’s so much. Maybe neuroscience or cognitive development. I don’t know. It seems like the people in social psych get to do all of the fun and controversial experiments so that’s on my mind too. I know I don’t want to do clinical stuff- like mental health or counseling. A.I. stuff sounds great too. It’s weird. Cause last year when I first started to learn about psych from you, I didn’t know much. And then, towards the end of the year, I was like, ‘Oh man. This is easy. I got this’. Then, this year, I came in feeling confident. You know? I knew the theories and terms and stuff. And then...I don’t know. Like in the past few weeks, we’re getting close to being done with another year of psych. But this time, I don’t feel so confident. It’s almost like, I knew it and then once I thought I understood it all, it began to fall apart. And I realized that I don’t really know as much as I thought. I know that’s probably really confusing. I’m hoping college will fill in some more of the blanks”.

I was moved by Alex's reflection. I understood exactly what he was trying to convey. He went on to assure me that his confusion wasn't because of my poor instruction. He knew he would pass his exams and he knew content requirements. Instead, he wanted me to understand that he was beginning to see how often concepts in psychology can converge and that answers are not always so clear and concise. As a teacher, I felt so touched. At the risk of sounding melodramatic, I remember at this point of our interview thinking to myself, "I've taught you what I can do in high school and you are most definitely ready for college".

Overall, Alex did not think his Facebook profile is an accurate reflection of who he is, although he admits that a casual viewer may get a sense of his interests, particularly in psychology. While he can understand how a person might use Facebook to connect with people with varying or similar viewpoints in an effort to construct an identity, Alex does not feel that this appropriately characterizes his use. He does believe that in some way, his engagement with Facebook has heightened his interest in exploring psychology as a future area of study in college or perhaps as an occupation. Alex is also very fond of using the Facebook messenger application as a free communication tool circumventing the need for a costly data plan for his mobile phone. Alex agrees with his classification as being in the identity achievement status. He feels that there have been opportunities of crisis that he has worked through and emerged with a sense of values that continue to guide his decision making and identity construction.

#### **Case: Identity achievement- Sara**

Sara identifies herself as Caucasian, non-Hispanic. At the time of the research period, Sara was 18-years old. Sara is a very astute student. She is a high performing, academically-motivated student who received As on nearly every test, quiz, or homework assignment. I cannot recall a time when Sara received anything less than an A on her report card from me. Sara was

the kind of student that always took advantage of any extra credit in my class. Her essays were well articulated and constructed. In the rare event that Sara did not receive full credit on some assignment, she was eager to speak with me about how to improve her work or what could have been done differently. In these times, Sara was never defensive. She was earnest, polite, and sincere in her requests. According to the results from the identity status questionnaire, Sara was in the identity achievement status.

A few months before the research period, Sara had received the title of Homecoming Queen. There were suspicions among students that she was also destined to receive the title of Prom Queen which was soon approaching. Sara is a very sweet and approachable young lady. She is popular among her peers. She has a pleasant disposition and friendly demeanor.

Sara is also a very talented volleyball player. She had been scouted to play volleyball in college and received two scholarship offers. Sara, however, has narrowed her undergraduate options to two other schools that did not offer any volleyball awards. She has decidedly committed to attend a program that offers a strong academic program in lieu of potential sports-related honors.

As professional and academically disciplined as Sara is, her boyfriend is something quite different. He is one of my funniest students. He is a practical joker-kind of student who loves to play pranks on his peers and myself. He is not a stellar student; he didn't place too much emphasis on coursework, but managed to do well enough to stay in the IB program. Unlike Sara who, as best as I can recall, never submitted a late assignment, her boyfriend was a constant procrastinator and regularly missed classes. For whatever reason, Sara and her boyfriend have been a successful couple. As a teacher to both of these students, I was very grateful for their relationship. I knew that Sara was often the reason that her boyfriend did better than expected on

tests and quizzes. They worked together to study and I know that Sara was an active tutor to help her boyfriend learn and review material. But truly, Sara would be generous with her time and notes with anyone who asked.

I selected Sara for continued research observation because of her classroom consistency and the feedback she provided on her technology questionnaire. Sara was a student who completed work in its entirety. She was dedicated to her responsibilities and fulfilled her obligations. I was confident that Sara would be willing to maintain her participation throughout the research period and that her documentation would be thorough and detailed. Sara also indicated on her technology questionnaire that she was a regular Facebook user. She indicated that she accessed her Facebook account about every other day. She was familiar with posting pictures and videos and indicated experience with other social networking applications such as Instagram, SnapChat, and Twitter. I felt that given my personal experience with Sara and her familiarity with Facebook technology, that she would be a participant with rich information and a dedication to the research aims.

**Social media.** Sara explains that for her, Facebook is just a tool. She stated, “I don't really go on to socialize with many people. I don't go on so much anymore. I used to really use it for email when it was more popular in my social circles, but as of right now, I just really use it to check for homework and the IB web page. A school I'm considering has a roommate page you can check where girls posts things about themselves, so I glance at that too.”

Browsing the profiles of others, Sara thinks she can tell some things of importance to the people, but is cautious not to overgeneralize. Sara explained, “You wouldn't be able to look at my page and know really anything too important. Maybe just a few details. But I see some people way over-share on their pages and photos. This one kid's mom got her all of [a college's]



paraphernalia. Sweaters, posters, banners, hats. And in the photo, this girl is coming off as completely basic. I'm embarrassed for her, but you could tell that she was really enthusiastic, really excited." Sara said that was enough to clue her in that this was not a person with whom she would want to room.

While Sara used to post pictures and status updates more frequently, she says that she stopped doing much of that once she got to high school. She recalls that she began to see her friends more frequently outside of school and so there really wasn't a need post a status to share with people what you were doing since you were already doing it with the people who mattered. High school brought with it greater autonomy, at least a little more than in middle school, and that freedom seemed to included peers who also did not feel the need to use Facebook as a tool to update friends about what was happening.

Sara stated, "Some of the things I posted in middle school I just wouldn't do today. It was so childish. Especially those old pictures from when I was a little kid. They are super embarrassing. But everyone has them so I don't stress out too much about it. Once I tried to go through my old Facebook pictures to delete them, but there are just so many that I got bored and figured, it really didn't matter anyway."

Sara recounts that the information on Facebook page about her likes and favorites movies and television shows are out dated. She shared, "I've never really gone back to update that stuff since middle school. There's no way someone would get any kind of idea about who I am today that's even close based on those TV shows and bands."

What Sara has updated on her Facebook profile however is her relationship status. She admits that she is sincere about updating this field. She explained, "It's not like I date a bunch of guys. I've only had two serious relationships since high school, but I like to make sure that field

is correct. It used to be because some guys would say that we were dating and friends wouldn't believe the guys because I hadn't verified it on Facebook. That's so middle-school! Now, you know if I'm single or with someone."

Sara also communicates her romantic relationship by the choice of her profile picture (Figure 16). "It's me and my boyfriend. It's a nice black and white photo and we weren't even trying to look cute, but it came out that way so I decided to use it as my profile pic."



*Figure 16.* Sara on the right embracing her boyfriend. Sara says she made the image her profile picture sometime in January of 2015. The photo was taken by a friend at Sara's house.

Sara seems to talk about her Facebook as tool for two areas of her life: family and school. She shares that she will sometimes go onto Facebook just to see what other people might be posting, but that she doesn't think it necessary to post numerous items herself. Sara explained, "If I go on a college visit or a trip someplace, I'll post a couple of photos. I do that mostly because I am friends with a lot of family. They want to know what's going on with me so it's an easy way to let them into my life. They can follow me and they'll know I'm back in town from a visit to a school or that my flight got cancelled in Italy."

During the research observation period, Sara posted an album of several photos (Figure 17). There had been a private family event at a local venue and Sara shared some of the photos from the evening on her Facebook for other family members who weren't able to attend. The

photos were apparently well received by family members not in attendance as evidenced by the ‘32 likes’ the album received from visitors.



*Figure 17.* Sara posted an album of almost a dozen photographs from a private family event at a local venue. The album was posted March 20, 2015 and received a number of ‘likes’ from visitors. Sarah appears in the first frame, upper left, wearing a strapless dress with a vertical print, embracing a gentleman in a suit and tie.

All of the Facebook engagement occurs on Sara's mobile phone. She says she never uses a desktop computer or tablet to access Facebook. She elaborates, "Honestly, I've forgotten my password. It's been so long. It's already stored on my phone so that's really the only place get to Facebook. I don't even have the Facebook app loaded onto my phone because I don't want it using any of my [phone's] memory. I just have a Safari browser always open to Facebook and then I can jump inside real quick."

The most popular application Sara uses for communication with her friends is SnapChat. She explained, "I use SnapChat with most everybody. If you're not super close to someone, for example my boyfriend's sister—she and I are not really close, like we're close, but we're not texting each other everyday. But with SnapChat, it's a lot easier because I know she likes me enough to SnapChat me regularly, but I don't have the need to share thoughts and have full conversations with her because that's not really our relationship. It's a way of keeping in touch with people in a friendly way, but you don't have to have a whole conversation with them or feel the need to respond to them. You're not obligated to respond to someone. If someone doesn't respond to your Snapchat, it's no big deal. You can respond hours later."

Sara says that she sends most her SnapChats to her boyfriend. When she sends a private direct message to her boyfriend, she says that she is much more concerned about how she looks even if the message is just for a few seconds. But when she sends snap-message to a friend, they might be awkward and goofy. She said, "It's my boyfriend! Come on. I have to look good for him. With my friends, who cares? They're friends. They don't care how you look. And if I get notified that they screen captured one of my silly pictures I totally call them out on it. That's the point of SnapChat."

Sara says that she posts an occasional picture of her and her boyfriend on Facebook. The purpose, she says, is just to let some friends know where we are. Since her relationship, Sara and her boyfriend spend their disposable leisure time with mutual friends, but do attend concerts, movies, and dinner on their own. Sara says she likes to post a picture sometimes when she and her boyfriend are away from friends just to let everyone know that they are having fun. She explained, “My dad is always watching my page too. So if I tell him and me and [my boyfriend] are going to MusicFest, I know I should post a pic of us there. He’s never asked to do that. He’s not looking over my shoulder or anything, but I don’t want him to worry so I post a simple pic of us”.

Our high school prom was several weeks away from the research observation period, but in preparation of that, Sara’s father had made arrangements to have a professional photographer come to their home and take photos in advance. According to Sara, “My dad thought that if we did the pictures the actual day of the prom, it would be really hectic. Plus, if it rains for any of the outside photos, we can always reschedule, but we can’t do that on actual prom day. So I found a dress early, got [my boyfriend] his tux and then had a fun photo session.”

Friends of the couple learned about Dad’s early photo shoot and urged Sara to post a few. Sara was not enthused about posting pictures to her Facebook profile so early before prom. She explained, “You don’t under Mr. Valdéz. Some girls can be really vicious. I didn’t want anyone seeing my dress before prom. I know it sounds silly, but it takes away the surprise of walking in.” After days of pleading, Sara gave in to the requests and posted one photo captured by the professional photographer (Figure 18). “It’s just a really funny photo. We did the traditional side-by-side, and then the I-stand-in-front-you-stand-behind-me pose. We did photos in the garden, on the staircase, by the dock. I posed with my dad and by myself. We got maybe a hundred

photos. But this one was cute. So me and [my boyfriend] are posing shoulder-to-shoulder and my dad jumps in and kind of makes a mean face. He really likes [my boyfriend] so he was just kidding, but he's my dad and I know he just cares about me."



*Figure 18.* This photo was uploaded to Sara's Facebook profile March 30, 2015. Sara appears on the left, her father is in the middle, and Sara's boyfriend on the right. The photo was uploaded to Sara's Facebook account in black and white so as not to reveal the color coordination between Sara's gown and her boyfriend's tie.

**Identity.** Sara was indicated as being in the identity achievement status per her results from the status questionnaire. I asked Sara to read over the description I provided her and asked her to read the other status descriptions as well.

Sara confirmed, "Yeah I agree with it. I definitely am not identity foreclosure because I definitely don't go blindly by another's values. I feel like I have used the values my parents have given me as a guide, but I still make my own decisions and in that sense, I think the achievement part has helped me to accomplish a well-defined sense of personal values. I mean, I feel like I'm

very clear about my identity and how I perceive myself and how I would like others to perceive me. I do agree with identity achievement.”

I asked Sara to think deeply about the crisis and commitment description as outlined by Marcia. I wanted to know if she could recognize these characteristics in herself across her lifespan. She said, “I don't mind sharing it with you. It's funny because it's actually what I wrote my essay on for my college app. The prompt was about what was a failure in your life that you overcame or something like that and so the crisis that you're talking about is something that actually affected me. I went to a private school in Tampa when I was little and there's nothing wrong with the school. It's a great school, but at the time, I was 5 or 6 years old, I felt like I was just old enough to realize what was going on. My parents were going through a divorce and seeing my parents being frustrated and going through that in their life, I was able to pick and choose what things I wanted to incorporate and not incorporate into my life and relationships I had with other people. My father actually got remarried and divorced again from his second wife when I was 13. I feel like the first crisis I had was when I was younger and growing up. That was the time I was still searching and trying to figure out how to come to terms with relationships, but I didn't it really figure it out until my dad got divorced again and I was like, ‘Okay this is what I'm going to do with my life and this is definitely not what I'm going to do with my life.’ By then, I was really old enough to see what was going on and decide for myself how I wanted to go about relationships.”

I asked Sara to clarify the type of relationships she meant. “Romantic”, she said. For Sarah, her father’s divorces gave her cause to reflect on the kind of qualities she wanted to find in a romantic partner. It also provided a template for the characteristics she did not want.



Sara remembers that it was the move brought on by her father's divorce from her biological mother that caused Sara to take kindergarten twice. She explained, "I had a lot of change and had to go to different schools. First grade I finished at one school and in a second grade I went to a different school and then I went to a private school, but I still had a lot of issues with change. I mean I've overcome it now, but I think that the crisis directly affected me at school. In school and relationships."

Sara felt that the early changes in her academic settings caused her to feel inferior. Sara shared, "Even though it was just kindergarten, it was still important, so it gave me a complex about intelligence and for a long time I felt that I had to prove myself and try harder. I felt like I was supposed to be embarrassed by having to take kindergarten twice so I tried all through my schooling to be the best. And then once I got into the IB program, I started exceeding at school and I was really happy. I felt like, wow, I don't need to feel like this anymore and then I got accepted several good colleges and I don't feel like I'm less than anyone else."

I reassured Sara that she was indeed a very bright student and talented athlete. She smiled and said, "I think that in the world, there will always be people who are smarter than you and better at you in some aspects, but in the end I still think that I'm pretty impressive."

I asked Sara about other domains of her life and the ways in which her engagement with Facebook may have influenced her identity. Sara identifies her religious affiliation as Bahá'í. Sara's biological mother is Iranian and had hoped that Sara would also follow the Bahá'í faith. Sara learned that her mother and father had a discussion when Sara was a young girl. They had decided that they would not direct Sara into any religion in particular and let her discover for herself what religion, if at all, she wanted to explore. Sara remembers when she was in middle school and asked more about the Bahá'í faith. She said her mother explained the basic tenets and



philosophy. She explained, “You still have to expose kids to things; you can't just expect them to figure it out for themselves because they're going to be a little bit lost and not know what to explore. Kids won't understand their actions so I think, that in a way, I'm glad that my mom helped me to understand my religion because I'm happy about it now. “

Sara follows a family friend on Facebook who organizes Bahá'í events. The friend is very active in the faith and is also posts quite a number of pictures and videos. Sara will receive these posts in her newsfeed and is aware of worship gatherings, dances, and parties that are available for her to attend. She does indeed take advantage of these and is happy with her religious connections and the way in which Facebook helps her connect with other Bahá'í followers.

In terms of her occupational choices, Sara has noticed the posts of some family friends whom she follows. Both of Sara's biological parents are physicians. She was aware of the demands of the field and the associated responsibilities the occupation brings. Because of her parents, Sara was able to become Facebook friends with her parents' co-workers, other doctors who would post about their days and their schedules. Sara capitalized on these contacts when she began to seriously consider becoming a physician. She reached out to her parent's co-workers and coordinated times to shadow the doctors and visit their office. She spoke with each doctor directly about their career choices and the life demands that are placed upon them. Sara confirms that it was her use of Facebook that was the vehicle through which she was able to learn more about her future profession.

Sara explained, “Facebook can help someone explore their identity, but it depends on what you're going through and what you've experienced. It depends on what you want to share and how much you pay attention to what other people are doing. I've found where Facebook fits

in my life. It's a tool. I'm pretty confident in my identity and the person I am. I know that there's more to come in college, but I feel like I'll be able to handle whatever might be waiting for me."

**Pedagogy.** A private IB Facebook group allows students to post questions, share documents, and keep up-to-date about relevant information. Sara says she usually checks the page once a day and then one more time before she goes to bed. She said, "It's like the very last thing I do on my phone before I text my boyfriend." She goes onto the page to give help with school-related work. She said she tends to help others who post questions more than she herself create posts asking for help. For psychology, Sara said, "I've asked questions about what readings where do when I left your syllabus in [my boyfriend's] car, but other than that, I don't really ask for clarification on concepts or objectives". Sara shared that she notices the posts that come from Phineas Gage in her newsfeed and will occasionally will read one. Sara explained, "I remember one [story] you posted about stereotype threat in girls over math. I had just had a conversation with a friend about that like a week earlier so I forwarded it to her".

Sara's other social platforms have begun to diminish in use throughout her high school career. Sara used Instagram occasionally because her boyfriend was on it, and wanted to follow him in order to see what he was posting. Sara also utilized Twitter mostly during her Senior-year. She stated, "I would follow some colleges on Twitter because they would tweet reminders about deadlines and tips for completing their applications. But since, I'm done with that part of the process, I'm pretty sure I'll just unfollow the schools. I still use Twitter. There's some celebrities I follow and get notifications form them, but you know, as singers get less popular, I'll probably unfollow them at some point too." Sara's social media platforms for school use were fairly limited. Rarely was her Facebook use directed toward our psychology class; most of her Facebook use was to help others with their course-related questions.

Sara perceives her use of Facebook as primarily a communication tool between herself and family friends. Her Facebook behaviors have changed since she was in middle school. Earlier, Sara would post numerous pictures and constant status updates. Once she entered high school, however, Sara become more cautious about what she posted, slowly her updates and pictures to her Facebook account began to diminish. Sara has utilized her Facebook account to form greater connections to her religious affiliation by staying informed of events coordinated by a devout family friend. In addition, Sara has explored more about her chosen profession by connecting with family friends over Facebook. Her Facebook friendships with her parent's doctor-friends have given her an opportunity to shadow these professionals and learn more about their work. Finally, Sara agrees with the characterization that she is in the identity achievement status. She feels that the experience of her father's divorces and the early school struggles she experienced have been crises that invited her to be reflective at an early age and influenced the commitment she has to romantic relationships and education. Looking ahead toward her future use, Sara suspects that she will continue using SnapChat with regular frequency. Sara does not feel that she will leave Facebook altogether. She knows that extended family and family friends keep abreast of her activities via Facebook posts so she will continue to post what she's doing at college and a summer trip she plans to take after graduation. In addition, Sara suspects that when she gets to college, any clubs she plans to join will probably host a Facebook page. She's noticed how tennis groups, volleyball groups, and the student council at the schools she's considering have Facebook pages to indicate meetings and activities. She feels that once she begins to become more involved with college extracurricular activities, her Facebook will be an invaluable tool to staying connected.

## **Cross case analysis**

Stake (2006) warns against directly comparing too frequently among participants in a multiple case study analysis. “Multicase study is not a design for comparing cases” (Stake, 2006, p. 83). Each case or rather, each quintain, should be able to stand on its own and give an embraceable illustration of each person’s experience. Comparing cases diminishes the integrity of each case as if it were lacking something or possessing something that the other did not have (Stake, 2006). The researcher should instead respect the individuality of each case and honor the phenomenological experience of each participant. Although Stake’s caution is indeed a valuable warning about the integrity of multiple case study analysis, some comparisons should be noted. This is in no way intended to suggest generalizability among classes of adolescents which would be disingenuous to the qualitative framework. Nor do I intend to suggest that each individual’s experience necessarily represents others who share the same identity status or gender. But because my focus draws heavily from a theoretical base of Marcia’s assumption that adolescents fall into one of four identity categories (1966), I feel that examining these similarities and differences is essential to illuminate the main research questions.

The focused sample which comprised the multiple case study did not include two of Marcia’s four identity types (1993). Rather, the study included two students in the identity moratorium and two students in the identity achievement statuses. This suggest that all participants had considered themselves as having experienced some crisis, that is, an exploration of developmental alternatives in various identity-defining domains, like occupational choices, educational possibilities, romantic interests, religious choices (Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010). The difference then, between these two types is that one set, the identity achievement status students, have resolved parts of the identity-formation process as a

result of going through a crisis experience. The moratorium status students, while having experienced a crisis, have not arrived at any conclusions about how the crisis affects their developing identity. Because identity formation is central to my research questions, I've organized the notable comparisons between participants by identity type in order to emphasize developmental influences over social media use. Table 10 summarizes the major research findings by each question.

Table 9

*Summary of Findings Across Research Questions*

<u>Research Question</u>	<u>Identity Achievement</u>	<u>Identity Moratorium</u>
Use of social media	<ul style="list-style-type: none"> <li>• Fluent in multiple forms of social media</li> <li>• Active use of Facebook</li> <li>• Likely to follow schools &amp; sites with future educational use</li> <li>• Likely to use Facebook in the future</li> </ul>	<ul style="list-style-type: none"> <li>• Fluent in multiple forms of social media</li> <li>• Passive use of Facebook</li> <li>• No relationship status displayed</li> <li>• Disdain for Facebook profiles that are too polished</li> </ul>
Identity Formation	<ul style="list-style-type: none"> <li>• Current Facebook profile does not accurately represent self</li> <li>• Use of Facebook deepened future occupational interests/religious faith</li> </ul>	<ul style="list-style-type: none"> <li>• Current Facebook profile does not accurately represent self</li> <li>• Did not rely on Facebook to develop/explore personal interests</li> </ul>
Informing pedagogy	<ul style="list-style-type: none"> <li>• Regularly used Facebook to follow-up with class homework &amp; class notes</li> </ul>	<ul style="list-style-type: none"> <li>• Only the female participant regularly used Facebook to follow-up with class homework &amp; class notes</li> </ul>

*Note:* Themes are summarized from a collective case study of four participants.

**Identity moratorium.** Both Jim and Jennifer were identified as being in the identity moratorium status. Both of the participants agreed with this characterization acknowledging that they are still searching for some sense of commitment to their developing values. They feel that they have experienced a crisis, but have not yet developed a complete understanding of the personal identity they are forming.

Jim and Jennifer were not exceptionally high-performing students. They both managed to complete their time in the IB program with their share of grade-related obstacles, but each managed to get passing grades that allowed them to remain in an academically rigorous program. Neither student personalized their grades to their identity, perceiving their classroom performance separate from who they were as individuals. Jim was perhaps more distant about his school-based grades, seemingly aloof, as if the grades were of little importance to him. Jennifer was much more vocal about her performance. She was explicitly excited if she received a D instead of an F and laughed much more about her missed assignments in a manner that conveyed a sense of humor about her predicament. Still, both Jim and Jennifer did not feel as if their grades reflected who they really were.

Both participants in the identity moratorium status used the word “passive” to describe their Facebook use. Jim does not share posts about outings with friends, school-related experiences, or information about romantic attachments. Jennifer described herself as a ‘Facebook ninja’ occasionally lurking on the pages of others to see what they have posted. Neither of them considers themselves to be regular users who post a great deal of status updates or content to their pages.

Neither Jim nor Jennifer felt it necessary to make mention of their relationship status. According to Jim, “If anyone wants to know, they can just ask me”. For Jennifer, “It’s just not a big deal to have to post it”. Both Jim and Jennifer each had a paramour during the research observation period and neither chose to make this romantic attachment part of their virtual representation on Facebook.

Jim and Jennifer expressed an explicit disdain for Facebook profiles that appeared too polished. Each participant believed that a Facebook profile that is too perfect is somehow a

reflection of a disingenuous quality. These students feel that Facebook pages with photos that show the user is a consistently good light or with status updates which never reveal a bad day are suspect. Jim was particularly convinced that this characterization was typical of some of the college Facebook pages he briefly visited while researching potential undergraduate programs. As Jennifer browsed for likely college roommate matches on Facebook, she was guarded against profiles that seemed too perfect. Jennifer prefers the realness of a user that is better conveyed through the mobile social application of SnapChat.

**Identity achievement.** Data from the questionnaires of Alex and Sara, identified both of these participants as being in the identity achievement status. Each participant agreed that this status best characterized their identity. They had experienced a kind of crisis and had come out of the experience with a greater sense of commitment into which they were developing. Both of these students were high-achieving, grade-conscious participants. They consistently submitted superior classwork and earned high marks on their report cards and were recognized for academic achievements in the two years they were known to me.

Alex and Sara recognized that Facebook had helped them each in some way to develop an aspect of their identity. Alex acknowledged that in taking inventory of the posts he did populate to his Facebook page, he demonstrated a heavy orientation towards the field of psychology. Many of the posts he shared were about neuroscience or cognitive-related fields. He found a great deal of interest from a college's psychology Facebook page which helped to foster an affinity toward the subject and influenced his choice of an undergraduate major. Sara too recognized the role that Facebook helped in her efforts to connect with her religious faith and the way she was able to connect with professionals in the medical field in her search for a potential career. She used Facebook to stay abreast of community events in order to celebrate her religious

affiliation. Sara reached out to family friends through Facebook who were physicians to coordinate shadow visits and ask about college experiences. Sara’s early inclinations toward her religious faith and future profession were fostered by the opportunities she sought out through the Facebook platform. Each of these participants were able to reflect on the ways in which their Facebook use brought into greater focus what was a developing area of their identity.

**Gender.** There were also some themes that emerged unexpectedly from the gender differences among the four participants, outlined in Table 11. Again, while the intention is not to generalize Facebook behaviors across genders, this small, but rich sample illuminates some potential areas that future research might investigate.

Table 10

*Summary of Findings Across Gender*

<u>Male Participants</u>	<u>Female Participant</u>
<ul style="list-style-type: none"> <li>• Relied on Facebook messenger app rather than direct peer-to-peer texting</li> </ul>	<ul style="list-style-type: none"> <li>• Preferred peer-to-peer direct texting but installed Facebook messenger app</li> </ul>
<ul style="list-style-type: none"> <li>• Maintained an open Facebook network; likely to accept friend requests from strangers</li> </ul>	<ul style="list-style-type: none"> <li>• Maintained an open Facebook network; more selective about who was accepted as a friend</li> </ul>
<ul style="list-style-type: none"> <li>• Utilized Facebook to advertise upcoming productions weeks away</li> </ul>	<ul style="list-style-type: none"> <li>• Utilized Facebook to explore future college roommates months away</li> </ul>

*Note:* Themes are summarized from a collective case study of four participants.

Three gender-related themes seemed to emerge: 1) the use of Facebook messenger, 2) the management of the friends network, and 3) the primary use of Facebook during the research period.

All four participants were familiar with the stand-alone Facebook messenger application, yet the male participants expressed their use of the application in a way that was different from that of the female participants. Jim and Alex, both males, said that they used the messenger



application heavily, relying on it a great deal for direct communication rather than investing in an expensive cellular plan. Their primary form of texting friends was through the free Facebook application. Jim and Alex both send text messages to their friends directly in the traditional manner of a peer-to-peer model by utilizing their mobile phone's carrier. Yet, both emphasize that in an effort to reduce personal costs, they will send messages to the same friends who are already part of their Facebook network over Facebook's messenger application. This reduces data use and diminishes cost for Jim and Alex. They prefer to connect to readily available complimentary wi-fi at school or other public settings and not use their monthly allotment of data at all.

Jennifer and Sara, while also familiar with the Facebook feature and acknowledging that they had the application installed on their phones, described that they used the application because their friends used it. That is, they probably would not have installed it onto their phones except that some of their friends choose to use this method to text each other. For their own preference, Jennifer and Sara prefer direct peer-to-peer texting. While this finding may reflect a socio-economic difference between the males and females in the study, it is interesting to note that both of the female participants were not concerned with the cost or number of texts that they sent or received. I did not ask participants about their respective mobile phone plans, carrier service, or costs, but this finding may be of interest for additional research.

A second theme that emerged demonstrating a difference between the male and female participants was the way in which each gender managed their network of friends. Both males were inclined to accept Facebook friend requests from whoever sent them one. This means that Jim and Alex essentially had friends on their network with whom they might have never met in person or had any shared interest. A stranger could friend-request Jim or Alex and this person

would most likely be accepted into the social network of the boys. The behavior may be more of a result of both Jim and Alex having a public audience. Both young men are active in theatrical productions and use their Facebook accounts to promote upcoming shows. Jim in particular promotes theatrical and musical activities.

Jennifer and Sara were much more careful about who they accepted into their Facebook friend network. While all participants reported having open, unsecured accounts, meaning anyone could search Facebook to find them, the females were less likely to accept a friend request from a stranger. They tended instead to maintain a network of friends who were already known to them, including causal and close friends, as well as family members, immediate and extended. This noteworthy observation might be of interest for another body of research exploration.

Finally, a third theme that seemed to develop from the data was the way in which the male and female participants happen to be engaged with Facebook during the research observation period. During this time, the male participants were both in the midst of promoting an upcoming theatrical production. This was an unplanned happenstance on my part. I did not know that each of the male participants had volunteered to be part of this production. I learned later from Alex, at the request of the show's producer, each cast member was encouraged to use his or her Facebook page to help promote the show. Alex was at first resistant about using his personal Facebook page to promote the show, but eventually acquiesced to the producer's request. Jim was much more enthusiastic about the promotion and not only created a post to populate his page, but also changed his profile picture twice to further maintain interest among his users.

During the research period, the females were also engaged with regular Facebook use, but for a different means. Each of the females had gained acceptance to different colleges and neither had yet committed to attend any one in particular. Each of the colleges provided a service that allowed matriculating freshmen to browse the Facebook profile pages of other students who were also accepted to the school. The intention of this feature is to allow each student to have a greater degree of autonomy in selecting a potential roommate. In reviewing Jennifer and Sara's Facebook diaries and in each of their respective interviews, both girls shared how they would browse the roommate search feature through the Facebook platform. Jennifer and Sara would occasionally spend a few minutes looking at the Facebook profiles of other accepted candidates and take note of those with whom they might find a potential match, or those with whom they were definitely not likely to form a connection.

All of the participants were future-oriented in their Facebook use. They were thinking ahead toward some upcoming event. The male participants used Facebook to focus on a matter that was several weeks away. The female participants used Facebook to focus on a matter that was months away. Gender differences in the use of Facebook technologies was not the focus of the current research, but as coding themes emerged, I felt it important to share the findings and the recommendations for future research aims.

For purposes of pedagogical interests, these gender differences give little suggestion as to practical classroom use. Still, there may be some benefit in exploring the notion that Alex and Jim, the boys, were more concerned with their phone's data plan while Jen and Sara, the girls, were not. I wonder if this might imply that boys are more careful about their resources. In the classroom, I would need to attend to how this might manifest. Are boys more miserly than girls in lending paper or pens? Are the notes that boys take in class more brief in content than girls for

fear of using paper? Conversely, are the notes that girls take more copious than boys because the concern over resources like ink and paper are of no importance? Moving forward, my classroom observations will attend to potential expressions of how this difference over the concern of resources might manifest.

Differences in how participants openly accepted friend requests (the boys) or screened requests with more caution (the girls), might suggest that girls are more critical in their evaluation of data. Perhaps girls are more measured in who they take into their confidence or perhaps are more careful about who they choose to let into their social circles. In the classroom, this carries implications for relationship building. It may be the case that boys are easier to befriend as new students while the girls may need greater familiarity first. I have not noticed this to actually be my experience in the classroom, but the data collected here has drawn my attention to this potential difference among the relationship building process for male and female students.

Male and female students in my study displayed a different time orientation in their Facebook use. Given the data collection period, boys were posting content to address a matter that was in their near future. Girls, however, were using Facebook as a research tool to explore profiles of potential roommates with whom they would meet almost six months later. Overall, this may suggest a difference in time orientation. In terms of classroom practice, it may be the case that boys are more apt to complete reading assignments/homework tasks only as they near the approaching deadline. Girls, instead may begin to undertake a task much earlier than boys maintaining a future-oriented perspective. If this is indeed an appropriate characterization, this finding carries implications for how I regulate assignments and due dates. My experience in the IB program does not seem to generally support this assumption. From my perspective, both my male and female students are as likely to procrastinate over assignments. Still, the finding may

hold other implications for how students manage to complete their obligations beyond academic demands.

**Similarities.** There were some additional themes that emerged from the coding that were shared by all participants. Each participant shared that their current Facebook profile was outdated. All participants invested time in creating a page that reflected their interests and likes in movies, books, television shows, and musical artists when they first registered to become a Facebook user. For each of the four participants, this was during their middle school tenure, approximately, 7<sup>th</sup> or 8<sup>th</sup> grade, between the ages of 14 and 15-years of age. All participants voiced a marked decline in their active Facebook use upon entering high school. None of the participants deleted their Facebook accounts or stopped using Facebook completely, but instead changed the ways in which they engaged Facebook. Jennifer, for example, was more self-conscious about the content she posted and did not want to alienate potential friends. She was disinclined to post as freely to her profile page for fear of peer rejection. Sara was less likely to post content to her Facebook page because she was already spending time with the same people who would have read her posts. She felt it would be unnecessary, for example, to share that she saw a movie with a girlfriend, since the same girlfriend would likely see the post anyway.

Additionally, as competing mobile applications became more ubiquitous, each of the participants began to migrate to additional forms of social networking that were more specific in their unique features. In exploring his pansexuality, Jim was more inclined to use Instagram for communication about sexual interests because it afforded him greater anonymity and the likelihood of a greater variety of users than Facebook alone. Rather than trusting Facebook content as legitimate news, Alex choose to go directly to established news sites. This was true even if a trusted news source posted the content for itself; Alex thought it wiser to still go the

new source's website, out of the Facebook architecture. Jennifer was more likely to spend time on Pinterest if she was seeking some degree of distraction. While Facebook provided her with occasional cat videos, Jennifer was more likely to actively seek out distraction from Pinterest's ability to appeal to her senses of humor, fashion, and crafty-nature. All participants were users of SnapChat and used the feature to share stories several seconds long. Sara suggested that the casual and fleeting (that is, time-sensitive) mode of content delivery made SnapChat much more real to her. Jennifer and Jim agree that they are suspicious of any content that is made to look too good on Facebook and Alex was critical of trusting anything at all he saw on Facebook.

All participants agreed to some extent that their Facebook pages captured something real and authentic about themselves, but no one felt it was by any means a complete and accurate reflection of their identity. They agreed that anyone who made the effort to mine through older, previous posts from years ago, might be able to form a picture of their 14/15 year-old middle school self, but each participant acknowledges that he or she has matured and grown in their identities since then. Jim thought a stranger might be able to come away with a very compartmentalized understanding of his identity if that stranger only had access to Jim's Facebook profile page. Jennifer did not feel Facebook was able to capture all of who she is, but acknowledges that she does not populate her profile with the content someone would need to truly understand her identity. Alex says he is too multifaceted and the way he uses Facebook is not intended to capture all of who he is. Sara agrees, but adds that Facebook could help someone navigate his or her personal interests and recognize his or her personality traits if that person is reflective about he or she does while on Facebook.

With the exception of Jim, all of the remaining participants agreed that they used the Facebook IB page during their high school career. They acknowledged the value in having a

private community comprised of other students in the same school, in the same program, of the same cohort. Jennifer was most likely to post questions about class units or look for handouts that she had misplaced in her offline life. While Sara did access the IB-only Facebook page, she was most often someone providing help rather than seeking it. She agreed that the page was useful for a great deal of academic help.

All participants agreed that they saw themselves continuing to use Facebook in some capacity into the immediate future. Jim hoped that technology would advance at some point so that users who wish to promote functions would be able access more powerful platforms other than Twitter or Facebook, but conceded that for now, it would have to do. Jennifer imagined her continued use of Facebook would be driven mostly by a desire to keep family members informed of her college experience as she was moving forward in her education. She also believed that once in college, her selection of extracurricular activities would probably use Facebook as a shared message board system to coordinate meetings and functions. Both Alex and Sara agreed that they would probably continue to use Facebook as a way to keep in touch with friends whom they have made along their lifespans. Alex and Sara admit to still having a number of friends in the current Facebook network that they met in middle school and to whom they really do not communicate or see with any regularity. Still, these were close friends at one point and Alex and Sara are interested in their well-being. They foresee a similar pattern of Facebook behavior as they graduate from high school and enter into college.

### **Limitations**

Qualitative research requires a degree of reflection that makes it necessary for the researcher to be thoughtful about methodology and potential limitations which can challenge data trustworthiness. I was careful to consider each of the challenges and make explicit efforts to

ensure that data I collected was thoroughly documented and authentically reflected the experiences of the participants.

Because my research questions examined representations of technology through different identity types, it was important for me to be sensitive to potential digital divide issues. The ability to access technology and associated hardware platforms could highlight variations in household incomes which could make student participants feel uncomfortable. During the informed consent process, I was sure to explain to participants that information about how they accessed social media and their choice of devices would be confidential. I also explained that part of my research included learning about the various methods students used to get online, whether that was using free wifi hotspots, cable modems, or even dial-ups. I wanted to know how students accessed their social media outlets and emphasized that any differences that might be discovered were valuable. I had hoped that my explanation would make students feel comfortable about sharing their experiences honestly.

Interviews were part of my data collection process. I employed member checking after interviews were transcribed for students to verify. A possible limitation of member-checking is introduced when participants are permitted to read their interview transcripts at early in the data collection process (Glaser & Strauss, 1967). Allowing participants to read their transcripts during the on-going data collection process may unintentionally influence what they record and/or how they behave throughout the remaining days of the study. If the participants gain a clearer understanding of what the researcher is capturing during the data collection period, participants may exhibit socially desirable behaviors which may be contrary to what their actual behaviors would have been. I was also aware that participants might have also responded to unintended researcher demands and engaged in Facebook behaviors that they had believed I wanted to



document. I reinforced to the participants the importance of being honest during the data collection process and that I was not hoping to hear anything in particular.

Despite these concerns, I was confident that member-checking was valuable to the credibility of the study. I clearly outlined the intentions of the study's aims during the informed consent process so as to assure participants that it was not necessary to alter their behaviors for any reason that was not part of their genuine activity. The small sample size of my study, lead me to emphasize the need to ensure that all of the data collected was accurately represented thereby allowing each participant to correct any possible misrepresentations. Across all the member checking instances, no participant ever made changes to the interview documentation.

The survey I utilized, the Measure of the Ego Identity Process Questionnaire also posed self-reporting concerns. This is the certainly a concern for any survey tool, although prior research by Phillips (2009) found no significant correlations between social desirability and adolescent scores of identity type measures. Some participants may tend to provide false information or recall requested information inaccurately. Similar concerns were also part of the administration of the technology questionnaire, the observation of the online student diaries, and the semi-structured interviews, all of which may unintentionally evoke social desirability. That is, participants may respond in such a way that makes themselves look attractive, popular, or technologically-sophisticated. Being aware of these limitations, I was careful to make sure students understood my interest in feedback that was genuine. Having conducted research themselves, my students were also familiar with the challenges of social desirability and I expressed how their empathy in this study was appreciated.

The Ego Identity Process Questionnaire has itself been questioned with regard to a particular limitation. The questionnaire "is limited in that it does not sharply differentiate

between diffusion and moratorium. However, this is likely due to the fact that few pure diffusion-status types are not often observed among healthy adolescent populations" (Adams, 1998, p. 21). Both identity statuses share a characteristic of not committing to a particular life philosophy (Marcia, 1980); one feels that there are no choices from which to choose (diffusion) while the other continues to explore various choices (moratorium). While this is an expected limitation of the questionnaire, I was certain to address this methodological concern by following up with participants during the semi-structured interviews in order to assess characteristics unique to diffusion and moratorium identity types. Moratorium identity status adolescents are currently experiencing a crisis; the diffusion adolescents are not. I could distinguish this characteristic during the interview. This was accomplished by investigating experiences of crisis that the participants might have experienced.

Finally, the identity statuses outlined by Marcia may pose potential difficulties. Marcia acknowledges that adolescents may change or adopt their identity statuses as they continue to experience issues of crisis and commitment (1993) so there is an element of fluidity to the identity status model. The nature of the identity status therefore poses concern. My research data collection interval was for one month but participant maturation was not likely to disrupt my findings. For Marcia, identity type did not change week-to-week, but rather was part of an involved process in which the adolescent wrestled with issues of some personally relevant experience across some period of time (1993). My time interval was not long enough to introduce an identity status change among my four participants. The two interviews I scheduled throughout the data collection period however, were my opportunities to check for any potential crisis that might have emerged during my study. My study reflects a point-in-time for the participants and does not reveal an enduring developmental characteristic across the lifespan.

This is inherently a feature of lifespan research as adolescents grow and change across life experiences and/or neuromaturational development.

## Chapter Five: Discussion

I had created a Facebook profile as a way of extending my classroom reach into the after-hours of my students. Those students who were interested, were welcome to friend my alias, Phineas Gage, and could receive into their newsfeed psychology-related stories that they could read or ignore. It was a way of connecting typically theoretical ideas from our psychology curriculum to practical, real-life examples. For interested students, they could receive new stories effortlessly delivered to them that exemplified some aspect of psychology thereby reinforcing concepts and extending learning outside of the classroom.

As Facebook use became commonplace and the platform's features began to become more versatile, I was curious to know in what ways students were using Facebook for class, if at all and what their online behaviors might mean to my instructional practices. I was (and am) a teacher interested in ways that might continually improve student success—academically, socially, and how to nurture their interest in psychology.

With this purpose in mind, I developed three research questions to investigate:

- Question 1- Social media: How are students using their social media platforms during their senior-year of high school?
- Question 2- Identity: In what ways does Marcia's model of adolescence identity type help to explain potential differences in Facebook use among adolescents?
- Question 3- Pedagogy: In what ways are students' Facebook practices and teaching practice that relies on social media responsive to one another?

Drawing on a collective case study of four senior-level students, I relied upon Marcia's model of identity status types to inform my question of Facebook use. Marcia's (1980) established research on adolescent development and identity formation was an appropriate theoretical framework from which to examine patterns of student behaviors. Relying on a cross case analysis provided me the opportunity to examine patterns of behavior both within and between groups, in this case, my groups being identity achievement and identity moratorium. The cross case approach is a methodology that allows researchers to study complex phenomenon in a natural context (Stake, 2006). Collecting data that reflects the experiences of participants in sufficient detail allowed me to consider differences and similarities in the perception of Facebook use among students. Mobilizing knowledge from individual cases and then comparing/contrasting patterns of use, was the most appropriate way to discover insights to my research questions. The different identity statuses defined case boundaries and each was examined in terms of social media use, identity formation, and pedagogical implications.

In the following discussion, I highlight the major findings from each of the research questions and what it means in the context of my classroom and practice. With regard to social media use, I discovered that only some of the students in my sample utilized Facebook as a resource to learn more about future educational pursuits (the identity achievement students) and while all agreed that their use of Facebook has changed since middle school, their social media use of other platforms, such as SnapChat has increased.

In exploring the question of identity, all four participants agreed that their current Facebook profile did not truly capture their sense of self any longer. However, the identity achievement students revealed that they did indeed use Facebook groups and connections to

further explore their interests in future educational/occupational pursuits and to deepen religious faith.

The question of pedagogy revealed that none of the students in my sample used Facebook as a tool exclusively for psychology class. Three of the four students however, did use Facebook to some extent to review homework assignments, share class notes, and help peers with difficult content. In this regard, identity status among the four participants did not suggest a pattern of Facebook use for our classwork. In light of this finding, I discuss possibilities to making Facebook a potential tool for limited instructional practices.

### **Social media**

Current patterns of social media use among participants were inconsistent among the sample. Early Facebook use, however shared some common features. When participants first established a Facebook profile page during their middle-school years, they invested particular effort in creating a profile which was complete with favorite television shows, movies, and personal interests. The tendency to create a robust Facebook profile aligns with earlier research from the literature review. Wilson and Proudfoot (2014) contend that users create a virtual representation of themselves including pictures, textual descriptions, and lists of interests in order to gain social benefits and fill perceived needs of self-esteem. Social acceptance and self-worth are important to individuals across the lifespan, but certainly during formative middle school years these concepts are particularly salient (Rhodes, Roffman, Reddy, & Frediksen, 2004).

All participants admitted that as they aged, especially, into high school, they became less concerned with their Facebook profiles accurately reflecting their identities. Sara explained that as she obtained more autonomy in high school, it became less essential that she posts about her

personal activities since she would already be participating with her friends in the activity. It seemed then, to be less important to make any post at all. Yet, while the personal characteristics projected onto the Facebook profile seemingly decreased (or rather, were rarely updated), the participants' use of Facebook seemed to change. Rather than utilizing Facebook as a vanity engine for impression management, Facebook became a useful and cost-effective communication tool into the senior year of high school. For example, Jennifer shared that she was very concerned about the number of friends she was able to accumulate during her middle school years. She used her Facebook page to suggest an image of popularity and connectedness. Sara posted several pictures and statuses when in middle school that as a high school senior she now feels embarrassed about.

Using Facebook to maintain connections with already established friends and family members seemed to be an important characteristic during senior year. This corresponds to findings (Angwin, 2009) that online identities help users to thrive socially by maintaining connections with online peers. The participants were more cautious about who they included as part of their social network as high school seniors wanting to preserve ties with people already known to them. An exception to this was Jim who, for advertising purposes, was more inclined to accept friend requests from strangers. Facebook was, in its early use by participants, a playful way to connect with friends and show a personal side that was easy to construct and manage. During high school, however, the use of Facebook changed for these users. This tendency is confirmed by Facebook data which suggest that there has been a decrease in daily users among teens (Olson, 2013). That is, teenagers are still on Facebook, but they are not using it in the ways they once did. Previous research has documented that Facebook profiles are constructed by

students for an audience they feel are seeking them by means of social searching and surveillance (Joinson, 2008).

This phenomenon was confirmed by my participants. I found that participants did not post updates or photos with great frequency over the observation period. Rather, participants in my study posted in order to advertise upcoming theatrical productions, family gatherings, or social justice considerations. During their senior-year, participants seem to be using the Facebook messenger application, more than the traditional Facebook architecture. Participants would leave messages for each other which would then be pushed to the other user's phone for notification. Basically, it acts as a text messaging system with a slight delay in delivery time. The free cost and minimal data use makes the messenger application an attractive choice for adolescents.

All participants agreed that they accessed Facebook at least once a day; some citing dozens of times, others just once before bed. This finding is consistent with research from the Edison Research Group (2012), whose consumer survey found that teens check their Facebook account an average of six times a day. Most participants used their personal smartphone to access Facebook when casually reading messages or looking at other users' posts. Jennifer and Alex admit to using their Facebook accounts as distractions to the routine of their day; Jennifer preferring cat videos and Alex preferring news stories. In addition to Facebook, all participants were familiar with other social platforms such as Instagram, Pintrest, Twitter, and SnapChat. Participants agreed that their use of the other media platforms was influenced by whom they were contacting. Jim preferred Instagram to carry virtual conversations with strangers. Jennifer preferred SnapChat to communicate with her boyfriend. Alex liked to use the Facebook messenger app to connect with his friends by phone. Participants acknowledged that as the



landscape of social media platforms continues to expand, there is greater competition for user loyalty among developers. New features and added benefits are continuously added to successive versions of social platforms in order to renew user interest. As my participants mature and their social experiences change or their interests become more focused, they may likely commit to specific media platforms for specific needs. None of the participants envisioned themselves cancelling their Facebook profile anytime soon. Sara acknowledged that her Facebook account will probably be useful as she enters college in order to stay informed with potential social groups for meeting dates and announcements. Alex understands that his Facebook profile provides him with newsfeeds about college lectures and academic interests. As seniors, these students have transitioned their Facebook use from projecting an image of self or casual self-promotion to one that honors a shared community (extended family members, theatrical performances) and networked interests (college, homework, job force possibilities, religious functions).

SnapChat in particular needs greater investigation in the future. The time sensitive feature which allows content to self-destruct is attractive to my participants because it offers a degree of confidentiality. Research comparing Facebook and SnapChat has documented that the “main difference in motives [of use] were that Snapchat was used more for flirting and finding new love interests, whereas Facebook was still the main social networking site used for keeping in touch with friends” (Utz, Muscanell, & Khalid, 2015, p. 141). Each of the four participants used SnapChat to some degree. Jennifer, in particular revealed that she appreciated the rawness which characterizes SnapChat messages. A user is less likely to alter the content in a SnapChat message and therefore brings greater authenticity to the content. Sara shared that she is more careful with the snap messages she sends privately to her boyfriend, but is much more casual with the images

she sends to her friends. “Beyond providing a platform for sharing embarrassing or sexual pictures, little is known about the perceived influence of Snapchat on young adult interpersonal relationships” (Vaterlaus, Barnett, Roche, & Young, 2016, p. 594). As the landscape and ubiquity of social media tools continue to escalate, SnapChat is certainly worthy of greater study.

## **Identity**

Each of the participants agreed that who they are now is not accurately reflected in their current Facebook profile. They admitted to no longer being active in updating content such as favorite movies, books, or television shows. All participants did not feel that their Facebook pages alone were adequate reflections of their personalities. Jim shared that only a small portion of who he is can be captured from only observing his Facebook posts. While the content he does post is accurate about his feelings and current projects, it is nonetheless incomplete. He did not feel that his profile page adequately captures the larger spectrum of his identity. Indeed, Jennifer is suspicious of how people try to represent themselves on Facebook. Cautious of pages and content that look too perfect, Jennifer thinks poorly of users who invest too much time and effort into projecting an identity that is false. Jennifer admits that she can recognize these hollow efforts on Facebook because she herself was once someone who did just that in her middle school years. She values instead an identity that is unapologetically authentic and does not consider Facebook to be the most effective tool to do this. Jennifer’s position has been verified from research by Vorvoreanu (2009) who has found that Facebook culture values the images and posts of businesses, celebrities, and typical users who authentically represent themselves online.

According to survey results, both Jim and Jennifer were in Marcia’s identity moratorium status, meaning that they have experienced some kind of personal crisis and are exploring possible choices before making some commitment as a result of the crisis (Marcia, 1993). Each

of these participants described their Facebook use as passive. They were not regularly updating status information or seeking out information about their friends via the Facebook platform. Neither were overly motivated to share their respective relationship status with their friends and both took issue with Facebook profiles that seemed too good to be true. Both agreed that they are still exploring parts of their developing identity and that Facebook plays only a minor role in this process.

Like Jim, Alex also agreed that his Facebook profile is limited in its ability to accurately represent his identity. An observer would be able to learn about some of Alex's interests in psychology or science from his posts, but not all of his interests. Alex felt that actually networking on a social network could help someone become better informed about those interests that make up an identity. He connected with groups and colleges that populated his newsfeed with announcements and articles that brought Alex a stronger commitment to what he might study during his undergraduate career. Alex's identity was enhanced by his Facebook connections because he was more committed to what he wanted to study and the potential occupation he was likely to pursue.

Sara was also fairly informed about her likely course of study and career because of her Facebook connections. She was successful at coordinating doctor shadow visits and became more knowledgeable about her medical aspirations. By using her Facebook network and reaching out to medical professionals, Sara was able to take advantage of experienced individuals who could provide insight about Sara's educational goals. She also recognized that because of Facebook announcements which appeared in her newsfeed, her religious faith had become more solidified by participating in social activities that were advertised. Sara was constantly informed of approaching worship meetings and discussions that she would attend in

order to draw her closer to her faith. She relied on Facebook to keep her updated as she committed to make her religion a part of her identity.

Both Alex and Sara were determined to be in Marcia's identity achievement status. Adolescents in this status have experienced some kind of personal crisis and have made a commitment toward some resolution or belief as a result of this crisis (Marcia, 1993). Each of these students had expressed commitments toward specific academic interests: psychology for Alex; medicine for Sara. Each of these students were confident that their identity was supported by the interests they followed from their Facebook connections. By utilizing Facebook connections, each of these participants were successful at clarifying academic interests and secured an identity that was resolute in future endeavors.

Given these outcomes for my particular experience with IB psychology seniors, identity is influenced by a number of factors. Both moratorium and achievement identity status types are engaged with Facebook, but use their Facebook access in different ways. Learning how students tend to maneuver this platform makes me better aware of how my instructional practices might benefit our psychology class. It was not the case that the sample relied upon Facebook for regular help with psychology. Aside from confirming a due date or reading assignment, students were generally passive to the Facebook content I posted. Alex, however, was more engaged with my Facebook posts. All students were aware of the posts I made from the Phineas Gage account and would occasionally read the content. To this extent, I was successful at supplementing some curricular connections through my Facebook, but I did not expect to draw on these posts heavily for classroom needs. It was not my intention to use Facebook as an alternative to traditional face-to-face instruction. Still, there were valuable lessons the study revealed to relevant for my pedagogical approach.

## **Pedagogy**

Given the various experiences of participants in this study, there are valuable opportunities for Facebook to be integrated into the classroom. Students in this study were comfortable using Facebook as a tool to aid in their high school curriculum. The architecture of Facebook makes collaborative learning effortless. Content sharing can be synchronous or asynchronous depending on the student's schedule. The features of Facebook allow students to share multimedia with one another, make comments about the content, and allow that content to live indefinitely on the Facebook page for later retrieval or archival. Alex, Sara, and Jennifer relied on the IB Facebook page to check on assignments, share notes, post questions and answered concerns from fellow students. This page offered a kind of academic support that these students found valuable in their high school experience. In this manner, the student-generated, student-governed, Facebook page has had a beneficial effect on these students and their high school academic experience. This Facebook page is generated each year and is specific only for the particular cohort of students. The page is maintained to a private setting and operated only by current students who are presently attending our program; no alumni are included. This is a self-organizing exercise among the students themselves. Someone creates the page and then invites anyone who is of the same class cohort to the page. The page is restricted only to these students but if later, a new student joins the cohort or a student registers for a Facebook account, his or her name is added by the page's administrator. The page is open so that anyone of its users can post, edit, share, etc. But how this person is selected, chosen, elected, whichever, is unknown to me. I did not ask any of my participants about the administrator of this page. My experience has been that there seems to be three or four student leaders among the class that emerge as the ones who coordinate information.

For example, throughout the year, our school's student government will coordinate with the administration to allow for several school-wide spirit dress-up days. The word goes out that on Monday, students can come to school wearing western wear. So I'll see cowboy hats, plaid shirts, jeans, and boots. Some students bring props like lassos or stuffed ponies. Some students create whole characters aligning with the western theme and dress as a pioneer chuck wagon cook, a Lone Ranger assemble, or a saloon dance hall girl. But these events are well coordinate and widely publicized in advanced. Then, there are IB-only spirit days. These are unofficial dress-up days that are often unknown to teachers and administrators. The students coordinate among themselves these days and the themes. Maybe everyone just wears red. Another day, students dress up as their favorite teacher. Whatever the theme, in my classroom discussions with students, they always seem to be able to name a student or two who decided on the theme and who planned the day. Sometimes these unofficial events are posted to the Facebook page, other times they are not. I also learned that there were times when the selected dress-up day found objection from other students. Once, the theme was supposed to be 'Cowboys and Indians'. Students objected to the stereotyped representations of Native Americans that they suspected they would see. The dress-up day was cancelled. What this demonstrates is the self-organizing and self-monitoring that is done among these students. Their use of Facebook as an important resource in their high school experience reflects the student's value of this social networking platform.

I have found the usefulness of Facebook in engaging students in my content area of psychology outside of school hours. Students log on to the platform to check messages and view posts and updates. When I populate my classroom page with content, these stories appear in the newsfeed of my students. My stories are tagged with buzz words from psychology class that

serve as a quick index of material. My hope is that students will see a key term that engages their recall of the word and its meaning. Maybe some students will read the story, maybe they read the tags, maybe they will not read it at all, but I have made a very small effort to continue my teaching outside of the classroom. I make great effort to select stories that would be of interest my Junior and Senior high school students. I hope that I am modeling to my students the areas where theory and practice intersect. These are the real-life articles they will encounter when they are adults and I want them to practice their critical thinking skills while still with me in the classroom. I think this can continue to be a valuable, unobtrusive, cost-effective way of augmenting my curriculum while simultaneously allowing students to know their teacher in a professional manner.

The way in which Facebook use might find greater incorporation into the classroom has several precautions however. I would encourage a teacher to be cautious about violating the policies of his or her school district. If it is the policy of a district that a teacher should not use any form of social media as part of their classroom instruction, then the teacher should comply with such expectations. There are likely measured and legal reasons for this prohibition and a teacher should be respectful of those professional boundaries. I walk a careful line between respecting district rules and serving my students. There is never any post or comment on my school Facebook page that I would fear a parent seeing or a newspaper journalist investigating. I am mindful about the privacy of my students, the appropriateness of what I select to post, and the professionalism that I model on the page. I reflect with serious intention about how I temper a direct violation of district rules with the ways in which students might benefit.

I would encourage a teacher to create a page that was separate from his or her own personal Facebook page. This means that students would not interact with any of the teacher's

personal adult friends. It also means that the teacher would not run the risk of violating any expectations of professionalism. A separate profile means that the teacher's network of professional school contacts would be separate from his or her own personal/non-school-related friends. The teacher must take extra time to manage two pages, but this level of security and privacy demonstrates a regard for professional standards. Alternatively, rather than creating a profile page, a teacher might choose to create a fan page. A fan page is much more public and is useful for announcements, bulletins, and posts. Students would 'like' the fan page and updates or notices would be updated to the student's newsfeed.

Facebook privacy settings are quite powerful. If a teacher elects to incorporate Facebook into his or her curriculum, the teacher should be clear with students about what is shared. If students choose to friend request Phineas Gage, I encourage them to have their privacy settings set to 'friends only'. This limits the access that I have to the student's profile. This means that I cannot access the student's photo albums and I do not receive push notifications whenever the student updates a status or creates a post. I have very limited access to the student's personal life outside of class. I feel that this is an ethical precaution that lessens the probability of me being exposed to anything potentially questionable on the part of the student. Facebook privacy settings can be cumbersome to navigate so I would encourage other teachers to write out a step-by-step list of instructions about can be shared with interested students. This task also models for students the care they should take as they create an online presence. I want them to be mindful about their virtual self and use caution when expanding their friend network with people they know and with those who are strangers.

Teachers who incorporate Facebook into their class will also need to be thoughtful about how to promote good citizenship in a digital world. As a teacher, I am aware that my students



take note of how I behave online. I do not post status updates that are cruel or spiteful. I post psychology-related news items. If a student shares content with me, I acknowledge and thank the student. When former students share comments about their psychology classes, I reply in kind and thank them for staying in touch or respect social conventions and ask about college. These small, but important gestures of social etiquette reflect some of the goals of digital citizenship. I am reflecting back a thank you to a comment, being polite, and modeling prosocial behavior. When I do post non-psychology news items, they are humorous or innocuous observations (Figures 25 -22). These kinds of posts are funny, but only if the student can appreciate the psychology reference. Other posts share parts of my personality that help foster relationship building among my students.



Figure 19. Psychology-related post about a bull.

This post concerns an incident where law enforcement fired upon a bull that was running loose near a bus stop. The story was just too ridiculous to me, but months before my students learned about a researcher named Jose Delgado who performed a now infamous study of localization of function where he was able to control the motor movement of a bull by radio control. My comment references this study as if to suggest that Delgado had some malicious intent toward children. It's a funny comment, but students have to remember the psychology research to appreciate it.



Figure 20. Hey girl meme related to statistics.

This meme was posted to Phineas Gage's Facebook profile and received 21 likes. To appreciate the implicit joke, the student must be familiar with the reference to inferential statistics and the pop culture reference to Ryan Gosling memes.



Figure 21. Posting non-psychology item.

Posting of non-psychology items helps to reveal some small aspects of my personality. These posts help to foster relationship building with my students in a way that is relatable and approachable. In this post, I was sharing a new story about a special offer at a chain of convenience stores and revealed my preferred choice of flavor combinations. The post received 12 likes from students.



Figure 22. Video of a bunny.

This is a video of a small bunny sitting upright at a desk as if it is completing work and then slowly, the bunny falls over as it goes to sleep. I posted the short video with the comment, “Grading IAs”, referring to the internal assessments that each IB Senior psychology student must submit. Yearly, I bemoan how long it takes to score each of these documents which range from 30-40 pages and I typically have 80-90 to assess. The post received 33 likes as students were empathetic to the arduous task I had to complete.

This innocent humor and shared observations help to reveal my personality, but also reflects a digital citizenship that is respectful. In a mutual exchange of respect on Facebook, I also enjoy when students share content with me that I haven’t yet encountered. I do my best to stay current with real-life applications on our psychology themes in music, television shows, movies, books, any kind of pop culture reference. I know my content delivery ability is improved when students share valuable connections with that I, in turn, use for class. For any teacher

considering including Facebook as a part of curriculum, they should expect that students will share a variety of multimedia connections to the class, including shared videos, memes, new stories, or gifs. This helps me to stay current and relevant. I never watched the television drama series *House*, but several of my students did. As we spoke about sensory synesthesia, phantom limb phenomenon, or chimerism in humans, students would reference episode that they had seen and later, post clips from the show to my Facebook. When students hear songs with lyrics that illustrate concepts we study, they will post YouTube links to my Facebook with comments about the psychology connections. This helps create a value-added benefit to my class because I get to add new content year-to-year or even class-to-class. I like to employ a pedagogy that draws from issues and references that are significant to my high school students. I try to approach what I think that means based on my encounters with them, but who better to ask than students themselves. Their contributions are invaluable to me and help to shape the narrative of the class. One student posted a video to my page that was timely. We were working on a unit on qualitative research methodology and a student shared a video with me. In the video, a hidden camera captured the reactions of women as they entered a mall, but first needed to pass through door labeled 'beautiful' or another one labeled 'average'. The video posed several ethical concerns and briefly captured some debriefing comments about how women saw themselves. It was a short video, but captured almost 20 minutes of classroom discussion (Figure 23). This was a video clip that I would not have seen had it not been for the student who happened to share it with me. I already have plans to use it again next academic year for the same unit.



*Figure 23.* This video was posted by a student who identified the qualitative nature of the research. This was a video that I would never have encountered, but thankfully, the student was able to easily share the clip with me via Facebook. I used the video as part of class discussion which was very successful.

Another advantage for my continued use of Facebook in the classroom is the familiarity the platform's architecture among student users. Teachers can use this familiarity to their advantage if their district is one that regularly changes its course management system. In my district, we have changed the course management system every two years. This software is intended to handle how teachers post grades, email students and parents, take attendance, and the software is supposed to host the online version of a class should the teacher wish to post documents, videos, etc. for students to access. Some of the management systems have been very cumbersome and piecemeal. They have been successful for some district needs and very lacking



in others. Administrators, teachers, parents, and students each have different expectations about what to expect from the software. It's hard to please all of the stakeholders with one management systems and it seems that whichever group protests enough leads to the purchase of a new license for a new system. Caught in this struggle is the student, who must contend with learning how to navigate the software of which ever system is being employed. This means a new set of login credentials for each student as well as a flexible digital literacy that can accommodate how to download documents, post to blogs, and manage a course calendar. While the learning curve for these skill sets is minor, they become irritating when students must continually re-learn a set of behaviors to simply check their grades or print a syllabus. Frustration is also voiced by teachers who loose course content over the summer during the transition. Course documents such as syllabi, course descriptions, homework assignments, readings are purged when the district transitions from one system to another with little to no warning to teachers about the change.

Facebook has the advantage of remaining fairly stable. Updates to Facebook include greater control over privacy settings or additional applications that are intended to enhance the user's experience, but these are manageable and do little to disrupt the overall ability of the user to navigate Facebook. This becomes advantageous when a student can easily access course materials. Further, while never intended, local district servers tend to experience downtimes making access to the server impossible during some windows. Facebook on the other hand is regularly active. Complete outages are unlikely. Because Facebook has been developed to operate across several delivery platforms, there are few limitations to the ways in which students can access their profile page be it on a mobile phone, tablet, desktop, or even smart television. The local district course management systems are typically friendly to competing operating systems so it makes little difference if a student accesses the software by way of a Mac or a PC.

But beyond this, the systems in my district have been poorly designed to be accessed by devices other than desktops. Coordinating materials that are readily accessible on Facebook give students plenty of options on when they access course items and affords them a predictable and knowable way on how to post, download, upload, or share.

For teachers who are still interested in integrating Facebook, there are challenges that will need to be addressed. It seems unlikely that any schools that allow teachers to use Facebook in the classroom would be able to make students register for Facebook. Registration involves sharing personally identifiable information to a company that parents may not find agreeable or desirable.

Although mobile platforms have become ubiquitous and vary in price and scale, teachers still need to be mindful of potential digital divides that may exist in their classrooms. In this study, all of the participants had mobile phones, but two of them were cautious about their data usage. It would be impractical and unfair to expect students to access all course items solely via Facebook. Rather, Facebook can be thoughtfully used to supplement class activities and enrich course discussions. This option may be particularly attractive to teachers who are already very familiar with Facebook. According to the PEW Research Center (2013), 78% of AP teachers and National Writing Project teachers use social networking sites such as Facebook. I teach both AP and IB, and have found the Facebook platform to be very helpful. The research collected here helps me to discover if students who are still on Facebook might be using it in different ways. Content discovered on Facebook has been the start of some of our classroom discussions and the object of inclusion into parts of my curriculum. This experience aligns with research which has found that Facebook has been shown to be an effective means of providing students with extracurricular content (Manca & Ranieri, 2013; Bahner et al., 2012; Pilgrim & Bledsoe, 2011).



Manca and Ranieri (2013) identified five themes that characterize the use of Facebook in the classroom: 1) Support classroom discussions and facilitating collaborative learning; 2) Teacher use for developing content; 3) Sharing supplemental educational resources for students; 4) Delivering content; and 5) To support self-managed learning. In my experience for my classroom, I tend to agree with each of these, with the exception of delivering content. I rely on traditional face-to-face engagement.

In an honest effort to be equitable, teachers who choose to use Facebook in the classroom, will also want to allow class time for interested students to access the social network through a set of classroom computers, media center computers, or a computing lab. In the beginning, this has the added benefit of allowing the teacher to model how to navigate privacy settings and for the novice user to learn to maneuver through the platform. Students can be encouraged to follow certain pages that are course related. Although I never mandate students to follow any pages, I am explicit about the wonderful psychology-related audio pieces I discover from following the page maintained by National Public Radio, the neurobiological items I discover from following *Wired Magazine*, and the interesting innovations I've learned from following TED.

For those who plan to use Facebook in their classes, they will readily discover the best practices that have already been articulated for teachers. These include how to creatively post and grade homework assignments, how to develop an outline for course notes, preview lecture powerpoints, create digital tickets-out-the-door, projects to develop book summaries, ways to encourage group projects and collaborative learning, and techniques to help shy and English-learning students may participate more.

It would be a mistake for a district to forbid Facebook access, because they are unsure how it might be used. I certainly am sensitive to student protect and privacy and different age levels may require different levels of supervision. However, I think marginalizing modern technologies of communication is a disservice to students of the 21<sup>st</sup> century. In 2011, a Babson survey found that 61% of US educators have an active Facebook account. Of these educators, 18% use their Facebook account to communicate with fellow educators, and 12% use their Facebook account to communicate with their students (Moran, Seaman, & Tinti-Kane, 2011). Facebook use among educators can be a valuable way to enhance the student's learning experience.

Facebook does not need to be excluded as a teaching tool. It can extend the classroom encouraging students to encounter real-world examples of content that the teacher chooses to populate to the newsfeed. By extending the classroom, the teacher is likely to reinforce concepts that have been learned and continue to scaffold them to learn important content. I achieve this by posting news stories but also humorous content that can only be appreciated if the student understands the psychological reference. Facebook is not appropriate as a primary method of instruction, but it is useful as a method to enhance the educational experience. Using Facebook with students has the added benefit of permitting students to compliment the class with suggestions of related content and pop culture examples. This gives the teacher an advantage as he or she modifies the curriculum each successive year. The experiences of the students in this study convey the usefulness of Facebook as a communication tool both as a messenger application, as well as a resource to support their academic needs in high school. All of the students in this study acknowledged that their use of Facebook declined upon entering high school, but none of them deleted their accounts; nor do any of them foresee themselves deleting

their accounts in the near future. Facebook will continue to be a useful networking tool for future teachers. As various technologies continue to migrate into the classroom, all interested stakeholders will need to find a way to make respectful and thoughtful accommodations that enhance, rather than distract from classroom goals.

Future research should also address potential differences between upper classmen and freshmen students. My study utilized a sample of high school seniors, but freshmen students may engage with social media platforms in different ways. According to Junco (2014), high school seniors spent less time on Facebook than freshmen. In addition, the researchers also discovered that time spent on Facebook was negatively predicative of GPA for freshmen, sophomores, and juniors, but not for seniors. The researchers theorize that underclassmen may be more likely to engage in off-task related activities while on Facebook that distracts them from assignments or homework activities. I would add that by their senior year, students have become better managers of their time and more efficient at classroom tasks.

### **Theoretical Frameworks**

This study drew from two theoretical positions in order to examine the research questions. I situated the research efforts in the approach of social constructivism. This theory of knowledge examines the ways in which the nature of reality is created through shared meaning among individuals in society and values the perceptions of each person's understanding of some phenomenon (Burr, 2015). I created both virtual and real spaces for participants to share their perceptions of Facebook use and the possible ways in which this social networking site might have influenced their identity development. It was important to honor each participants' narrative in order to examine their experiences for patterns and valuable themes that could illuminate my research questions. Because social constructivism acknowledges that each person creates an

impression of the world from his/her interaction in it, I needed to capture the honest reflections of each participant. The interview data and the journals participants kept to document their Facebook use helped me to establish their perceptions of their experiences. Interview and survey questions prompted students to reflect on their social networking use. Administered in an atmosphere of trust and openness, it was necessary to document how my students understood the role of Facebook during this period of their senior year and what ways Facebook might have influenced their experiences at school. By carefully examining the interactions participants shared with me about their Facebook use, I was able to align my research philosophy with the social constructivism perspective.

The other significant theoretical approach that drove the data collection was Marcia's (1980) model of identity formation. Marcia's conceptualization of adolescence provided the framework to understand the process of identity formation. This study examined how different identity types experienced Facebook use in order to document potential differences. Marcia's theory was an exceptional fit with the social constructivist approach because Marcia (1980) posited that identity formed through one's experiences with crisis and commitment. However a person interpreted his/her struggles and then the sense of meaning that came from that struggle was essential to what Marcia called ego formation. Because one's personal interpretation of these experiences drives identity, Marcia's model shares with social constructivism the value placed upon a person's subjective perspective of any interaction.

Although this study captured data on only two of the four identity types, the theoretical framework of Marcia's research was an important feature used to distinguish Facebook behaviors. My sample, consisting of identity achievement and identity moratorium, provided useful data to address my research questions. The identity status labels were the lenses through

which I was able to both collect and interpret data from participants. Alex and Sara, participants who were found to be in the identity achievement status, are typified in Marcia's theory as being focused on their lives, not easily swayed by external influences, and able to understand the experiences of others (Kroger & Marcia, 2011). The remaining two participants, Jim and Jen who were in the identity moratorium status, are struggling to define themselves. Adolescents in this status are lively, morally sensitive, and while they may vacillate between choices, they eventually make self-relevant choices (Kroger & Marcia, 2011). Drawing from social constructivism and Marcia's identity status model as theoretical frameworks, my research questions were structured to capture participants' perspectives on Facebook use and their experience of identity formation.

### **Ethics of Trust**

Working with any adolescents and collecting data, especially about their identities, is a sensitive issue. The research proposal had additional layers of complexity because the research participants were my own students. I was able to recruit volunteers and collect meaningful data in large part because of the trust I have developed with my students.

This trust is engendered to a great extent by my classroom approach. I feel that my classroom management style is flexible enough to keep students (and myself) safe while still respecting an environment of inquiry and humor. All of the participants who were part of this research were known to me since the beginning of their junior year. The research period was very close to the end of their senior year, so overall, I had known the students for almost two complete academic school years. But trust was not just established over time, but in meaningful contact as well. I follow through with plans I make with my students. I respect their time by aligning instruction to an organized syllabus. I am conscientious about my obligations to my

students. Establishing trust happens through small behaviors and committing to our classroom agreements, both implicit and explicit. I try, with great effort to attend at least one of the extracurricular activities of many of my students. This means I am apt to be seen at a football, volleyball, swimming, baseball, golf, basketball, wrestling, tennis, track, soccer event. It also means I will be at a chorus production, theatrical show, lip synch contest, talent show, car wash fund raiser, school dance, awards ceremony. These are not mandatory teacher events, although I know the administration appreciates the extra help when teachers are present at these functions, these are just times that I can get to know my students outside of the classroom. I'm there, like a proud parent, with camera in hand to capture a photo. My presence, follow-through, and encouragement, are critical to establishing and maintaining trust. Our program's culture supports students inside and outside of the classroom. I respect the sense of trust we establish and am careful not to jeopardize it.

I have a wall in my class dedicated to the photos of students. Those photos stay up on the wall for the two years that I have the students. If they leave our program, they still remain until their cohort graduates. There are photos of many of the interactive learning activities we also experience over the duration of a two-year curriculum. There is the time we were learning about perception and students wore vision-altering goggles to throw a foam football or try to kick a soccer ball. There is the time competing groups of students were each given the same materials and had 30-minutes to make a prototype of a new muster boat. There is a photo of the prize-winning art pieces showcased in the media center. There is the unplanned when times I happen to catch a group of my students at a coffeehouse reviewing for a midterm, going to see a movie, at a convenient store buying junk food and sodas. When students appear in the local or school newspaper, the clipping is attached to the wall. When we have spirit dress-up days, students stop

by so I can take a picture of them in their silly attire and funny poses. Illustrations students draw for me of Pavlov's dogs escaping, Zimbardo as an evil comic book villain, or me in a stylish neck tie—everything goes on that wall for two years.

In between classes (or when students become tired of my lecture for the day), I can see them glancing at that wall, pointing, talking, laughing, remembering our class. Eventually, near the end of their Senior year, the wall becomes part of a discussion about the challenges and possibilities of using photography as data for qualitative data analysis. Students work through the topic and then we talk about the photo albums many of them have stored on their mobile phones. What could we learn from the student? What might be misleading?

I think this wall is part of trust building with students. They see themselves and they know I care. I went to your football game. I went to see you in the play. I saw your dress at prom. I shook your hand at the awards ceremony. It also fosters a curiosity and interest among Junior students. They see photos of my Seniors wearing funny hats and blindfolds in class and ask me, "What are they doing? What's happening? Do we get to do that too?"

"Sure we can do that. It's a demo for Weber's Law. Google it and tell me if you can figure out what we're doing?" I asked.

Sometimes this works. Sometimes I can coax a few students to learn something on their own, outside of traditional in-class time. I hear them hypothesizing what they see in the photos against what they have quickly brought up on their phone. They trust I will tell them if they are right. They trust that they will learn the theory being demonstrated. They trust that they will also get to experience that fun day in class when they are Seniors. The photo wall is not only a relationship tool in my class, but comes to also serve as a topic for classroom learning activities.

Humor is also employed a great deal in my class. This is part of my instructional style. I've had teachers that would absolutely terrify me as a student. I never knew if there would be a surprise quiz. I wasn't sure if I was called upon, if I would know exactly what the teacher wanted. I hated those classes. I did the work out of fear and never enjoyed the content. I did not want that to be my classroom. The humor is never directed against anyone, but is situational, that is, something to which most of us have experienced in some fashion. If there are ever pointed comments, they are always directed at myself. I can be made to look the fool, without losing credibility. I can admit to my many foolish attempts because I know that actually, they are behaviors that my students themselves have also encountered, but may be too shy to admit. Humor reduces stress and anxiety (Berk, 1999) and therefore is essential for a high-quality learning environment. Chugani (1998) purports that meaningful learning take place in an anxiety-free environment. This does not suggest that a little stress is motivating and can create some degree of intense focus, but this is not the atmosphere that I would want to engender on a regular basis.

I want my student to want to come to my class. I want them to be curious about what we're going to discuss. They seem to enjoy learning about their teachers who never reveal much of their personal life. When I tell a story about my life in connection with a topic of psychology, they seem to really enjoy it. I trust them by sharing some of who I am and they can see its relation whatever we are studying. This effort reflects my dedication to Daggett's (2011) model to rely on rigor, relevancy, and relationships as part of my pedagogical best practice.

Krashen (1982) states that students are more likely to retain newly learned information when the content is associated with strong positive emotions. The brain's amygdala is stimulated as part of a fearful response and learning new materials can be impeded if the brain's amygdala



is strongly activated (Nader, Schafe & Le Doux, 2000). The material will fail to be processed by the hippocampus for short-term processing and it is unlikely that the student will be able to accurately recall the information if at all. To me, this suggests that if I want students to encode the material, it's best to keep the classroom atmosphere light. I use humor to this end. It's alright to laugh at our mistakes sometimes. We all make them. I really believe that this takes away some of the intense pressure my students feel to perform and only participate when they know they have the right answer to a question.

A perfectionistic attitude among my students can paralyze them so much that they are scared of intellectual risk-taking and will not offer a guess to a higher-order question. I understand. No one wants to look foolish in front of peers who are like academic wolves waiting to pounce upon the intellectually weak prey. When I notice students begin to offer educated guesses, I foster this tender sprout. They may not have the answer for which I'm hoping, but I maneuver to the student for a high-five. "Good guess! I think you're thinking of a different researcher. I appreciate it [name of student]." Then I reformulate the question to offer a little more of a clue. I've gotten much more comfortable with cooperative learning techniques, and this is where I employ a favorite of mine: a partner-turn-and-share. I'll ask a complex question, maybe put it on the board so students can reference it, and then afford them a moment to formulate an answer in the privacy of two or three of their neighboring peers. They get to vet their answer first with each other before the big-reveal to the entire class. I hope this makes the process less scary for them. It certainly has improved the quality of the responses. Students are learning to trust their thought processes, learning to trust one another to clarify a response, and trusting me to give them accurate feedback about their comments—not to affirm a bad answer.

I feel that I also establish trust with students in their times of academic crisis. I carefully monitor the performance of each one of my students. There are some units that are not as successfully accomplished as others. I solicit anonymous feedback to ask if there was something we could have done/more less with in hopes of improving the lessons of the unit. I also approach students if I foresee a trend of poor quiz grades, missed assignments, excessive absences, or low test scores. I try to catch any of this in my class before administration notices.

I want to help curb the trend before it becomes too exaggerated. Sometimes, it's just as simple as amending a reading schedule or a student was too embarrassed to tell me that he or she has lost an expensive textbook. These are adjustments that are easy to accommodate. Sometimes a student will admit that he or she did not understand a model while it appeared that everyone did and so the student kept quiet. Some after school sessions and a personalized set of notes usually corrects this short-coming.

Unfortunately, there are occasions when the poor performance is common to many if not all of the student's course load. This necessitates a dreaded parent-teacher conference at which the student is expected to attend. For our IB program at our specific school, a very typical parent-teacher conference is generally attended by: the student, mom, dad (or if divorced, mom and dad as well as their respective paramours), seven academic teachers, the IB guidance counselor, the IB administrator, the IB CAS coordinator (who keeps track of the student's volunteer hours/service hours for Bright Future and IB requirements), and with great probability, the student's private tutor, perhaps in math or a world language. Here is a room of possibly 15 adults sitting around a large oblong table each in turn talking to and about the student who sits there very frequently ashamed and embarrassed. It's quite rare when I don't come across a 17 or 18 year-old boy or girl who just cannot help but begin to weep. These conferences are usually

punctuated with tears from the student. It breaks my heart. Truly, the staff is there to problem solve. We work at coming up with solutions and alternatives to better enable the student's success. Of course, this is not what is always heard by the student. Rather, the student hears teachers express disappointment, exasperation, or anger. To be honest, in my experiences, this has happened too. But, with much more frequency, each of the staff members speaks encouragingly and realistically about requirements and expectations.

To elaborate on this kind of trust exercise, I will privately ask the student to meet with me for a few minutes after school in the week before a parent-teacher conference. If this is the first conference, then I take a few minutes to explain to the student how the meeting is coordinated: who gets to speak and in what turn. I show the student the email that was sent to the teachers and what seems to be the issue of concern (attendance, grades, participation, etc.). I explain to the student that he or she will see teachers passing a form around to sign and about its purpose. Then, I share with the student what I personally plan to share at the meeting. I tell the student my concerns and what has been going well and where there is opportunity for improvement. I ask if the student agrees with my perception of the situation or if perhaps I may have misunderstood anything. I ask to see the student's notes for class and I show the student the attendance record or grade record that I have. I ask the student to verify if what is documented appears accurate. I explain that what everyone is going to say is intended to help and not hurt or embarrass. I also invite the student to sit next to me if he or she is so inclined during the conference. I tell the student that if he or she is feeling attacked, scared, wants to disagree with a teacher's comment, or is on the verge of crying, that he or she should begin to tap my foot or pick up my pen. We work out some signal so that I know I can interrupt to do a kind of member checking with the

student. For example: “Tracy, Mr. Daniels is saying that you don’t seem to take notes in his class. Are you regularly taking notes?” I might ask.

I want the student to know that each of his or her teacher’s is truly an advocate, but I understand that it may not feel like that for the next 45 minutes. Later, and with a much more casual tone, I debrief with the student. I check in and ask how they felt it went: How’s the new academic plan going? Did you get to talk to Mr. Daniels about the missed homework? Are your parents going to give you back your phone?

The purpose here is not to gossip or make light of the concerns from the conference, but to show the student that I was listening and care about the outcome. If the student gives me vague or ill-formed replies, then I leave it alone and do not push. But often, the student speaks openly about what is happening or what has already been corrected. I try to be as transparent about what the conference is meant to accomplish and hope that the student will reciprocate, in kind, a transparency about where he or she needs help or has made progress.

I also build trust by employing a kind of academic transparency. Students have some kind of rubric for every assignment, presentation, or essay. I try as best as possible to be fair and transparent with grades and evaluation. I show them examples and non-examples of some prior student work to provide guidance. I welcome their questions when they want to know why something has to be done a certain way. I tell them repeatedly after returning an essay, that if they do not understand my margin comments or do not agree with or simply have a question about their score, they should come to me after school with their paper and we can discuss the grade. Indeed, I have made errors because I misinterpreted a student’s sentence or quite frankly overlooked a key term I was expecting to be included. Incidentally, these instances later become examples of threats to internal validity that I can use in class when we discuss the unit on

research methods and human observation. Students, I hope, are comfortable and trusting enough to approach me about a grade and carry a conversation to defend their position. I realize that there is cultural expectation that a student should never question a teacher as a matter of respect. But truthfully, teachers make mistakes in the classroom; well, at least I do. I want to model that I am accountable for those mistakes and I am willing to do what I can to correct any oversights. Students trust that I grade fairly and respect their concerns.

My classroom choices are data driven. I have the peer-reviewed empirical data to support why I want a student to write an essay in black or blue ink, rather than any other color or pencil. I have data on psychometric test construction to show students why the first five questions on a multiple choice exam will be easy and then progress to more challenging problems. Everything is up for question. I encourage it. In a larger respect this is, to me, a beneficial life skill that is my responsibility as a social studies teacher. I want them to make decisions that are informed, reasoned, and justified. I want my students to be autonomous, critical consumers of information they receive. I warn my students, however that not all their teachers may be as receptive to continual questions about pedagogy and classroom management best practices. When students do inquire about why I wore a neck tie on test day, but not today or why the classroom feels colder after lunch than it feels during first period, it has the added benefit of having students look at data. I show them the journal articles. They can take their time to read and be critical of the articles. Early in their education with me, they are more likely to accept the conditions or practices of the classroom and question very little. There are times, more likely further in his or her education, when a student returns to me to point out a glaring threat to internal validity in a study. As they become more knowledgeable, they seem more comfortable challenging the order or questioning the status quo. I love this! If their arguments are sound (and many times they are),

I'll adjust my classroom management practice. They can trust that I am listening and not authoritarian in my approach.

My syllabus is another tool that I employ to establish trust with my students. I do not surprise students with additional readings or quizzes throughout the specific grading period. What students receive from me in writing is a kind of contract. I am telling them what I expect for the next several weeks and deadlines for completing the work. They trust that I will not alter the expectations of work, particularly by adding additional work. Of course, there are times when unforeseen circumstances make it necessary to change a due date or reschedule a test, but these are extremely rare in my class and when they do occur, students are especially obliging since they realize it happens so infrequently. I am showing respect to my students by letting them know in advance when a test or quiz is scheduled, when a project falls due, or when even when I expect to be absent. I know that they need to manage the demands of six other classes and what might seem like coursework minutia to a teacher in one class is actually a big deal to the student's overall ability to manage sports, volunteering, work, and academics, not to mention some occasional downtime. When I stick to my course syllabus, I know I am earning trust with my students. When they approach me and need to reschedule an assignment because of illness or absences, I trust them by being flexible and making myself available to their needs. When students fail to show for a rescheduled exam, I lose trust in them. When I take too much liberty with syllabus changes, students lose trust in me.

The trust that I nurture with students is very important to me. I would not want to take advantage of it. I do not try with conscious effort to make friends with students but I can be friendly. I can develop and reciprocate trust. I can follow-through on commitments and show kindness that's tempered with fairness. I can listen to and predict their needs and make

accommodations accordingly that support their learning. Taking into mind with great consideration the established and mutual trust between my students and myself, it was not lightly that I explored the possibility of seeking out my classes as potential participants for this research.

I had approached the possibility with my classes as a discussion earlier in the year as we reviewed experimental methods. My seniors were about to carry out a formal experiment as part of an IB psychology requirement called an internal assessment. During the discussion I reminded students about working with people they know and the challenges that presents. I broached my research aims and asked how they would feel if were to try and recruit among them. There was a sincere excitement. I reminded my students that their classroom performance was separate from their potential participation in my research. They would still have the regular course load. I would not grade them more favorably because they may or may not choose to volunteer. If they were upset with me some day for whatever reason, they would need to be mature enough to separate those feelings from the authentic data that I was trying to capture about their Facebook use experience. I would reciprocate the same effort to compartmentalize non-research related emotions. Of course, I explained that I wanted to capture real data even if they thought it might be offensive or out of character for them. I tried to moderate a professional and mature conversation with students about what I was searching to document, the expectations of the data collection, and the shared responsibilities that both the student and I would practice. Much of this was repeated again at the formal recruitment process once I was able to proceed, but first, I sure that students and I had ample time to discuss feelings and concerns.

The ethics of this undertaking outside of the classroom also presented careful maneuvering. The nature of my research was investigating Facebook use among adolescents. As I was interested in recruiting students from my own classrooms, I needed to first begin with

permission from my principal. This request was problematic because our particular school district does not allow teachers to become Facebook friends with their own students as outlined in the district's social media policy (Appendix N). According to the employee policy manual of my school district, teachers cannot establish or maintain contact with students of the same district via any method of communication other than district-approved technologies. The justification for the policy is meant to protect both the student and the teacher. If the teacher reaches out to a student through the district's email server, then there will be a record of the email. This is intended to ensure that there is no misunderstanding about the nature of the communication and that there is no impropriety between teacher and student. This is certainly a reasonable expectation. It wasn't until just three years ago that the district stopped blocking access to the Facebook URL through the school's server.

Given this background, approaching my principal for permission to move forward with my research aims presented a challenge. I maintain a Facebook page for the explicit use of my students in order to share psychology-related articles and questions. I post news worthy items to the page with tags that reference topics, researchers, and key terms that my students should recognize (Figure 19). I purposefully only allow my specific students to join our Facebook group. Users must request permission to join from me before they are allowed to view the contents of the page and the other members of the network. This is intended to protect my students. I do not want just any Facebook user being able to read the posts on our class page or being able to contact my students through my page. Students may choose to interact with strangers or non-high school users on their own through their own profiles, but I feel a responsibility to protect their privacy as best as I am able via the restrictions our class Facebook page.





*Figure 24.* This is an example of a psychology-related news item that I post to our classroom Facebook page under the name of Phineas Gage. I tag the post with relevant terms, such as, gender bias, systematic errors, etc. Students are free to comment on the post with their opinions about the article.

Students are also able to post articles or stories that they come across to share on the Facebook page. I have specified the settings of my page to alert me that someone has shared an article, but it does not appear on the page until I approve the content. This has never been an issue, but it ensures that whatever students feel inclined to share are indeed appropriate to our psychology-class audience. Many students who share content with me for the purpose of appearing on Phineas Gage's page will also tag the story themselves with key terms, modeling

the same format that I do. When students find articles that I approve for posting, there is a kind of excitement when we return to the classroom face-to-face. It's almost as if they are proud that what they sent to me was worthy enough to be shared. Sometimes it is a satisfaction that they came across a story that I had not yet discovered myself. I have provided an example of a student's shared story that was sent to me (Figure 25). In the post, I have publicly thanked the



Figure 25. Content posted from a student.

student and left her tag in place the way that she originally sent it to me. The post resulted in a few comments from other students including another story of an emerging term that I was unknown to me, “slacktivism”.

This is an example of content provided to me from a student referencing an infamous case study in social psychology and how the same phenomenon of bystander intervention may be showing itself in light of modern technology. The post received seven likes and resulted in a comment that lead to another article about a new phenomenon called slacktivism.

Students who have graduated can also continue to contribute to our shared Facebook page. I enjoy when former students post comments about their college psychology classes. They might share how surprised they were by how much they already knew. They might share how prepared they were for the rigorous writing expectations. I leave these comments on Phineas Gage’s page because I want current students to see what former students have to share based on their experiences. I want my current high school students to know that they are being prepared with a college-level education. When former students share posts about their college psychology experiences, I value their outlook and acknowledge that although they are no longer active students of mine, their effort to reach out and stay in contact with me is very dear (Figures 21 & 22).


In another post (Figure 26), a former student shares a movie trailer about an infamous study we discussed in high school, the Zimbardo prison experiment. In the post, the student also comments on her success in psychology while in college because of her high school experience. Personally, I appreciate these posts from former students; professionally, I hope that my current students read the post and know that the hard work I ask of them know will continue to benefit them later into their further education.



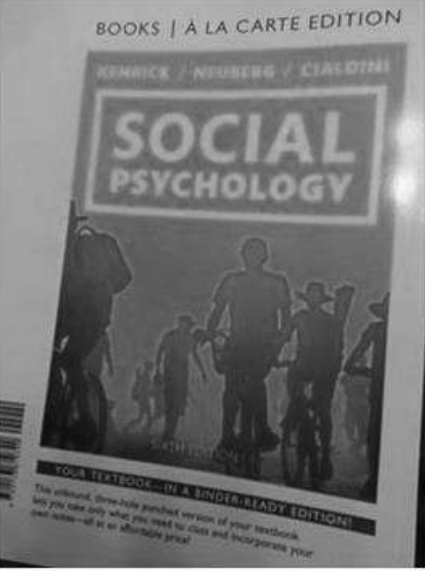
Figure 26. Zimbardo Trailer.

This post (Figure 27), was prompted from a previous student who was excited that one of his psychology college textbook authors was a researcher we studied in high school. The student's comment generated likes from 16 other students, including some students who also shared their familiarity with college textbook authors that we discussed as part of our high school curriculum.


The posts from previous students are special. These are no longer active students who are really under no particular obligation to keep in touch with me. During active school years, no students are ever required to join our class Facebook page. There is no expectation that they request to join, simply an invitation (Appendix L).


July 28 at 5:22pm

I just got my Social Psych textbook and it's co-written by Cialdini. I'm officially excited.  
 Ever read through this book, Phineas? It any good?



Like    Comment    Share

You,  and 13 others like this.


I found a psych book in a thrift store a couple weeks ago co-authored by Zimbardo  
 Like · Reply · 2 · July 28 at 5:37pm


I just checked and he referenced himself seventeen times over the course of the book.  
 Unlike · Reply · 1 · July 28 at 5:40pm


Phineas Gage Cialdini?!? Hahah. Awesome. Clearly, you already know some of things you're gonna read about.  
 Like · Reply · 1 · July 28 at 5:54pm


Phineas Gage Hey ! I have a social psych book too coauthored by Zimbardo. These researchers!  
 Like · Reply · 1 · July 28 at 5:55pm


I got Psychology and Life by Gerrig and Zimbardo; I just picked up a psych minor and it seems to cover a little bit of everything so I thought it'd be good for a refresher (not to mention the pic of Phil in the front)  
 Like · July 28 at 11:06pm


Phineas Gage Nice---who can pass up buying anything with Zimbardo's sexy face on it?  
 Like · July 28 at 11:23pm


Joey Hager A stronger man than I  
 Like · 2 · July 28 at 11:24pm

Write a reply...


My brother still has his Meyers social psych book  
 Unlike · Reply · 1 · July 28 at 9:29pm


Now that is a class I'd want to take!  
 Like · Reply · July 28 at 9:42pm

Figure 27. Student post about psychology textbook.

The fact that most students continue to allow Phineas Gage to remain a part of their social network is appreciated. They keep in touch and continue to share their psychology experiences (Figures 28 and 29).



*Figure 28.* A former student shares a selfie picture he took when a researcher visited the college campus to give a lecture. The researcher, Claude Steele, is an expert in a phenomenon called stereotype threat. This was a topic the student and I discussed while he was with me in high school. The hashtags were in the student's original post.





*Figure 29.* The same student who posted the selfie with Dr. Steele, later surprised me by asking Dr. Steele to personalize his latest book. When I received the book in the mail, I posted a picture and thanked the student. The post received 43 likes and a comment from a former classmate of the student also praising him.

I also let parents of active students know that they can request to join our Facebook page should they wish to monitor my posts. During our parent's night/back to school night, I share with parents the purpose of the Facebook page and how they can use it. In my experience as a previous IB student, there was a time when my parents were no longer able to help me with my homework. This was not a poor reflection of my parents. They are bright and loving parents.

They showed interest in my school work and always provided me with whatever I needed to be successful. There were times, however when I could tell they felt unable to provide academic help.

In the IB program, students are exposed to a rigorous curriculum across several content areas. Sometimes, the degree of chemistry, mathematics, or physics, for example can be daunting for parents who are either not currently in a related-field, have been out of school for some time, or perhaps are completely unfamiliar with their son or daughter's work. This can leave parents feeling disconnected from their children who may already be distant as they continue to find their identities. I have learned that family dinners are often not as regular as perhaps they once were while IB students are still volunteering to complete hours, playing a sport, or finishing homework. When I was in high-school, it would just irritate me when my parents would ask, "So what did you learn in school today?" I understand that they were just trying to be involved, but what could I say? On back-to-school night, I share this experience with parents and tell them that psychology should be very approachable. We might use some fancy terms and name-drop a few people, but the concepts should be about things that are familiar with everyone. I invite them to join our Facebook group so they can engage their sons and daughters in a conversation that touches on our curricular topics. The items I post are interesting and relevant. Parents probably have an opinion about these topics. I encourage them use these topics as a lead into a conversation. My hope is that by sharing with parents a way that they could use the Facebook page, they might be more likely to join.

Given this landscape of Facebook use, I approached my principal with the interest of pursuing my research aims among my students. I acknowledged to my principal that I am knowingly acting in direct contradiction to our district's policy on social media use. I outlined



the safeguards I have in place to protect students, such as limiting access to the class page to only students in my classes, disclosing to and inviting student parents and guardians to access the page, approving student posts prior to displaying them, making access to the page completely voluntary, never using the Facebook page for school-related communication. I was essentially breaking rules. I felt comfortable, however, approaching my principal because of the trust I had established with my administration. I have been a teacher with a long-standing of quantitatively successful testing results. The performance of my advance placement psychology scores have ranged from 95% to 100% passing rate, with an average of 80 students per year. My IB psychology scores have always been above the world average. I felt confident that based on my testing data, my school's administrative staff would be flexible in my requests. I thought it was beneficial that my principal was also completing a dissertation proposal for her doctorate as she might be sensitive to the need to collect meaningful data.

According to Haberman (2004), an effective teacher negotiates the bureaucracy of his or her school's district. This may on occasion present the teacher with situations where the teacher must consider the students' best interests and then decide if a rule can be broken. This has indeed been the ethos by which I have knowingly violated the district's social media policy. I don't blatantly violate school district rules. I recognize the policies in place and the purpose they serve to protect teachers and students. The Phineas Gage Facebook page was created several years before the social media policy was created. In that time, I had already seen the benefits of the page. I saw how students responded to psychology articles. I saw how students would connect the posts to content we had learned in class. I saw how former students would post about their experiences in college and current students would gain encouragement. To me, the value of the

Facebook page was readily apparent. So when the social media policy was created and teachers were encouraged to disable any Facebook pages, I continued to have my page remain active.

My principal was agreeable to my research aims provided that I could still obtain ethical consent from our district's department of research and accountability. I have an established relationship of trust and history with the district office. I have worked frequently with my school district's social studies department helping to provide training to new and veteran teachers. I have worked with our office of testing and data to create testing stems across almost a dozen social studies end-of-course exams. I have also worked with the office of advanced studies and academic excellence to develop support programs for teacher retention and student support. I was known to several individuals in the administration building in a very positive way as a helpful and knowledgeable educator. Following appropriate submission guidelines, documentation, and research support, I was able to obtain consent from the school district as well as a letter of support from the principal (Appendix J). This documentation was especially helpful as I progressed forward to obtain consent from the IRB (Appendix H).

### **Reflexivity**

My efforts in this research has given me a number of items to consider about the students in my classroom and the instructional practices I utilize. I am grateful for having created the Phineas Gage Facebook profile, even though I did so in direct contradiction to school board policy. The page has provided benefits to the classroom experience for students any myself. For the students, I have learned that some of them value the posts I share. It brings a real and practical face to psychology by connecting new stories of interest to theories in psychology. I know it can be trite to suggest, but psychology really is everywhere and by forwarding articles to my students' newsfeeds, I model for them the myriad ways the content we engage in the

classroom shows itself to plain everyday sight. I've learned that sometimes, this helps students to scaffold previous learning with concrete examples.

In addition, the profile gives insight to students about me as their teacher. They want to know things about me—my interests and opinions. By sharing stories of humor, drama, or science/technology, students may garner a sense of my personality. In as much as I assumed that what students posted on their Facebook profile in some way reflected their identity, the same could be true for me as well. The items I posted to Phineas Gage do in fact reveal aspects of my humor and interests. Curious students could follow Phineas's profile and learn about some aspects of my identity. What I was trying to ascertain about my students from their Facebook profile, they might just as well reciprocate the same sentiment to mine.

The study has also promoted me to recognize the balance I have maintained in my use of social media as a function of classroom instruction. I have only introduced social media peripherally, to supplement the class and not to depend on it as a significant tool of instruction. For various reasons outlined earlier, such as concerns of a digital divide, I only make use of Facebook to extend the classroom to interested students who want to explore the content of psychology more deeply. Our usual in-class time is filled with bell-to-bell instruction as I diligently make our way through the curriculum. This leaves very little room for extraneous stories, articles, videos that are not somehow directly related to the content at hand. Thankfully, Facebook creates this other-space for me. It serves as a virtual placeholder where I can innocently and easily share additional information for my students with as much (or as little) detail as I choose.

The profile page also allows former students to stay connected to me as they continue into their professional and/or educational careers beyond high school. Students who have since

graduated, continue to keep in touch with me through the Phineas Gage page and occasionally write to share their graduate/undergraduate experiences of psychology with me. I treasure these efforts to maintain contact since during their time with me as their teacher, I worked with great sincerity and effort to establish appropriate and meaningful relationships with students. I have given consideration to maintaining the Phineas Gage Facebook profile even when/if I leave teaching from my current school. It has become a conduit that has allowed students and I to maintain familiarity.

The qualitative nature of the study also gave me reason to consider my methods and the experience of the research process. As I progressed through the research process, I became aware of the strength that quantitative methods had as part of my schema for scholarship. Executing a qualitative study provided an opportunity for me to extend my research skills set and to also provide more informed instruction to my students since qualitative research methods is part of their required curriculum. As I reflected on the data collection and analysis of this study, I was concerned that I had not employed a measure of inter-coder reliability in order to increase the trustworthiness of my data. I did not solicit the help from another researcher to examine interview themes or to review participant Facebook posts. While I still included measures of reliability, I was bothered that another researcher did not verify my coding or themes. I recognized that my concern was being influenced by my tradition of hypo-deductive epistemological training. I had been taught to give hegemony to a scientific approach that was positivist and grounded in the traditional experimental method. Recognizing this particular bias gave me pause to consider if I might also over emphasize quantitative methods over qualitative in my classroom instruction. To address this concern, I have incorporated this concern as part of

my instructional lesson and encourage a class discussion about the perceived emphasis on the traditional scientific method in our Western view.

The process of this research experience has given me opportunities to reflect on my teaching and Facebook use. I am thankful for the insights that I have been able to assemble as a result of this work and have already begun to integrate my findings into my classroom practices. Certainly, there are several areas that remain worthy of further investigation but the small window afforded to me here has already provided great value.

## Epilogue

I want to conclude with a brief comment that extends beyond the discussion of findings. The study is part of an emerging need to have discussions about social media in the classroom and the future of technologies in the classroom. The research gathered here suggests potential changes to the current social media policy in schools in the district, particularly in regards to Facebook. It also carries implications for educational purposes at large. Certainly, there is no one-size-fits-all solution for every teacher in every school, but to dismiss such a ubiquitous technology provides a disservice to teacher and student alike. In the 2016 U.S. National Technology Education Plan, *Future Ready Learning: Reimagining the Role of Technology in Education*, the U.S. Department of Education, stakeholders were called upon to apply “the advanced technologies used in our daily personal and professional lives to our entire education system to improve student learning.” In order to meet this goal, Facebook must be considered. There are particular advantages to using Facebook as a classroom tool. These include: quick response time, distribution of classroom resources, and digital citizenship.

Since students regularly check their mobile devices out of habit or boredom, they would likely notice push notifications forwarded to their phones or tablets. At present, last minute changes or updates to the class syllabus are communicated through email and/or the classroom management system a district might utilize. And while certainly it is the student’s responsibility to regularly check his/her email and to login to the classroom management site, any updates or changes would be communicated with greater expediency if a teacher were to draw from the notification architecture of Facebook as well. Teachers would likely communicate their message

about homework, tests, and or projects to students and teachers much faster and with greater confidence that the message would be received. Further, unexpected teacher absences and substitute teacher support could be shared with greater immediacy.

Teachers would also be able to draw on the easy and ever-increasing digital resources that students could access by supplying dynamic links and media-rich content about the course. It seems almost antiquated for a teacher to photocopy an article for each student, distribute the copy in class, and discuss the article at the next encounter. Rather, teachers could upload (or link to) a digital copy of the same article or even a few options of the central topic at different reading levels in order to provide differentiated instruction. In addition, the teacher might provide a link to an audio segment from NPR that discusses the same issue, or to a YouTube driven TedTalk that investigates the same topic. In this way, and with only minor teacher-time investment, students are offered a variety of options by which they can learn about whatever the topic might be. The Facebook platform supports the various content formats and enables students to leave immediate feedback/comments about the topic rather than needing to wait until the next class session. All of the class's major resources are then centralized into one location that can be accessed no matter the time or device the student may be using.

The inclusion of Facebook into the classroom will also give teachers the very easy way of introducing outside information that supplements the traditional classroom curriculum. Teachers could 'like' or 'share' news stories on the class Facebook page that are current and relevant to topics covered in the class. These may not be articles that the teacher requires students to read, but only shares in passing thereby reinforcing the relevancy of the class and the connections to the real-world.

Facebook automatically converts the web-based content into a mobile format so without any additional work on behalf of the teacher, students can access content on-the-go through tablet computers or mobile phones. This kind of mobile learning platform provides members of the class with on-demand opportunities for greater participation and the freedom to use technology in a way that best fits with individual student preferences (Phillips, Baird, & Fogg, 2013).

Finally, the teacher can model appropriate digital citizenship skills by having an online presence among his/her students. By behaving in a way that creates a safe and mature virtual-self, students may also learn how better to respect others and the online community. The teacher will be providing guidance and support in a structured environment and will demonstrate how to deal with inappropriate internet use should it arise.

Teachers who consider using Facebook in the classroom should practice some very basic guidelines. These include the following four suggestions:

- 1) The classroom page should be separate from the teacher's personal page. It is not appropriate for teachers to overshare about their weekend or their adult friends on Facebook when students might be able to access the information. As such, teachers should limit who joins their Facebook page or group and restrict access only to their students, not personal friends and certainly not unknown strangers from the Facebook-osphere. A separate page respects the privacy of the teacher and ensures that Facebook activity is limited to curricular-related posts.
- 2) Teachers should also practice mindfulness about their online presence when engaged on Facebook. They should ensure a tone of professionalism in their conversations with students. Facebook exchanges tend to have a very casual nature. Teachers can



- still have a sense of humor and levity while posting appropriate comments and sharing content. I imagine that parents and my principal are reading my posts and make sure that nothing could be potentially misunderstood.
- 3) As the teacher builds and maintains his/her classroom Facebook page, the teacher will naturally 'like' and share personal interests such as television shows, book titles, etc. The teacher should include such interests thoughtfully keeping in mind that the page is intended to expand classroom goals and not reflect the teacher's personal life. Depending on the privacy settings, students will be able to read a teacher's likes and interests. It is in the best interest of the teacher to make sure these characteristics are class-appropriate. To this end, teachers may consider using their Facebook page to network with other professional development organizations or subject-related content sites. Students may see that I 'liked' the page for National Public radio or that I 'liked' the PsychCentral page. They begin to get an idea of where I discover content for class, what resources I consider reliable, and perhaps where they might go to as a homework resource.
- 4) Teachers should try to integrate their Facebook pages into their teaching. The Facebook page becomes a helpful tool that can be used to communicate and share information with students. Referencing to the class Facebook page has the added benefit of creating traffic and momentum for the page. It means that there are eyes regularly on the page and it also means that a teacher can monitor the page more easily to ensure any shared information is relevant. Again, depending on the teacher's privacy level, he or she may opt to allow students to post directly onto the page or not to allow any outside posts at all. In such cases, a teacher might consider creating a

‘fan’ page, rather than a profile or group page. Fan pages are public and provide only one-direction of communication—from the teacher to the public.

There are ways that teachers can utilize Facebook without ever friending a student. Pages and groups can still allow for some versions of Facebook’s infrastructure without the problematic relationships that drive the fear of some social media policies. In any case, whatever the method of choice, it is certain that Facebook should not be ignored as a potential valuable classroom tool. Additional social media applications like Instagram, SnapChat, Vine, etc. have their uses as well. A creative teacher will find useful ways that appropriately integrate new technologies into a meaningful pedagogy.

Technological advancements in both hardware and software related applications will certainly continue to proliferate at the typical rapid rate. It is a disservice to discourage reasonable inclusion of these advancements and emerging tools into a classroom. Social studies teachers provide instruction in more than just a specific content area. They also inform students in civic literacy and technological-use. *Civic ideals and practice* and *science, technology, and society* are two relevant themes outlined by the National Council of Social Studies (Golston, 2010). Honoring the possibilities of social media applications like Facebook reflect these themes in a meaningful way that respect teacher responsibilities and student interests. It is easy for social media to blur the divisions between personal and professional interests. But, an ethically responsible and thoughtful teacher can capitalize on this important tool to engage student learners and develop creative pedagogical approaches.

Moving forward, stakeholders will continue to address concerns of privacy, safety, and fair access. These are significant issues that should not be marginalized. As part of a safe learning environment, both tangible and virtual, minimizing student digital footprints, protection

from cyberbullying, and overcoming the digital divide need to be included in a reasonable plan for the inclusion of social media tools. A continued responsibility should also befall teacher-education programs so as to encourage student-teachers to develop a plan about potential social media integration approaches. Surely, these student-teachers would have at some point considered their personal social media activities as a typical part of their day-to-day experiences. They may even already come to college teacher-preparation classes with an *a priori* expectation about such a commonplace use of technology in the classroom. Either way, a thoughtful student-teacher will have an informed opinion about the benefits and challenges of Facebook use as part of a classroom instructional policy.

An emerging concern for teachers should also include aversive side effects of Facebook use. While researchers continue to investigate the validity of claims of internet addiction (Mossbarger, 2008), what may be more salient to teachers are affective issues related specifically to Facebook. Verdun, et al. (2015) has documented experimental and longitudinal evidence suggesting that passive Facebook use leads to a decrease in well-being by increasing envy. Passive use is characterized by a user who acts primarily as a consumer of information, such as scrolling through newsfeeds or viewing posts, rather than directly exchanging comments with other networked users. Envy has also been reported to facilitate symptoms of depression among college Facebook users (Tandoc, Ferrucci, & Duffy, 2014). Students tend to compare their successes and accomplishments against what they see posted on the profile pages of others online leading to possible feelings of inadequacy or low social ranking. This phenomenon continues to be of interest among researchers, but certainly serves as a caution for teachers to be vigilant.

As technology and its respective applications continue to develop, it will come to play a large role in the continuation of student teaching and pedagogical techniques. Education majors and even veteran teachers will need to remain vigilant about emerging technologies and potential classroom uses. As teachers, we have a duty to educate ourselves about novel technologies and familiarize ourselves with the related-jargon and terminology associated with such advancements. Without this knowledge, teachers will ineffectively engage with modern learning techniques. Simply, including technologies (e.g., social media) need not change a classroom in a dramatic way. Facebook, Twitter, Instagram, SnapChat, etc. are not necessarily applications that will revolutionize how teachers instruct, but they can allow the daily tasks that teachers complete more efficient and perhaps more relevant to students' interests. Classroom procedures can be streamlined with greater efficacy, syllabi can be distributed and amended with greater haste, end-of-the-year assessments can be more closely monitored, and future improvements to social media applications can increase helpful teacher metrics that provide year-long feedback to parents, administrators, and students.

A future e-classroom that capitalizes on social media will engage students on their personal level and allow for a greater differentiation. They will free the teacher to explore more project-based learning or flipped classroom models. I understand that such a suggestion may imply a heavy reliance upon technology. But to be clear, technology includes what might be considered traditional (or analog) devices such as a chalkboard, an overhead projector, a ball point pen, a television, a VCR/DVD player, or even a calculator. A teacher will need to model and to inspire a balance between use of technologies and person-to-person engagement. Clearly, too much of anything is a distraction, but an effective teacher will monitor student interest and will adjust the classroom atmosphere accordingly. Social studies teachers still need to respond to

the need for soft skills such as eye contact, greetings, and demonstrating warm regard to one's peers. Balancing the introduction of emerging technologies with the need to foster developing social skills will remain a future task of any teacher's pedagogy.

Social networking applications are impressive communication tools, but certainly I do not believe them to be a kind of learning-tool juggernaut that resolves all teacher challenges. Much of what this study has revealed is that individual use of Facebook among students is quite personal. The nuances that characterize why and how a student accesses his/her Facebook account are influenced by a number of social, academic, and personal needs. How that teacher might capitalize on these subtle behaviors demands on the teacher's creative initiative and a resilient self-trust that he/she will, in earnest, try to make wise choices about what benefits his/her students.

## References

- Adams, G. R. (1998). *The objective measure of ego identity status: A reference manual*. Retrieved from [http://www.uoguelph.ca/~gadams/OMEIS\\_manual.pdf](http://www.uoguelph.ca/~gadams/OMEIS_manual.pdf)
- Adams, G. R., Shea, J., & Fitch, S. A. (1979). Toward the development of an objective assessment of ego-identity status. *Journal of Youth and Adolescence*, 8(2), 223-237.
- Akers, J. F., Jones, R., & Coyl, D. D. (1998). Adolescent friendship pairs: Similarities in identity status development, behaviors, attitudes, and intentions. *Journal of Adolescent Research*, 13(2), 178-201.
- Andrews, T. (2012). *What is social constructivism?* Retrieved from [groundedtheoryreview.com](http://groundedtheoryreview.com)
- Angwin, J. (2009, 29 March). Putting your best face forward. *The Wall Street Journal*. Retrieved from <http://online.wsj.com>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.
- Bahner, D. P., Adkins, E., Patel, N. Donley, C. Nagel, R., & Kman, N. E. (2012). How we use social media to supplement a novel curriculum in medical education. *Medical Teacher*, 34(6), 439-444.
- Balistreri, E. Busch-Rossnagel, N. A., & Geisinger, K. F (1995). Development and preliminary validation of the Ego Identity Process Questionnaire. *Journal of Adolescence*, 18, 179-192.
- Bandura, A. (1964). The stormy decade: Fact or fiction? *Psychology in the School*, 1(3), 224-231.

- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bargh, J. A., McKenna, K. Y. A., & Fitzsimons, G. M. (2002). Can you see the real me? Activation and expression of the 'true self' on the internet. *Journal of Social Issues*, 58(1), 33-48.
- Bawden, D. (2001). *Information and digital literacies: A review of concepts*. Retrieved from <http://arizona.openrepository.com/arizona/bitstream/10150/105803/1/bawden.pdf>
- Benner, P. (2008). Interpretive phenomenology. In L.M. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 461-464). Thousand Oaks, CA: Sage Publications, Inc.
- Bennion, L. D., & Adams, G. R. (1986). A revision of the extended version of the Objective Measure of Ego Identity Status: An identity instrument for use with late adolescents. *Journal of Adolescent Research*, 1, 183–198.
- Berk, R. A. (1998). *Professors are from Mars, students are from Snickers*. Madison, WI: Mendota Press.
- Bickman, L., & Rog, D. J. (2009). Applied research design. In L. Bickman & D. J. Rog (Eds.). (2009), *The Sage handbook of applied research methods* (2nd ed., pp. 3–43). Los Angeles, CA: Sage.
- Bosch, L. A., Serido, J., Card, N., Shim, S., & Barber, B. L. (2016). Predictors of financial identity maturation in emerging adulthood. *Development in Emerging Adulthood*, 1-10. doi: 10.1177/2167696816631845
- Boyd, D. (2014). *It's complicated: The social lives of networked teens*. New Haven, CT: Yale University Press.

- Boyd, D. (2015). "Making Sense of Teen Life: Strategies for Capturing Ethnographic Data in a Networked Era." In Hargittai, E. & Sandvig, C. (Eds.) *Digital research confidential: The secrets of studying behavior online*. Cambridge, MA: MIT Press.
- Bowen, W. G. (2013). *Higher education in the digital age*. Princeton, NJ: Princeton University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723-742.
- Bruner, J. (1990). *Acts of meaning*. London, Eng: Harvard University Press.
- Buckingham, D. (2008). Introducing identity. In D. Buckingham (Ed.), *Youth, identity, and digital media*. (pp. 1-24). Cambridge, MA: The MIT Press.
- Buffardi, L. E., & Campbell, K. W. (2008). Narcissism and social networking web sites. *Personality and Social Psychology Bulletin*, 34(10), 1303-1314.
- Burr, V. (2015). *Social constructivism* (3<sup>rd</sup> ed.). New York, NY: Routledge.
- Chandler, D., & Roberts-Young, D. (2000). *The construction of identity in the personal homepages of adolescents*. Retrieved from <http://www.aber.ac.uk/media/Documents/short/strasbourg.html>
- Checkfacebook.com (2009). Retrieved from <http://www.checkfacebook.com>.
- Chugani, H. T. (1998). Biological basis of emotions: Brain systems and brain development. *Pediatrics*, 102, 1225-1229.
- Clancy, S. M., & Dollinger, S. J. (1993). Identity, self, and personality: Identity status and the five-factor model of personality. *Journal of Research on Adolescence*, 3, 227-245.
- Cohen, L. (2007). *Social scholarship on the rise*. Retrieved from [http://liblogs.albany.edu/library/social\\_scholarship\\_on\\_the\\_rise.html](http://liblogs.albany.edu/library/social_scholarship_on_the_rise.html)



- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7 ed.). New York: Routledge.
- comScore (2009). *Data passport*. Retrieved from [http://www.comscore.com/Press\\_Events/Presentations\\_Whitepapers/2009/comScore\\_Data\\_Passport\\_-\\_First\\_Half\\_2009](http://www.comscore.com/Press_Events/Presentations_Whitepapers/2009/comScore_Data_Passport_-_First_Half_2009)
- Coolican, H. (1999). *Research methods and statistics in psychology*. Great Britain, UK: Hodder & Stoughton Educational.
- Cote, J. E., & Levine, C. (1988). A critical examination of the ego identity status paradigm. *Developmental Review*, 8, 147-184.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Daggett, W. R. (2011). *The Daggett system for effective instruction: Where research and best practices meet*. Retrieved from [http://www.leadered.com/pdf/Cross-Age\\_Peer\\_Teaching\\_2014.pdf](http://www.leadered.com/pdf/Cross-Age_Peer_Teaching_2014.pdf)
- Daggett, W. R. (2014). *How brain research related to rigor, relevance and relationships*. Retrieved from <http://www.successfulpractices.org>
- Darling-Fisher, C. S., & Leidy, N. K. (1988). Measuring Eriksonian development in the adult: The modified Erikson psychosocial stage inventory. *Psychological Reports*, 62(3), 747-754.
- Denzin, N. K., & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-17). Thousand Oaks: Sage Publications.
- Dewey, J. (1916/1966). *Democracy and education: An introduction to the philosophy of education*. New York, NY: Free Press.

- Digital Youth Network (2009). *Digital Youth Network: Who are we?* Retrieved from [digitalyouthnetwork.org](http://digitalyouthnetwork.org)
- Dougherty, K. D., & Andercheck, B. (2014). Using Facebook to engage learners in a large introductory course. *Teaching Sociology*, 42(2), 95-104.
- Edison Research Group (2012). *Facebook account checks in 24-hours*. Retrieved from [www.convinceandconvert.com/social-media-research](http://www.convinceandconvert.com/social-media-research)
- Ellison, N., & Boyd, D. (2013). Sociality through social network sites. In W. H. Dutton (Ed.), *The Oxford handbook of Internet studies* (pp. 151-172). Oxford: Oxford University Press.
- Engler, B. (2003). *Personality theories*. Boston, MA: Houghton Mifflin Company.
- Erikson, E. H. (1950). *Childhood and society*. New York, NY: Norton.
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers. *Psychological Issues*, 1(1), 5-165.
- Erikson, E. H. (1968). *Identity, youth, and crises*. New York, NY: Norton.
- Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93-106.
- Eysenck, M. E., & Keane, M. T. (2005). *Cognitive psychology*. New York, NY: Taylor & Francis Group.
- Facebook. (2009). *Press room-statistics*. Retrieved from <http://www.facebook.com/press/info.php?statistics>
- Facebook. (2016). *Terms of service: Statement of rights and responsibilities*. Retrieved from <https://www.facebook.com/terms>

- Freud, S. (1898/1995). *The basic writings of Sigmund Freud: Psychopathology of everyday life, the interpretation of dreams, and three contributions to the theory of sex* (A. A. Brill, Trans.). New York: Modern Library.
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 14081416. Retrieved from <http://nsuworks.nova.edu/tqr/vol20/iss9/3>
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Boston, MA: Allyn & Bacon.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York, NY: Basic Books.
- Giedd, J. N. (2012). The digital revolution and adolescent brain evolution. *Journal of Adolescent Health*, 51, 101-105.
- Glaser, B. G., & Strauss, A. L. (1967) *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine de Gruyter.
- Goffman, E. (1969). *Strategic Interaction*. Philadelphia, PA: University of Pennsylvania Press.
- Goldman, D. (2009). *Facebook is king but Twitter makes waves*. Retrieved from [http://money.cnn.com/2009/06/02/technology/social\\_network\\_growth/index.htm](http://money.cnn.com/2009/06/02/technology/social_network_growth/index.htm)
- Golston, S. (2010). The revised NCSS standards: Ideas for the classroom teacher. *Social Education*, 74(4), 210-216.
- Gray, M. (2007). Face value: Facebook. *Contexts*, 6(2), 73-75.
- Greenhow, C., Robelia, B., & Hughes, J. E. (2009). Learning, teaching, and scholarship in a digital age: What path should we take now? *Educational Researcher*, 38(4), 246-259.

- Gross, E. F. (2004). Adolescent internet use: What we expect, what teens report. *Applied Developmental Psychology, 25*(6), 633-649.
- Guadagno, R. E., & Cialdini, R. B. (2002). Online persuasion: An examination of gender differences in computer-mediated interpersonal influence. *Group Dynamics, 6*, 38–51.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal, 29*, 75–91.
- Haberman, M. (2004). Can star teachers create learning communities? *Educational Leadership, 61*(8), 52-56.
- Hargittai, E. (2008). Whose space? Differences among users and non-users of social network sites. *Journal of Computer-Mediated Communication, 13*(1), 276-297.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education*, 2 vols. New York, NY: Appleton.
- Hamachek, D. E. (1988). Evaluating self-concept and ego development within Erikson's psychological framework: A formulation. *Journal of Counseling and Development, 66*(8), 354-360.
- Havighurst, R. (1972). *Developmental tasks and education*. New York, NY: Random House.
- High-schools.com (2016). *Data on U.S. public high schools & private high schools*. Retrieved from <http://high-schools.com/directory/fl/cities/palm-harbor/palm-harbor-university-high-school/120156003014>
- Hofstra, B., Corten, R., & van Tubergen, F. (2015). Who was first on Facebook? Determinants of early adoption among adolescents. *New Media and Society, May*, 1-19.
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigor in qualitative case-study research. *Nurse Researcher, 20*(4), 12-17.

- Hull, G., & Schultz, K. (2002). *School's out! Bridging out-of-school literacies with classroom practice*. New York: Teachers College Press.
- Huffaker, D. A., & Calvert, S. L. (2005). Gender, identity, and language use in teenage blogs. *Journal of Computer-Mediated Communication, 10*(2). Retrieved from <http://jcmc.indiana.edu/vol10/issue2/huffaker.html>
- IBO (2010). *International Baccalaureate organization curriculum guide*. Retrieved from <http://www.ibo.org/diploma/curriculum>
- Interlandi, J. (2008, October 13). Reading this will change your brain: A leading neuroscientist says processing digital information can rewire your circuits. *Newsweek*. Retrieved from <http://www.newsweek.com/are-you-digital-native-92455>
- Ito, M., Horst, H. A., Bittanti, M., Boyd, D., Herr-Stephenson, B., Lange, P.G., Pascoe, C.J., ... Tripp, L. (2008). *Living and learning with new media: Summary of findings from the Digital Youth Project*. Retrieved from <http://digitalyouth.ischool.berkeley.edu/report>
- Jackson, L. A., Ervin, K. S., & Gardner, P. D. (2001). Gender and the Internet: Women communicating and men searching. *Sex Roles, 44*, 363–379.
- Jackson, L. A., Eye, A., & Biocca, F. A. (2010). Personality, cognitive style, demographic characteristics and Internet use: Findings from the HomeNetToo project. *Swiss Journal of Psychology, 62*(2), 79-90.
- Joinson, A. N. (2008, April). *Looking at, looking up, or keeping up with people? Motives and uses of Facebook*. Paper presented at CHI 2008 Proceedings, Florence, Italy. Retrieved from [digitalintelligencetoday.com/downloads/Joinson\\_Facebook.pdf](http://digitalintelligencetoday.com/downloads/Joinson_Facebook.pdf)
- Junco, R. (2015). Student class standing, Facebook use, and academic performance. *Journal of Applied Developmental Psychology, 36*, 18-29.

- Jupp, V. (Ed.) (2006). *The Sage dictionary of social research methods*. London, Eng: Sage Publications.
- King, R. M. (2000). *Adolescence: Overview, historical background and theoretical perspectives*. Retrieved from <http://www.psyking.net/id183.htm>
- Klimstra, T. A., Hale, W. H., Raaijmakers, Q. A. W., Branje, S. J. T., & Meeus, W. H. J. (2010). Identity formation in adolescence: Change or stability? *Journal of Youth and Adolescence*, 39(2), 150-162.
- Krashen, S. (1982). Theory versus practice in language training. In R. W. Blair (Ed.), *Innovative approaches to language teaching* (pp. 25–27). Rowley, MA: Newbury.
- Kroger, J. (2005). Identity development during adolescence. In G.R. Adams & M.D. Berzonsky (Eds.), *Handbook of adolescence* (pp. 204-226). Malden, MA: Blackwell Pub.
- Kroger, J. (1993). On the nature of structural transition in the identity formation process. In J. Kroger (Ed.), *Discussions on ego identity* (pp. 205-234). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Kroger, J., & Marcia, J. (2011). The identity statuses: Origins, meanings, and interpretations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (eds.), *Handbook of identity theory and research* (pp. 32-53). New York, NY: Springer.
- Laghi, F., Baiocco, R., Liga, F., Guarino, A., & Baumgartner, E. (2013), Identity status differences among Italian adolescents: Associations with time perspective. *Children and Youth Services Review*, 35(3), 482-487.
- Larson, R., & Wilson, S. (2004). Adolescence across place and time: Globalization and the changing pathways to adulthood. In R. M. Lerner & L. Steinberg (Eds.). (2004), *Handbook of adolescent psychology* (2nd ed., pp. 299-331). Hoboken, NJ: Wiley.

- Leininger, M. (1994) Evaluation criteria and critique of qualitative research studies. In J. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 95-115). Thousand Oaks, CA: Sage Publications.
- Lenhart, A., & Madden, M. (2007, Jan.). *Social networking sites and teens: An overview*. Pew Internet & American Life Project. Retrieved from [http://www.pewinternet.org/~media/Files/Reports/2007/PIP\\_SNS\\_Data\\_Memo\\_Jan\\_2007.pdf](http://www.pewinternet.org/~media/Files/Reports/2007/PIP_SNS_Data_Memo_Jan_2007.pdf)
- Lenhart, A., & Madden, M. (2007, Feb.). *Teens, privacy & online social networks: How teens manage their online identities and personal information in the age of MySpace*. Pew Internet & American Life Project. Retrieved from <http://pewresearch.org/pubs/454/teens-privacy-online-social-networks.pdf>
- Lenhart, A., Madden, M., Macgill, A. R., & Smith, A. (2007). *Teens and social media*. Pew Internet & American Life Project. Retrieved from [http://www.pewinternet.org/PPF/r/230/report\\_display.asp](http://www.pewinternet.org/PPF/r/230/report_display.asp)
- Lerner, R. M., & Steinberg, L. (2004). The scientific study of adolescent development: Past, present, and future. In R. M. Lerner & L. Steinberg (Eds.). (2004), *Handbook of adolescent psychology* (2nd ed., pp. 1-12). Hoboken, NJ: Wiley.
- Lewis, C., & Fabos, B. (2005). Instant messaging, literacies, and social identities. *Reading Research Quarterly*, 40(4), 470-501.
- Lifton, R. J. (1993). *The protean self: Human resilience in an age of fragmentation*. New York, NY: Basic Books.
- Lincoln, Y. S., & Guba, E. G. (1985) *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.

- Maczewski, M. (2002). Exploring identities through the internet: Youth experiences online. *Child & Youth care Forum, 31*(2), 111-129.
- Manca, S., & Ranieri, M. (2013). Is it a tool suitable for learning? A critical review of the literature on Facebook as a technology-enhanced learning environment. *Journal of Computer Assisted Learning, 29*(6), 487-504.
- Mandara, J., Gaylord-Harden, N.K., Richards, M.H., & Ragsdale, B.L. (2009). The effects of changes in racial identity and self-esteem on changes in African American adolescents' mental health. *Child Development, 80*(6), 1660-1675.
- Markstorm, C. A., & Marshall, S. K. (2007). The psychosocial inventory of ego strengths: Examination of theory and psychometric properties. *Journal of Adolescence, 30*(1), 63-79.
- Marcia, J. E., (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology, 3*(5), 551-558.
- Marcia, J. E. (1967). Ego identity status: Relationship to change in self-esteem, "general maladjustment", and authoritarianism. *Journal of Personality, 35*(1), 118-133.
- Marcia, J. E. (1980). Identity in adolescence. In J. Andelson (Ed.), *Handbook of adolescent psychology* (pp. 109-137). New York, NY: Wiley.
- Marcia, J. E. (1993). The ego identity status approach to ego identity. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), *Ego identity: A handbook for psychosocial research* (pp. 1-21). New York, NY: Springer-Verlag.



- McCrae, R. R., Costa, P. T., Terracciano, A., Parker, W. D., Mills, C. J., DeFruyt, F., & Mervielde, I. (2002). Personality trait development from age 12 to 18: Longitudinal, cross-sectional, and cross-cultural analyses. *Journal of Personality and Social Psychology, 83*(6), 1456-1468.
- McKenna, K., & Bargh, J. (1999). Causes and consequences of social interaction on the Internet: A conceptual framework. *Media Psychology, 1*, 249-270.
- Meeus, W., Iedema, J., Helsen, M., & Vollenbergh, W. (1999). Patterns of adolescent identity development: Review of literature and longitudinal analysis. *Developmental Review, 19*, 419-461.
- Miller, P. H. (1993). *Theories of developmental psychology*. New York: W.H. Freeman & Company.
- Mirabolghasemi, M., & Huspi, S. H. (2012). *A blended community of inquiry approach: The usage of social network as a support for course management system*. Proceedings for International Conference on Computer & Information Science (ICCIS), 180-183.
- Moran, M., Seaman, J., & Tinti-Kane, H. (2011). *Babson survey*. Retrieved from <http://www.mindjumpers.com/blog/2011/04/education-industry-infographic-2>
- Moreno, M. A., Parks, M. P., Zimmerman, F. J., Brito, T. E., & Christaki, D. A. (2009). Adolescent display of health risk behaviors on MySpace: Prevalence and associations. *Archives of Pediatric & Adolescent Medicine, 163*(1), 27-34.
- Morse, J. M. (1995). The significance of saturation. *Qualitative Health Research, 5*(2), 147-149.
- Mossbarger, B. (2008). Is 'Internet addiction' addressed in the classroom? A survey of psychology textbooks. *Computers in Human Behavior, 24*(2), 468-474.

- Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: A review of the literature. *Journal of Information Technology for Teacher Education*, 9(3), 319-342.
- Muuss, R. E. (1975). *Theories of adolescence*. New York, NY: Random House.
- Nader, K., Schafe, G. E., & LeDoux, J. E. (2000). Fear memories require protein synthesis in the amygdala for reconsolidation after retrieval. *Nature*, 406, 722-726.
- National Education Association. (2008). *Technology in schools: The ongoing challenge of access, adequacy and equity* (NEA Policy Brief, PB19, Center for Great Public Schools). Washington, DC: U.S. Government Printing Office.
- National Science Foundation Report (NSF) (2001, February). Division of Science Resource Studies, *The Application and Implications of Information Technologies in the Home*, NSF 01-313, Project Director E. L. Collins. Arlington, VA.
- Nielsen, L. (2014). Using social media to engage students and families. *Educational Horizons*, 92(2), 16-20.
- Nielsenwire.com (2009). *Time spent of Facebook up 700%, but MySpace still tops for videos*. Retrieved from [http://blog.nielsen.com/nielsenwire/online\\_mobile/time-spent-on-facebook-up-700-but-myspace-still-tops-for-video](http://blog.nielsen.com/nielsenwire/online_mobile/time-spent-on-facebook-up-700-but-myspace-still-tops-for-video)
- Noguchi, Y. (2005, November 22). Self 2.0: Internet users put a best face forward- Web chatters upgrade their identities for virtual life. *Washington Post*, p. A1.
- Olson, P. (2013). Teenagers say goodbye to Facebook and hello to messenger apps. *The Guardian*. Retrieved from <https://www.theguardian.com/technology/2013/nov/10/teenagers-messenger-apps-facebook-exodus>

- Papademas, D. (2009). IVSA code of research ethics and guidelines. *Visual Studies*, 24(3), 250-257.
- Papalia, D. E., Olds, S. W., & Feldman, R. D. (2009). *Human development*. (11<sup>th</sup> ed). New York: McGraw-Hill.
- Patton, Q. M. (2002). *Qualitative evaluation and research* (5th ed.). Newbury Park, CA: Sage.
- Pew Internet & American Life Project. (2010). *Social side of the Internet* [Data file]. Retrieved from [http://pewinternet.org/~media/Files/Questionnaire/2011/PIAL%20Social%20Side%20of%20Internet\\_FINAL%20Topline.pdf](http://pewinternet.org/~media/Files/Questionnaire/2011/PIAL%20Social%20Side%20of%20Internet_FINAL%20Topline.pdf)
- Pew Research Center. (2015). *Teens, social media & technology overview 2015*. Retrieved from [www.pewinternet.org/files/2015/04/09/teens-social-media-technology-2015](http://www.pewinternet.org/files/2015/04/09/teens-social-media-technology-2015)
- Pew Research Center. (2015). *Teens, technology, and romantic relationships*. Retrieved from [www.pewinternet.org/files/2015/10/PI\\_2015-10-01\\_teens-technology-romance](http://www.pewinternet.org/files/2015/10/PI_2015-10-01_teens-technology-romance)
- Pew Research Center. (2014). *Social media update 2014*. Retrieved from <http://www.pewinternet.org/2015/01/09/social-media-update-2014>
- Pew Research Center. (2013). *How teachers are using technology at home and in their classrooms*. Retrieved from <http://www.pewinternet.org/2013/02/28/how-teachers-are-using-technology-at-home-and-in-their-classrooms>
- Pew Research Center. (2005). *Internet: The mainstreaming of online life*. Retrieved from <http://www.pewresearch.org/files/old-assets/trends/trends2005-internet.pdf>
- Phillips, L. F., Baird, D., & Fogg, B. J. (2013). *Facebook for educators*. Retrieved from <https://www.facebook.com/FBforEducators>

- Phillips, T. M. (2009). Does social desirability bias distort results on the ego identity process questionnaire or the identity style inventory? *Identity: An International Journal of Theory and Research*, 9(1), 87-94.
- Phinney, J. S. (1988). Ethnic identity search and commitment in Black and White eighth graders. *Journal of Early Adolescence*, 9(1) 34-39.
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, 54(3), 271-281.
- Piaget, J. (1954). *Intelligence and affectivity: Their relation during child development*. Palo Alto, CA: Annual Review, Inc.
- Pilgrim, J., & Bledsoe, C. (2011). Engaging pre-service teachers in learning through social networking. *Journal of Literacy and Technology*, 12(1), 2-25.
- Pinellas County School District. (2014). *District strategic plan 2014-2015*. Retrieved from [http://pcsb.org.cms/lib8/FL01903687/Domain/170/DSP\\_1415\\_final.pdf](http://pcsb.org.cms/lib8/FL01903687/Domain/170/DSP_1415_final.pdf)
- Prensky, M. (2010). *Teaching digital natives: Partnering for real learning*. London, Eng.: Sage Publishers.
- Raskin, J. D. (2002). Constructivism in psychology: Personal construct psychology, radical constructivism, and social constructionism. In J. D. Raskin & S. K. Bridges (Eds.), *Studies in meaning: Exploring constructivist psychology* (pp. 1-25). New York: Pace University Press.
- Rhodes, J., Roffman, J., Reddy, R., & Fredriksen, K. (2004). Changes in self-esteem during the middle school years: A latent growth curve study of individual and contextual influences. *Journal of School Psychology*, 42, 243-261.

- Reichertz, J. (2014). Induction, deduction, abduction. In U. Flick (Ed.). *The Sage handbook of qualitative data analysis* (pp. 136-150). Los Angeles, CA: Sage Publications.
- Reid, D., & Weigle, P. (2016). Social media use among adolescents: Benefits and risks. *Adolescent Psychiatry, 4*(2), 73-80.
- Rodgers, B.L., & Cowles, K.V. (1993) The qualitative research audit trail: A complex collection of documentation. *Research in Nursing and Health, 16*(3), 219-226.
- Roschelle, J. M., Pea, R. D., Hoadley, C. M., Gordon, D. N., & Means, B. M. (2000). Changing how and what children learn in school with computer-based technologies. *Children and Computer Technology, 10*(2), 76-101.
- Ryeng, M. S., Kroger, J., & Martinussen, M. (2013a). Identity status and authoritarianism: A meta-analysis. *Identity: An International Journal of Theory and Research, 13*(3), 242-252.
- Ryeng, M. S., Kroger, J., & Martinussen, M. (2013b). Identity status and self-esteem: A meta-analysis. *Identity: An International Journal of Theory and Research, 13*(3), 201-213.
- Schwartz, S. J. (2001). The evolution of Eriksonian and neo-Eriksonian identity theory and research: A review and integration. *Identity: An International Journal of Theory and Research, 1*(1), 7-58.
- Schwartz, S. J. (2002). Convergent validity in objective measures of identity status: Implications for identity status theory. *Adolescence, 37*(147), 609-625.
- Selles, T., Markstrom-Adams, C., & Adams, G. R. (1994, February). *Identity formation and risk for suicide among older adolescents*. Paper presented at the Biennial Meetings of the Society for Research on Adolescence, San Diego, CA.

- Skinner, B. F. (1938). *The behavior of organisms: An experimental analysis*. New York, NY: Appleton-Century.
- Small, G., & Vorgan, G. (2008). *iBrain: Surviving the technological alteration of the modern mind*. New York, NY: Collins Living.
- Sokol, J. T. (2009). Identity development throughout the lifetime: An examination of Eriksonian theory. *Graduate Journal of Counseling Psychology, 1*(2), 139-148.
- Spradley, J. P. (1979). *The ethnographic interview*. New York, NY: Rinehart & Winston.
- Sprinthall, N. A., & Collins, W. A. (1984). *Adolescent psychology: A developmental view*. Reading, MA: Addison-Wesley Pub. Co.
- Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 236-247). Thousand Oaks, CA: Sage Publications.
- Stake, R. E. (2006). *Multiple case study analysis*. New York, NY: The Guildford Press.
- Statistica.com (2016). Retrieved from [www.statistica.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide](http://www.statistica.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide)
- Street, B. (2003). What's new in the new literacy studies? Critical approaches to literacy in theory and practice. *Current Issues in Comparative Education, 5*(2), 77-91.
- Stern, S. (2008). Producing sites, exploring identities: Youth online authorship. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 95-117). Cambridge, MA: The MIT Press.
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *Children and Electronic Media, 18*(1), 119-146.

- Subrahmanyam, K., Kraut, R. E., Greenfield, P. M., & Gross, E. F. (2000). The impact of home computer use on children's activities and development. *The Future of Children, 10*, 123-144.
- Subrahmanyam, K., & Smahel, D. (2010). Adolescents' digital worlds: An introduction. In K. Subrahmanyam & D. Smahel (Eds.), *Digital Youth: The role of media in development* (1-25). New York, NY: Springer.
- Susman, E. J., & Rogol, A. (2004). Puberty and psychological development. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 15–44). Hoboken, NJ: Wiley.
- Sweeney, C. (1999, October 17). In a chat room you can be NE1. *New York Times Magazine*. Retrieved from <http://www.nytimes.com/1999/10/17/magazine/in-a-chat-room-you-can-be-n-e-1.html?module=Search&mabReward=relbias%3Ar>
- Tandoc, E. C., Ferrucci, P., & Duffy, M. (2014). Facebook use, and depression among college students: Is facebooking depressing? *Computers in Human Behavior, 43*, 139-146.
- Tapscott, D. (1998). *Growing up digital: The rise of the net generation*. San Francisco, CA: McGraw-Hill.
- Taraborelli, D. (2008). Soft peer review: Social software and distributed scientific evaluation. Retrieved from [http://nitens.org/docs/spr\\_coop08.pdf](http://nitens.org/docs/spr_coop08.pdf)
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*, 77-100.
- Thongmak, M. (2013). Social network system in classroom: Antecedents of Edmodo adoption. *Journal of e-Learning and Higher Education, 2013*, 1-15.

- Tobin, G. A., & Begley, C. M. (2004) Methodological rigor within a qualitative framework. *Journal of Advanced Nursing*, 48(4), 388-396.
- Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Englewood Cliffs, NJ: Prentice Hall.
- Tsukayama, H. (2013). Facebook still leads social media, but sees slower growth among young users. *The Washington Post*. Retrieved from <http://www.redcode.net/2015/04/08/what-teen-problem-facebook-still-dominates-among-teenagers>
- Tyner, K. (1998). *Literacy in a digital world: Teaching and learning in the age of information*. New York, NY: Routledge.
- Turkle, S. (2012). *Alone together: Why we expect more from technology and less from each other*. New York, NY: Basic Books.
- Turkle, S. (1999). Looking toward cyberspace: Beyond grounded sociology. *Contemporary Sociology*, 28(6), 643-648.
- Upbinn, B. (2012). Facebook buys Instagram for \$1 billion. *Forbes*. Retrieved from [www.forbes.com/sites/bruceupbin/2012/04/09/facebook-buys-instagram-for-1-billion-wheres-the-revenue](http://www.forbes.com/sites/bruceupbin/2012/04/09/facebook-buys-instagram-for-1-billion-wheres-the-revenue)
- Utz, S., Muscanell, N., & Khalis, C. (2015). Snapchat elicits more jealousy than Facebook: A comparison of Snapchat and Facebook use. *Cyberpsychology, Behavior and Social Networking*, 18(3), 141-146.
- Vaterlaus, J. M., Barnett, K., Roche, C., & Young, J. A. (2016). Snapchat is more personal: An exploratory study on Snapchat behaviors and young adult interpersonal relationships. *Computers in Human Behavior*, 62, 594-601.



- Vazire, S., & Gosling, S.D. (2004). e-perception: Personality impressions based on personal websites. *Journal of Personality and Social Psychology*, 87(1), 123-132.
- Vorvoreanu, M. (2009). Perceptions of corporations on Facebook: An analysis of Facebook social norms. *Journal of New Communications Research*, 9(1), 67-86.
- Vygotsky, L. (1934/1987). Thinking and speech. In R.W. Rieber & A.S. Carton (Eds.), *The collected works of L.S. Vygotsky, Volume 1: Problems of general psychology* (pp. 39–285). New York, NY: Plenum Press.
- Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology*, 18, 341-358.
- Weber, S., & Mitchell, C. (2008). Imaging, keyboarding, and posting identities: Young people and new media technologies. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 25-47). Cambridge, MA: The MIT Press.
- Weiser, E. (2001). The functions of Internet use and their social and psychological consequences. *CyberPsychology & Behavior*, 4, 723–742.
- Wellman, B., & Hampton, K. (1999). Living networked on and offline. *Contemporary Sociology*, 28(6), 648-654.
- Wiles, R., Prosser, J., Bagnoli, A., Clark, A., Davies, K., Holland, S., & Renold, E. (2008). *Visual ethics: Ethical issues in visual research*. Economic & Social Research Council. Retrieved from <http://eprints.ncrm.ac.uk/421/1/MethodsReviewPaperNCRM-011.pdf>
- Willett, R. (2008). Consumer citizens online: Structure, agency, and gender in online participation. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 49-69). Cambridge, MA: The MIT Press.

- Williams, D., Consalvo, M. Caplan, S., & Yee, N. (2009). Looking for gender (LFG): Gender roles and behaviors among online gamers. *Journal of Communication*, 59, 700–725.
- Wilson, D. W., & Proudfoot, J. G. (2014). *Saving face on Facebook: Impression management as motivation to use social networks*. Paper presented at 20<sup>th</sup> Americas Conference on Information Systems, Savannah, GA. Retrieved from [aisel.aisnet.org/cgi/viewcontent.cgi?article=1665](http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1665)
- Zhang, Q., Cheng, L., & Boutaba, R. (2010). Cloud computing: State-of-the-art and research challenges. *Journal of Internet Services and Applications*, 1(1), 7-18.

## Appendices

### Appendix A: Introduction Script to Administer Ego Questionnaire

[After identifying participants and securing informed consent]

Thank you for your time today. My name is David Valdez and I am collecting research on how some factors influence your sense of self. I'm also interested in learning how you might use a social networking platform like Facebook.

I will be asking you take about 15 minutes to answer several survey questions. Please know that there are no right or wrong answers. I am only interested in your personal opinion--which might be different from someone else's. That's fine. Please do not answer in any way you might think I want you to answer or in a way you might think is popular. Only answer in a way that is truly authentic for you. Once you begin the survey, you may stop at any point. While I would appreciate you completing the survey to its completion, I understand that you may want to discontinue. There are no penalties or repercussions for discontinuing at any point.

I will keep your survey responses confidential.

Do you have any questions?

## Appendix B: Post-Questionnaire Debriefing Script

Thank you again for your time today. The information you provided me today will help me to better understand how you might be using Facebook and what influences your sense of self.

I am going to distribute one final handout. This is my email contact. If you or your parents have any follow-up questions about my research or would like to know the final outcomes of my study, please send me an email so that I can share information with you.

Does anyone have any questions?

Thank you.

X

Thank you again for your time today.

The information you provided me today will help me to better understand how you might be using Facebook and what influences your sense of self.

If you or your parents have any follow-up questions about my research or would like to know the final outcomes of my study, please send me an email so that I can share information with you.

David Valdez

dvaldez813@gmail.com

## Appendix C: Marcia Identity Status Questionnaire

Please respond to the following survey questions as honestly as possible. There are no 'right' or 'wrong' answers. All of the information you provide will be kept private. Please do not include your name on this survey.

Age: \_\_\_\_\_

Gender: Female Male

Please indicate your ethnicity:

Please indicate your race:

Hispanic or Latino \_\_\_\_\_

American Indian or Alaska Native \_\_\_\_\_

Not Hispanic or Latino \_\_\_\_\_

Asian \_\_\_\_\_

Black or African American \_\_\_\_\_

Native Hawaiian or Pacific Islander \_\_\_\_\_

White/Caucasian \_\_\_\_\_

Use the following 5-point scale to indicate the extent to which you agree with each of the items on this questionnaire. Check the box for each item that best matches your opinion.

		Strongly Agree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1.	I haven't chosen the occupation I really want to get into, and I'm just working at whatever is available until something better comes along.					
2.	When it comes to religion, I just haven't found anything that appeals and I don't really feel the need to look.					

		Strongly Agree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
3.	My ideas about men's and women's roles are identical to my parents'. What has worked for them will obviously work for me.					
4.	There's no single "life-style" which appeals to me more than another.					
5.	There are a lot of different kinds of people. I'm still exploring the many possibilities to find the right kind of friends for me.					
6.	I sometimes join in recreational activities when asked, but I rarely try anything on my own.					
7.	I haven't really thought about a "dating style." I'm not too concerned whether I date or not.					
8.	Politics is something that I can never be too sure about because things change so fast. But I think it's important to know what I can politically stand for and believe in.					
9.	I'm still trying to decide how capable I am as a person and what jobs will be right for me.					
10.	I don't give religion much thought and it doesn't bother me one way or the other.					
11.	There's so many ways to divide responsibilities in marriage. I'm trying to decide what will work for me.					
12.	I'm looking for an acceptable perspective for my own "life-style" view, but I haven't really found it yet.					
13.	There are many reasons for friendships, but I choose my close friends on the basis of certain values and similarities that I've personally decided on.					

		Strongly Agree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
14.	While I don't have one recreational activity I'm really committed to, I'm experiencing numerous leisure outlets to identify one I can really get involved in.					
15.	Based on past experiences, I've chosen the type of dating relationship I want now.					
16.	I haven't really considered politics. It just doesn't excite me much.					
17.	I might have thought about a lot of different jobs, but there's never really any question since my parents said what they wanted.					
18.	A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.					
19.	I've never really seriously considered men's and women's roles in marriage. It just doesn't seem to concern me.					
20.	After considerable thought I've developed my own individual viewpoint of what is for me an ideal "life-style" and don't believe anyone will be likely to change my perspective.					
21.	My parents know what's best for me in terms of how to choose my friends.					
22.	I've chosen one or more recreational activities to engage in regularly from lots of things and I'm satisfied with those choices.					
23.	I don't think about dating much. I just kind of take it as it comes.					
24.	I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.					

		Strongly Agree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
25.	I'm really not interested in finding the right job; any job will do. I just seem to flow with what is available.					
26.	I'm not sure what religion means to me. I'd like to make up my mind but I'm not done looking yet.					
27.	My ideas about men's and women's roles come right from my parents and family. I haven't seen any need to look further.					
28.	My own views on a desirable life style were taught to me by my parents and I don't see any need to question what they taught me.					
29.	I don't have any real close friends, and I don't think I'm looking for one right now.					
30.	Sometimes I join in leisure activities, but I really don't see a need to look for a particular activity to do regularly.					
31.	I'm trying out different types of dating relationships, I just haven't decided what is best for me.					
32.	There are so many different political parties and ideals, I can't decide which to follow until I figure it all out.					
33.	It took me a while to figure it out, but now I really know what I want for a career.					
34.	Religion is confusing to me right now. I keep changing my views on what is right and wrong for me.					
35.	I've spent some time thinking about men's and women's roles in marriage and I've decided what will work best for me.					
36.	In finding an acceptable viewpoint to life itself, I find myself engaging					



		Strongly Agree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
	in a lot of discussions with others and some self-exploration.					
37.	I only pick friends my parents would approve of.					
38.	I've always liked doing the same recreational activities my parents do and haven't ever seriously considered anything else.					
39.	I only go out with the type of people my parents expect me to date.					
40.	I've thought my political beliefs through and realize I can agree with some and not other aspects of what my parents believe.					
41.	My parents decided a long time ago what I should go into for employment and I'm following through on their plans.					
42.	I've gone through a period of serious questions about faith and can now say I understand what I believe in as an individual.					
43.	I've been thinking about the roles that husbands and wives play a lot these days, and I'm trying to make a final decision.					
44.	My parents' views on life are good enough for me, I don't need anything else.					
45.	I've tried many different friendships and now I have a clear idea of what I look for in a friend.					
46.	After trying a lot of different recreational activities, I've found one or more I really enjoy doing by myself or with friends.					
47.	My preferences about dating are still in the process of developing, I haven't fully decided yet.					
48.	I'm not sure about my political beliefs, but I'm trying to figure out					

		Strongly Agree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
	what I can truly believe in.					
49.	It took me a long time to decide but now I know for sure what direction to move in for a career.					
50.	I attend the same church my family has always attended. I've never really questioned why.					
51.	There are many ways that married couples can divide up family responsibilities. I've thought about lots of ways and now I know exactly how I want it to happen for me.					
52.	I guess I just take life as it comes, and I don't see myself living by any particular viewpoint to life.					
53.	I don't have any close friends. I just like to hang around with the crowd.					
54.	I've been experiencing a variety of recreational activities in hopes of finding one or more I can enjoy for some time to come.					
55.	I've dated different types of people and now know exactly what my own "unwritten rules" for dating are and who I will date.					
56.	I really have never been involved in politics enough to have made a firm stand one way or the other.					
57.	I just can't decide what to do for an occupation. There are so many that have possibilities.					
58.	I've never really questioned my religion. If it's right for my parents, it must be right for me.					
59.	Opinions on men's and women's roles seem so varied that I don't think much about it.					
60.	After a lot of self-examination I have established a very definite view on what my own life-style will be.					

		Strongly Agree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
61.	I really don't know what kind of friend is best for me. I'm trying to figure out exactly what friendship means to me.					
62.	All of my recreational preferences I got from my parents and I haven't really tried anything else.					
63.	I date only people my parents would approve of.					
64.	My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.					

## Appendix D: Technology-use questionnaire

Thank you for taking a few minutes to complete this survey about your use of social media tools. In particular, I would like for you to think about your use of Facebook. There are no right or wrong answers. Please respond in a way that is true for your experience of Facebook.

1. Do you have a Facebook account? YES NO
2. Do you have more than one Facebook account? YES NO
3. Thinking of your primary Facebook account, did you create a profile using your real name? Why/why not?
4. Have you ever posted personal interests (such as movies, music) to your primary Facebook account?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]
5. Have you ever posted a picture of yourself to your primary Facebook account?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]
6. Have you ever posted a video of yourself to your primary Facebook account?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]
7. Have you ever updated a personal relationship status to your primary Facebook account?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]
8. Have you ever deleted people from your Facebook network/friends list?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]
9. Have you ever posted a picture or posted a status update on your Facebook account that showed yourself in a way that was not accurate?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]

10. Have you ever posted a picture or posted a status update on your Facebook account that you later regretted?  
[If yes: What happened? If no: What prevented you from doing so?]
11. Have you ever been bullied or teased for something you posted to your primary Facebook account?  
[If yes: What motivated you to do so? If no: What prevented you from doing so?]
12. Do you feel that your primary Facebook profile accurately represents who you are?  
Why/why not?
13. Generally, how often do you access your primary Facebook account? (several times a day, once a week, etc.)
14. In addition to (or instead of Facebook), what other networking platforms do you regularly use?

Flickr      Google+      Instagram      LinkedIn      Other(s): \_\_\_\_\_

Pinterest      Snapchat      Twitter      Tumblr

## Appendix E: Script Semi-structured Introduction-Interview 1

Thank you for taking the time to meet with me today. I appreciate your help. I am interested in learning how you might use Facebook in your everyday life and to better understand how you think about the person you are. Do you have any follow up questions about the purpose of our meeting?

I have a few questions to ask you. There are no right or wrong answers. I'm interested in your point of view which might be different from someone else's. That's fine. Do you have any questions about what I'm expecting?

Our interview together will take about 20 to 30-minutes. You are free to leave at any time or you may opt to not answer any of my questions. Again, that's fine. Do you have any questions about the process?

Any information you share will be kept confidential. I will not use your real name or personally identifiable information in anything I might write. While my priority is to make sure your information is private, there are a couple of issues I must explain. If during the course of our interview, I learn of plans you might have to hurt yourself or to hurt others, I will need to share this information with a parent and/or school official in order to keep you safe. Do you have any questions?

In addition, if during the course of our interview, I learn of abuse, neglect, or harm you are currently experiencing, I will need to share this information with an parent and/or school official in order to keep you safe. Do you have any questions?

As I go through my questions, please feel free to interrupt me or ask for clarification if anything is unclear?

Do I have your permission to make an audio recording of our conversation? The recording will only be used for research purposes. I will keep the recording safe among my personal belongings and will not jeopardize your privacy. I will destroy the recording after the completion of my research.

Recording our conversation helps me to refer back to your comments later so I don't miss anything important you share. You can also listen to your answers on a later date to make sure you said everything you wanted and answered in a way which is true for you. If you don't want me to record our conversation, that is okay, but I will need to pause frequently to take notes as we speak. Do you have any questions?

## Appendix F: Script Semi-structured Debriefing

Thank you today for your time. The information you shared with me today will help me to better understand how teenagers tend to use Facebook and show how these patterns help to form an identity.

### IF APPLICABLE:

Your audio recording will be stored safely. I will make sure to destroy the recording as soon as my research is complete. In the coming weeks, I will contact you again to review your recording. I want to make sure you have the chance to add any additional comments or to change any answers you may have given.

In the meantime, my email address is [dvaldez813@gmail.com](mailto:dvaldez813@gmail.com). If you or your parents have any questions about our conversation today, please get in touch with me. Do you have any questions?

Thank you again.

## Appendix G: Semi-structured Interview Stems- Interview 2

1. According to your earlier responses on the survey, the results show you to be in a status called \_\_\_\_\_ (include as appropriate).

IDENTITY ACHIEVEMENT  
IDENTITY FORECLOSURE  
IDENTITY MORATORIUM  
IDENTITY DIFFUSION

According to this status you are: (include as appropriate)

**Identity Achievement** – You have developed a well-defined personal values and self-concepts. Your identity may be expanded and further defined in adulthood, but the basics are there. You are committed to an ideology and have a strong sense of ego identity.

**Identity Foreclosure** – You blindly accept the identity and values that were given to you in childhood by your family. You are committed to an identity but not as a result of your own searching or crisis.

**Identity Moratorium** – You have acquired a vague or ill-formed ideological and occupational commitments; you are still undergoing an identity search- a crisis. You are beginning to commit to an identity but are still developing it.

**Identity Diffusion** – You may not have a clear idea of your identity and are not at the moment making an attempt to find that identity. You may have struggled to find your identity, but have not resolved it. You seem to have stopped trying. There is no commitment and no searching.

Do you agree with this characterization?  
Why/why?

[The researcher recognizes that it may be necessary to explain the identity statuses in a less formal language so as to eliminate confusing psychological jargon]

2. Do you feel as if you have a fairly strong sense of the person you are or do you feel as if you are still exploring different sides of your personality?
3. I have a laptop with me. Could you log onto your Facebook account and let me see how you typically maneuver through your account?

[The researcher will note patterns of engagement and length of time]

4. Do you think that the ways in which you use Facebook ever helps you to learn about yourself, like interests, future jobs, potential educational efforts, or even what you look for in a romantic relationship? How so? Can you give me any examples?



5. If I only saw your Facebook profile, do you think I would have a pretty good sense of your personality by reviewing your likes, interests, pictures, and posts? Please explain why or why not?
6. I've been asking about how you use Facebook and how it might help your search for a sense of self. Do you think that there really is any connection or are they unrelated? Please share your thoughts.

## Appendix H: Ethical Documentation and IRB forms

Recruitment letter

USF eIRB: # 18316

My name is David Valdez. I am your student's IB Psychology teacher. I am collecting information in order to complete research for my dissertation through the University of South Florida, College of Education, Department of Secondary Education.

I am interested in learning if certain types of students use Facebook in ways that are different from other kinds of students. The theory is based on a model your student will learn about in our course senior year. The model suggests that during adolescence, students may be in one of four different identity statuses. I plan to administer a survey to willing students in order to determine which identity status best fits them. The survey will take about 15 minutes to complete. This study is not part of your student's normal curriculum. This is purely a voluntary research study.

Once I have a sense of the different identity types across my senior-level classes, I will ask four students to continue for additional follow-up participation. These four students will document how/when they use Facebook by recording their behaviors/habits into a secure online journal. These four students will also allow me to follow them on Facebook in order to verify the behaviors/habits they document in their journals. I will not engage with the students online (no instant messaging, no post exchanges).

Finally, these four students will be asked to sit with me for three interviews (about 20 minutes each) at the beginning, middle, and end of the study. The interviews allow me to check on students about their progress and to make sure that I understand how they are using Facebook without relying on my inferences alone. I will make audio recordings of the interviews so that I can transcribe the conversation and analyze them for potential patterns or themes.

Overall, gaining insight into the subtle ways different students use social media platforms, like Facebook, reveals how their present and reflect their adolescent identity. This may hold important information for teachers in order to better include technology in their classrooms and/or to make curriculum choices that are relevant and interesting to student-learners.

No physical harm or injury will come to your student if they choose to participate. I will keep all of their information confidential and destroy any recordings and documentation at the conclusion of the study. If your student reveals plans to hurt him or herself or others—or mentions current abuse or neglect, I must report this information to our school personnel.

Students who volunteer to participant will gain a deeper understanding of a model we will study during the senior year. In addition, because IB psychology students need to complete an internal assessment (IA) as part of their course requirement, they will be able to directly observe how their teacher conducts a study and collects data. They will gain first-hand knowledge of research procedures and protocols. The experience can be very beneficial for student volunteers. Additionally, each participant will gain knowledge about their identity type and four participants will learn about their Facebook behaviors and time consumption.

I have coordinated my research and permission with the offices of the University of South Florida and the offices of Pinellas County Schools. Our principal, Mrs. Gonzalez and our IB Administrator, Mrs. Barker are both aware of and have given permission for my research. Volunteering is completely optional and there is no disadvantage from not participating. There will be no impact on your student's grade, class standing, or teacher opinion. Your student is free to withdraw from the study at any time with no repercussion.

If you have questions or would like to discuss the research aims, please contact me at 813-732-5790 so that I can clarify any concerns.

Thank you for your consideration,

David Valdez

██████████ County legal guardian consent/participant assent form

**Purpose:**

The purpose of this study is to examine how activities on social networking sites such as Facebook may influence identity or self-discovery. The study is part of the dissertation thesis in education, under the supervision of Professor Berson at the University of South Florida.

**Procedure:**

If you agree to be in this study, you will be asked to do the following:

1. Complete a survey about the development of your identity and the habits you practice while on Facebook.
2. You may be contacted for a follow-up face-to-face interview depending on your responses to the survey.

The total time required to complete the survey should be no longer than 20 minutes.

**Benefits/Risks to Participant:**

You will not be penalized in your class if you chose not to participate. If you do choose to participate, it will in no way influence your performance in this class.

Participants will learn about a theory of adolescent identity formation and will help contribute to the body of knowledge in education and psychology.

Risks include any discomfort you may feel while responding to personal questions about the development of the sense of self you have created.

**Voluntary Nature of the Study/Confidentiality:**

Your participation in this study is entirely voluntary and you may refuse to complete the study at any point during the study, or refuse to answer any questions with which you are uncomfortable.

You may stop at any time and ask the researcher any questions you may have. You may include your name on the survey for identification purposes of a 20 minute follow-up interview. Although you may not be contacted for follow-up, you may choose not to include your name if you do not want to be contacted for additional follow-up research. Your anonymous participation in the survey is certainly appreciated.

Data collected will be accessible only to the researcher. Any future reporting of data will never contain your name or other personally identifiable information.

**Contacts and Questions:**

At this time you may ask any questions you may have regarding this study. If you have questions later, you may contact David Valdez at dvaldez813@gmail.com, or his faculty supervisor, Dr. Michael Berson at 813-974-3400 or berson@usf.edu.

**Statement of Consent:**

I have read the above information. I have asked any questions I had regarding the procedure and they have been answered to my satisfaction. I consent to participate in this study.

Name of Participant: \_\_\_\_\_ Date: \_\_\_\_\_ Age: \_\_\_\_\_  
(please print)

Signature of Participant: \_\_\_\_\_

(Note: You must be 18 years of age or older to participate in this study. If you are under 18 years old, please have a parent or legal guardian sign to give consent- in addition to your signature.)

Name of Parent/Guardian: \_\_\_\_\_ Date: \_\_\_\_\_  
(please print)

Signature of Parent/Guardian: \_\_\_\_\_

Thank you for your participation!

USF Parental Permission form





## Parental Permission to Participate in Research Involving Minimal Risk

Information for parents to consider before allowing their child to take part in this research study

IRB Study # 18316

---

The following information is being presented to help you and your child decide whether or not your child wishes to be a part of a research study. Please read this information carefully. If you have any questions or if you do not understand the information, we encourage you to ask the research.

We are asking you to allow your child to take part in a research study called:  
Identity formation and online behaviors

The person who is in charge of this research study is David Valdez. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. He is being guided in this research by his faculty advisor at USF, Michael Berson, PhD.

The research will be conducted at Palm Harbor University High School.

---

### Why is this research being done?

The purpose of this study is to find out how different teenagers might be using Facebook to come to form their identity.

### Why is your child being asked to take part?

We are asking your child to take part in this research study because he/she is currently a Senior at [REDACTED] and actively enrolled in one of Mr. Valdez's psychology classes. Typically, high school Seniors are 17-18 years old and this is the age of interest for the current research regarding Facebook.

### Should your child take part in this study?

This informed consent form tells you about this research study. You can decide if you want your child to take part in it. This form explains:

- Why this study is being done.
- What will happen during this study and what your child will need to do.
- Whether there is any chance your child might experience potential benefits from being in the study.
- The risks of having problems because your child is in this study.





### Before you decide:

- Read this form.
- Have a friend or family member read it.
- Talk about this study with the person in charge of the study or the person explaining the study. You can have someone with you when you talk about the study.
- Talk it over with someone you trust.
- Find out what the study is about.
- You may have questions this form does not answer. You do not have to guess at things you don't understand. If you have questions, ask the person in charge of the study or study staff as you go along. Ask them to explain things in a way you can understand.
- Take your time to think about it.

The decision to provide permission to allow your child to participate in the research study is up to you. If you choose to let your child be in the study, then you should sign this form. If you do not want your child to take part in this study, you should not sign the form.

### What will happen during this study?

Your child will be asked to spend about one month in this study. It will take about four weeks for your child to document how he/she uses Facebook and record when/what he/she posts, uploads, or shares. Your child will only be asked to document their activity when he or she is on Facebook.

During the study, your child will be one of about 50 students who will be asked to complete a 15-minute survey during a class period. This is not a course requirement. From the group of 50, four students will be asked to continue for further study. These four students will be asked document their Facebook behaviors for four weeks into a secure online journal. During this four-week period, your child will be asked to take part in three 20-minute interviews after school on campus. The interviews will help to ensure the data collected is accurate and aligned to your child's online behaviors.

A study visit is one your child will have with the person in charge of the study or study staff. Your child will need to come for three study visits in all. Most study visits will take about 20 minutes.

Prior to the study visits, your child will not need to prepare any statements or bring any materials.

Below is the estimated timeline for the research study:

September 2: Recruit potential participants and obtain informed consent from participants and legal guardians. This will take the researcher approximately 10-15 minutes in each of his three Senior-level classes during Fall of 2014.

September 8: Administer identity status survey to willing participants. Approximately 15 minutes to complete the survey.

September 12: Identify four participants for multi-case study follow-up. These students will allow the researcher to follow their Facebook posts/statuses for four-weeks. Students will document their behaviors in a journal as needed. Time varies depending on frequency with social platform.

September 15-October 10: Collect data on Facebook behaviors and examine participant journals.

September 16: 1st semi-structured interview. Approx. 20 min.

September 29: 2nd semi-structured interview. Approx. 20 min.

October 13 & 14: final semi-structured interview. Approx. 20 min.

October 14: End of data collection from participants.

At each visit, your child will be asked:

Throughout the four-week period, your child will be asked maintain an online journal where he/she will document their Facebook use. This journal will be a record of when your child goes online, what he/she does while on Facebook, what is posted, uploaded, or 'liked' and reflections about why. The time required to do this is dependent upon how frequently your child accesses Facebook.

For visits, your child will not need to prepare any materials or collect any resources. The visits will be used for an interview about your child's opinions on technology and Facebook. Each interview should take no longer than 20 minutes.

Your child will be given a 15-minute survey to complete. The survey will help to establish which one of four categories your child may fall into as an identity type. Each identity type has certain beliefs and outlooks that this research is examining across Facebook use.

- Your child will be asked to sit for three 20-minute interviews. The interviews will help to establish your child's opinions about technology in the classroom and the value (if any) of social networking tools, like Facebook.
- The last interview visit will provide the researcher the chance to share findings and conclusions about the study with the participants. This will give the participants the chance to agree or disagree with researcher's conclusions and provide feedback about the experience.
- Audio recording will be captured at each study visit interview. Participants may decline to be recorded without penalty and may continue in the study should they choose. The recording will help the researcher to review comments at a later time for trends or patterns in your child's comments. The researcher will be the only person who will have access to and be able to hear the audio recordings. The audio recordings will be maintained until the end of the study and the recordings (and any transcripts) will be destroyed at the completion of the study.

### **How many other people will take part?**

Fifty students will be asked to complete the initial survey and four individuals will be asked to continue into the second portion of the study lasting four-weeks.

### **What other choices do you have if you decide not to let your child to take part?**

If you decide not to let your child take part in this study, that is okay. You should not feel that there is any pressure for your child to take part in this study. They are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits they are entitled to receive if they stop or you want them to stop taking part in this study. Your decision to allow them to participate or not to participate will not affect their school record or course grades.



### **Will your child be compensated for taking part in this study?**

There is no financial compensation for participating in this study. In addition, your child will not receive any extra credit in his/her course for completing the study. You will receive no payment or other compensation for taking part in this study.

### **What are the potential benefits to your child if you let him / her take part in this study?**

The potential benefits to your child include:

Students who volunteer to participate may gain a deeper understanding of a model they will study during the senior year of psychology. In addition, because IB psychology students need to complete an internal assessment (IA) as part of their course requirement, they will be able to directly observe how to conduct a study and collect data. They will gain first-hand knowledge of research procedures and protocols. The experience can be very beneficial for student volunteers. Additionally, each participant will gain knowledge about their identity type and four participants will learn about their Facebook behaviors and time consumption.

### **What are the risks if your child takes part in this study?**

There are no known risks to those who take part in this study.

### **Conflict of Interest Statement**

The researcher is also the teacher of the student. The researcher will act responsibly to avoid conflicts between these two roles. The researcher will not communicate with participants online via instant messaging or posts with regards to any school related material or class content. In addition, the researcher will not discuss Facebook activity with the participant in class. Choosing to participate or not will in no way have an impact upon classroom instruction or grading. Avoiding conflicts which may arise will help the researcher to maintain the integrity of the data.

---

### **Privacy and Confidentiality**

We will keep your child's study records private and confidential. Certain people may need to see your child's study records. By law, anyone who looks at your child's records must keep them completely confidential. Although your child's specific responses and comments will not be shared with school staff, if your child indicates that he or she intends to harm him or herself or someone else, or if your child's responses on specific surveys indicate extreme emotional distress, we will contact district mental health counselors to ensure your child's safety as well as the safety of others. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, David Valdez.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This

is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

- Any agency of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP). This may include the Pinellas County School district.
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF Division of Research Integrity and Compliance, and other USF offices who oversee this research.

We may publish what we learn from this study. If we do, we will not include your child's name. We will not publish anything that would let people know who your child is.

### **You can get the answers to your questions, concerns, or complaints.**

If you have any questions, concerns or complaints about this study, call David Valdez at (813) 732-5790.

If you have questions about your child's rights, general questions, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638.

### **Consent for My Child to Participate in this Research Study**

It is up to you to decide whether you want your child to take part in this study. If you want your child to take part, please read the statements below and sign the form if the statements are true.

**I freely give my consent to let my child take part in this study.** I understand that by signing this form I am agreeing to let my child take part in research. I have received a copy of this form to take with me.

\_\_\_\_\_  
Signature of Parent of Child Taking Part in Study

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Parent of Child Taking Part in Study

### **Statement of Person Obtaining Informed Consent**

I have carefully explained to the parent of the child taking part in the study what he or she can expect from their child's participation. I hereby certify that when this person signs this form, to the best of my knowledge, he/ she understands:

- What the study is about;
- What procedures will be used;
- What the potential benefits might be; and
- What the known risks might be.

I can confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in the appropriate language. Additionally, this subject reads well enough to understand this document or, if not, this person is able to hear and understand when the form



is read to him or her. The parent signing this form does not have a medical/psychological problem that would compromise comprehension and therefore makes it hard to understand what is being explained and can, therefore, give legally effective informed consent. The parent signing this form is not under any type of anesthesia or analgesic that may cloud their judgment or make it hard to understand what is being explained and, therefore, can be considered competent to give permission to allow their child to participate in this research study.

\_\_\_\_\_  
Signature of Person Obtaining Informed Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Informed Consent

## USF Participant Assent form



### Assent to Participate in Research

Information for Persons under the Age of 18 Who Are Being Asked To Take Part in Research  
IRB Study # Pro00018316

---

**Title of study:** *Negotiating adolescent identity through Facebook use*

#### Why am I being asked to take part in this research?

You are being asked to take part in a research study about your identity is shaped during your Senior-level year of high school and what part (if any) social networking tools, like Facebook, might play. You are being asked to take part in this research study because you are a Senior and attend Palm Harbor University High School. If you take part in this study, you will be one of about 50 people at this site.

#### Who is doing this study?

The person in charge of this study is: David Valdez

#### What is the purpose of this study?

By doing this study, I hope to better understand how a social networking tool, like Facebook, might shape your sense of self and aspects of your identity. Your modern world is populated with technology and this study is intended to focus on one small aspect in order to examine its potential influence.

#### Where is the study going to take place and how long will it last?

The study will take place at ██████████ High School. You will be asked to complete a 15-minute survey. A small selection of about four students will be asked to complete some additional activities concerning their Facebook use and this can be completed online at home. These activities will last a few minutes, but will capture information over four weeks during the first semester.

#### What will you be asked to do?

- Fifty of you will be asked to complete a 15-minute survey.
- Four of you will be asked to document how you use Facebook across a one-month period. You will use an electronic journal to record when you post updates, make comments, upload or download photos/videos, etc.
- Each of the four volunteers will also meet with me three times during the month study for about 20-minutes. I will have some interview questions about your Facebook use and check your electronic journals to clarify any issues.

#### What things might happen if you participate?

To the best of my knowledge, your participation in this study will not harm you.

#### Is there benefit to me for participating?

We cannot promise that you will receive benefit from taking part in this research study. However, by taking part in this study you might learn more about how technology, specifically social networking sites like Facebook, might be shaping the way you think about your identity.

USF IRB: 18316

Version #1

July 28, 2014



**What other choices do I have if I do not participate?**

You have the alternative to choose not to participate in this research study. Your grades/class standing will not be affected in any way if you do not participate.

**Do I have to take part in this study?**

You should talk with your parents or guardian and others about taking part in this research study. If you do not want to take part in the study, that is your decision. You should take part in this study because you want to volunteer. If you do not choose to volunteer, your class grades/class standing will not be affected. There are no negative consequences or punishments for choosing not to participate.

**Will I receive any compensation for taking part in this study?**

You will not receive any compensation for taking part in this study.

**Who will see the information about me?**

Your information will be added to the information from other people taking part in the study so no one will know who you are.

**Can I change my mind and quit?**

If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to stop participating. Also, the people who are running this study may need for you to stop. If this happens, they will tell you when to stop and why.

**What if I have questions?**

You can ask questions about this study at any time. You can talk with your parents, guardian or other adults about this study. You can talk with the person who is asking you to volunteer. If you think of other questions later, you can ask them. You or your parents or guardian may contact me at 813-732-5790 or you can contact USF's Institutional Review Board at 813-974-5638.

**Assent to Participate**

I understand what the person conducting this study is asking me to do. I have thought about this and agree to take part in this study. I have been given a copy of this form.

\_\_\_\_\_  
Name of person agreeing to take part in the study

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of person agreeing to take part in the study

\_\_\_\_\_  
Name of person providing information (assent) to subject

\_\_\_\_\_  
Date



## Appendix I: Instructions for Online Diary

You will use the following link in order to access your online diary. This diary will be accessible to you 24-hours a day. Please do not share this link. Only access the link on devices you trust. I do not want you to accidentally leave your diary open for anyone to access.

I will be able to see your entries, but I will not edit or modify any of your entries.

Finally, one other person helping me during this study will be able to read your entries. This person will never contact you directly, nor will the person know any personally identifiable information about you--only what you enter into your diary. This person will help to make sure that I don't miss any information you might document that threatens your safety.

Use the following prompts every time you access your Facebook account, whether once a day or several times a day.

When making entries into your private diary, please be certain to include all of the following information every time you access your primary Facebook profile:

- 1.) Date & Time Facebook accessed? (i.e. May 1 @ 3:15pm)
- 2.) How was Facebook accessed? (i.e. phone, tablet, desktop?)
- 3.) How did you maneuver through Facebook? As best as you can recall, please document the sequence you moved through Facebook.
  - What did you do first, second, etc?
  - a. Did you update your status first? What did you post?
  - b. Did you then read new newsfeeds? How many did you click to read more? Why? What caught your interest about those specific feeds?
  - c. Were they any pictures that drew your attention? Why?
  - d. Did you 'like' or comment on anyone's status? What had they posted? What do you write?
  - e. Did you play any Facebook application games or complete any Facebook surveys?
- 4.) What time did you log out of Facebook/end your session?

## **Appendix J: Approvals and Certificates**

Certificate of Completion for Human Subjects and Clinical Practices from the Applications for Research Compliance (ARC) completed May 2, 2014.

# **Certificate of Completion**

## **David Valdez**

**Has Successfully Completed the Course in**

**CITI VA Human Subjects Protection and Good Clinical Practices**

**On**

**Friday, May 02, 2014**

9/19/2014 10:09:29 AM



Certificate of Completion for Social and behavioral Investigators and Key Personnel from the Applications for Research Compliance (ARC) completed April 30, 2014.

## Certificate of Completion

**David Valdez**

Has Successfully Completed the Course in

**CITI Social & Behavioral Investigators and Key Personnel**

On

**Wednesday, April 30, 2014**



9/19/2014 10:12:33 AM

IRB Letter of Approval received July 31, 2014

## eIRB: Study Approved

1 message

eirb@research.usf.edu <eirb@research.usf.edu>  
Reply-To: eirb@research.usf.edu  
To: dvaldez813@gmail.com

Thu, Jul 31, 2014 at 12:32 PM



### IRB Study Approved

To: David Valdez  
RE: Adolescent identity & online behaviors  
PI: [David Valdez](#)  
Link: [Pro00018316](#)

You are receiving this notification because the above listed study has received Approval by the IRB. For more information, and to access your Approval Letter, navigate to the project workspace by clicking the Link above.

*DO NOT REPLY: To ensure a timely response, please direct correspondence to Research Integrity & Compliance either through your project's workspace or the contact information below.*

*University of South Florida  
Research Integrity & Compliance, USF Research & Innovation  
3702 Spectrum Blvd Suite 165 - Tampa, FL 33612*

Template:\_000 - IRB Study: Approved

IRB Letter of Continuing Review received July 15, 2015



RESEARCH INTEGRITY AND COMPLIANCE  
Institutional Review Boards, FWA No. 00001669  
11901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799  
(813) 974-5638 • FAX (813) 974-7091

July 29, 2014

David Valdez  
Teaching and Learning  
Tampa, FL 33612

RE: **Expedited Approval for Initial Review**

IRB#: Pro00018316

Title: A qualitative multiple case study of Marcia's adolescent identity status model and Facebook habits among teens

Study Approval Period: 7/29/2014 to 7/29/2015

Dear Mr. Valdez:

On 7/29/2014, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents outlined below.

Approved Item(s):

Protocol Document(s):

[Revised Protocol Procedures per reviewer feedback](#)

(if in the future you need to submit an Amendment - please remove the document titled "USF IRB Protocol Procedures" as this should have been removed during this initial review)

**Study involves children and falls under 45 CFR 46.404: Research not involving more than minimal risk**

Consent/Assent Document(s)\*:

[Child Assent Form V1.pdf](#)

[Parental Permission Form V1.pdf](#)

\*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).



It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,



Kristen Salomon, Ph.D., Vice Chairperson  
USF Institutional Review Board

Letter of acknowledgement from school principal received July 28, 2014

From: Gonzalez Christen  
Sent: Monday, July 28, 2014 9:11 AM  
To: Valdez David  
Subject: Re: Valdez-Research

Good morning Mr. Valdez,

Yes, I am aware of your research to complete your doctorate and you have my permission to collect data as outlined by PCSB policies. Thank you and have a wonderful day.

Christen T. Gonzalez  
Principal

[REDACTED] High School

Letter of approval from county school board received August 18, 2014. Identifying info has been redacted.



ADMINISTRATION BUILDING  
201 Fourth St SW  
FD Box 2542  
Largo, FL 33709 2014  
Ph (727) 580 8000



August 18, 2014

Mr. David Valdez  
16646 Northdale Oaks Drive  
Greater Northdale, FL 33624

Re: Proposal number 0717-1314

Dear Mr. Valdez:

We are pleased to inform you that all required documentation has been received and reviewed. Your research titled, "Adolescent identity & online behaviors." has been approved. Approval is based on the application submitted to the Assessment, Accountability and Research (AAR) office.

I also would like to reinforce our practice on monetary rewards to school board staff and students; the school board staff cannot be paid for work performed related to this study during working hours and students may not be rewarded money for participating in a study. Monetary rewards shall be given to school(s) participating in the study.

Additionally, please be sure to file a copy of the parental consent forms in the student's cumulative folder.

Please notify this office of any modifications made to this study prior to initiating your study. If there are any questions or if additional information is needed, please contact the AAR office at 727-588-6252.

Best wishes for continued success.

Merlande Petit-Bois, Ph.D.  
Executive Manager, Evaluation  
Assessment, Accountability and Research



David J. Cook  
Vice Chairman  
Linda S. Foster  
James H. Clark  
Betsy Hooters  
Terry Kautner  
Peggy L. H. Stone  
Robin L. Wale  
Superintendent  
Merlande A. Petit-Bois, Ph.D.

## **Appendix K: Copyright Permission**

Adams, G. R. (1998). The objective measure of ego identity status: A reference manual.  
Retrieved from [http://www.uoguelph.ca/~gadams/OMEIS\\_manual.pdf](http://www.uoguelph.ca/~gadams/OMEIS_manual.pdf)

The original version of the Objective Measure of Ego-Identity Status was published in 1979. Two decades later the instrument is still being widely used in North America, Europe, Australia, and beyond. After twenty years of development, there have been numerous studies focusing on the estimation of the reliability and validity of items. Several modifications and revision of this measure of identity formation, based on an Eriksonian framework, and our own theoretical notions, and a multitude of studies investigating the ego-identity status paradigm, have contributed to the preparation of a revised reference manual to provide information on the psychometric qualities of this instrument.

This manual is developed with the intention of introducing the user to the framework of the test, an overview of its various stages of construction, and a summary of information that has been provided over several years in various publications. The versions of the tests included in this manual reflect our efforts in test construction and provide information of our publications regarding available instrumentation.

In certain cases it may be useful to refer to the publications for further elaboration of tabled data.

The Objective Measure of Ego-Identity Status is a self-report alternative to a clinical interview methodology. It evolved from research experience with the semi-structured interview to allow for wider applications of the foundation constructs of the Ego-Identity Status Paradigm. This self-report measure can be used for research and clinical or educational assessments of identity formation.

The development of this instrument has been supported through research grants from the Utah State University Agricultural Experiment Station, National Institute of Mental Health, and the Social Science and Humanities Research Council of Canada. Research scientists who purchase this manual have permission to copy the manual and instrument for use in projects that have been approved by university human subjects committees. There are no limits to the number of copies of test items for this purpose. Graduate students are granted permission to place the test items in their thesis appendices. Educational or clinical assessments, using the measure, must be accompanied by written approval through arrangements with the copyright holder.

Gerald R. Adams  
Fall, 1998

## Appendix L: Introduction to Summer Assignment

IB/AP Psychology-I

Ψ

Hello- I'm Mr. Valdéz and I'm happy to learn that you are planning on taking Psychology next year. I provide a Summer Assignment that introduces you to some of the themes we study in preparation for the AP exam you will take in May 2014 and the IB exam in 2016.

In order to access the materials, you will need to complete the Summer Assignment, go to:

<http://www.mediafire.com/#ocstt7d0yasse>

Or you can access the materials from this QR code:



- Begin with the document entitled:  
“START HERE-Junior-Summer Assignment”
- The readings are comprised of several pdfs you can read on your tablet, computer, or phone.
- If you would like me to upload the assignment to a USB-flash drive for you, please see me as soon as possible so that I can help you prepare for the assignment. If you have problems accessing the materials or need me to email you over the summer, please contact me at: [dvaldez813@live.com](mailto:dvaldez813@live.com).

## Appendix M: Summer Assignment

IB Psychology  
Summer Assignment  
2013-2014

---

Hello New Juniors!



### *What's this all about?*

Welcome to Psychology. I am excited to have you be a new member of our class. Whether you are HL or SL, this summer assignment will begin to introduce you to several applications and practical insights gained from studying psychology. The readings you complete over the summer will provide a background for in-class discussions and examples of empirical evidence. We do a great deal of talking in class. I value your opinions. Reading these assignments should give you some helpful information to offer as we carry out discussions.

Completing this Summer Assignment will give you an idea of the kinds of topics we study. I think it's important for you to know about the nature of the course early on so you can decide if this is where you'll want to be for the next two years. *TWO YEARS!!!* If you feel that the material you encounter for this Summer Assignment gives you difficulty or you do not feel that the content we will cover is to your liking, you will want to see the guidance office *as soon as we return from summer break* in order to select another class to fulfill your sixth subject obligation. Otherwise, my hope is that you find most of the readings interesting and thought-provoking. Even if you disagree with some of the evidence presented, your opinion will be valued and appreciated in our class. I would encourage you to stay with Psychology.

### *So what do I have to do?*

This summer assignment will acquaint you with some of the themes and questions of



## Psychology

human behavior we will encounter throughout our studies. I selected readings that I felt would be interesting and relevant to our studies. Some of the readings are very brief and may take you only a few minutes to read. Others may take anywhere from ten to fifteen minutes...still not too bad. After each reading there are a few questions to answer. Often the questions may seem rather broad. These are more opinion-based. Please share with me your thoughts and try to support your response with evidence from the reading (include page numbers when you cite the text). You'll see that other questions are content-related. These check on facts/information you acquired from the reading. Don't worry too much; I am looking for you to demonstrate that you have completed the reading and for you to engage in some critical thinking. As long as you can successfully accomplish that, you will earn full credit.

Please note that the Summer Assignment should be **your own personal work** and you may **not** 'borrow', copy, cut-and-paste another student's work. You may discuss some of the ideas with friends/family, but the work you submit should be authored originally by you alone.



Assignment Fourteen requires you to read a little more than the prior assignments. It's mostly an independent endeavor. We will eventually have presentations on these summer readings so I'm hoping that some of you will select one of the topics in Assignment 14 to present. The question for Assignment Fourteen is very brief. I just need to know what topic you selected to read and tell me briefly what you learned and your thoughts about it.

Assignment Fifteen is much lengthier, so plan wisely. There is no written portion to complete for Assignment Fifteen, but we will have an assessment (a test) once we get settled into the first six-weeks. Please be prepared by making sure you read carefully and come to class with any questions or terms you didn't understand. We will have some in-class time to review the reading before the assessment (the test), but it is in your best interest to have the reading finished before we begin school. The assessment (test) will NOT be the first session of class, but you should have the reading done before school begins.



### ***How long is this going to take?***

Although these estimates will vary from person to person depending on individual circumstances over the summer, Assignments One through Fourteen should take approximately three hours to complete. Assignment Fifteen may take anywhere from two to three hours to complete. Typically, the reading homework for our Psychology class will be about ten pages each session. If you



can, try and note the time it takes you to complete about ten pages of text. This will be helpful once the semester begins so you can budget time with other classes.

So it may take you about six to seven hours to complete the entire psychology summer assignment. Although it may feel as if you have 'the whole summer' to finish the assignment, time passes quickly when you're not in school. I suggest you spread the assignment over several days in order to complete it, rather than trying to finish it in one sitting. I wouldn't even want to read psychology for seven hours at one time! You'll retain more information if you take advantage of the 'spacing effect' (Google the term to learn the psych behind it).

### ***How much am I supposed to write?***

How long are your responses supposed to be to each question? You probably have heard from teachers before that they emphasize quality over quantity. The truth is, I don't have any preconceived ideas about how long each of your responses should be. Look, overall, I



need to see that you read and engaged the material somehow. This is *your first chance to impress me*—to show me what kind of work you do. Eleventh grade begins the official IB program (not-pre IB/pre-diploma). Show me that you can think critically, write effectively, and know how to complete work independently. This will be the very first encounter I have with the quality of work you can complete. My hope is that you write enough to convince me that you have thoroughly read and thought about the material. How much you write to achieve this goal reveals to me what you think is necessary to succeed in the program.

***What's the deal with the book?***

There is a great deal of reading to complete in this course for both HL and SL. It is after all an AP course. Your primary textbook for your Junior year will be Myers' Psychology for AP by David Myers. It's a good introductory text. It's the kind of text an intro college course might use.

I will assign you a proper textbook Session One. If, however, you'd like to purchase your own book in order to write in it, highlight passages, etc., you can find used copies online from a trusted retailer. Again, it is NOT necessary to buy your own copy. But just in case you're the kind of student who likes to mark-up your own book, make sure you get the right version:



***What do I do if I don't understand?***

You may encounter a question from the assignment you're not sure how to answer over the summer. You might find you've read something you didn't completely understand. What do you do? If you need

to contact me over the summer, use the e-mail: dvaldez813@live.com. I will be traveling over the summer so while I may not be able to respond right away...I will be certain to do so as soon as possible. Or, you can contact me via Facebook.

Our class has a Facebook group under the profile name of Phineas Gage. This is a protected profile so it is only available to IB/AP Psych students at PHU. If you'd like to join, send a friend request to Phineas and include a personal message telling me who you are (i.e. your name and that you'll be in Psych next year). If you send a friend request without telling me who you are, I won't be able to confirm you. I want to make sure that whoever friends Phineas is a PHU IB Psych student. There are several users who have the name Phineas Gage, so use the following profile ID:



<http://www.facebook.com/ibpsychology>

You should see a black and white photo of a man with one eye closed. You are free to search on your own and learn who Phineas Gage is, but we will eventually encounter him during the second six-weeks.

Some of you may not have a Facebook account or do not want to create one. It is NOT necessary to have a Facebook account for our class. We only use it to share documents/information which enrich class content; so do not feel like you need to friend Phineas—it is only an option if you want to use it. You will not miss out on anything if you choose not to friend Phineas. I just want to give you an opportunity to access materials in multiple ways. Please let your parents know that they are welcome to join as well. They will need to indicate that they are your parent when they send a friend request. Please make sure your security settings are set to private



should you friend me. Under ‘Notes’ in Facebook for Phineas, you will also find a digital copy of this assignment for your reference.

You should also be able to find the required .pdfs for this assignment at the following: <http://www.mediafire.com/?ocstt7d0yasse> or you can access via this QR code:



***Keeping the Extended Essay in Mind***

As you read through the selections assigned, keep in mind the possibility of completing your Extended Essay (EE) in Psychology. The assigned topics are somewhat controversial and would give you a great opportunity to demonstrate analysis of subject material, which is exactly how an EE differs from a research report. Although it is a long way off to concern yourself with, keeping and ‘eye out’ for a good EE topic now will save you some worry and headache in a few months. When you read the selections you may find a topic that is really interesting to you. Slip a post-it onto the page or put an index card into the book—do something to remind yourself of the topic/idea. Even if you don’t know exactly what you’re going to do with the idea yet, it will be a helpful place to start when you and I talk about EEs in Psychology.

All the best and although you have some work ahead of you, I hope you find time to have a fantastic summer! I look forward to seeing you in the Fall. Please e-mail or FB me over the summer even if it’s just to say hey. We’re going have each other for two years—so might as well get to know each other now.

Best,

Valdez

**Due:** The first session of school. (Depends on whether you're A-B-or C-Day)

**Points:** 50 points total for Assignments # 1-14

Collaboration on this assignment is: \_\_\_\_\_ Encouraged  
\_\_\_\_\_ Permitted  
\_\_\_\_\_ **X** \_\_\_\_\_ Prohibited

**Mechanics:** The assignments should be typed (for these summer assignments, single-spaced is okay), using 12-point Times New Roman font. Use 1-inch margins for sides, top, and bottom. Make sure to write in complete sentences using professional, academic language. This is your first chance to impress me with your writing, analysis, and ability to synthesize material, so please do your best. Some questions are text-based, that is, the direct answer comes from portions of the readings. Other questions are opinion-based, there is no right/wrong answer, but please use the readings to inform your response.

**--Use quotation marks & page numbers whenever you cite directly from the text--**



All of the assigned readings can be accessed from the following URL:  
**<http://www.mediafire.com/?ocstt7d0yasse>**

**Assignment One** Before you read anything from the textbook or investigate the industry of psychology any further, please complete the following: **define 'Psychology'**. What is meant by the word? What does it mean to you? Does the word make you think of anything in particular? ***DO NOT*** refer to a dictionary, encyclopedia, or any other reference aid. I already know how these resources define 'psychology'. I want to know how **you** define it. There is just about no wrong answer you can give me here. All I want to know is what comes to mind when you hear 'psychology'. Song lyrics? A TV show? An image of a therapist/researcher? Draw from your prior knowledge and understanding of psychology to complete this first assignment.

**Please complete your response to this assignment on a page by itself. The rest of the assignments do not have to start on a new page each time.**

**Assignment Two** Read Myers text pp 372- 373: Thinking Critically About-Lie Detection  
In a couple of paragraphs, respond to the following prompts about the reading.

- 1.) Describe a limitation of a polygraph and assess its validity.
- 2.) How reliable do you think nonverbal communication is?
- 3.) Do you feel the use of a polygraph is justified?

- Assignment Three** Read Myers text p 241: Close-Up- Biofeedback  
Briefly respond to the following prompts.  
4.) What are some limitations of Miller's rat study?  
5.) How would you assess the claims of biofeedback in humans? Are they real or fictitious?
- Assignment Four** Read Myers text p 569: Thinking Critically About- Insanity & Responsibility  
Briefly respond to the following prompts.  
6.) Identify an ethical concern of 'the insanity defense'.  
7.) Can you infer a difference between someone who is labeled as 'mentally ill' and someone who is labeled as 'insane'?
- Assignment Five** Read Myers text pp 584-585: Close-Up- Suicide  
Briefly respond to the following prompts.  
8.) Describe some of the trends associated with those who commit suicide.  
9.) What inferences can you make about those individuals who try to take their own life?
- Assignment Six** Read Myers text pp 395: Close-Up- How to Be Happier  
Briefly respond to the following prompts.  
10.) What factors tend to influence our mood?  
11.) Which of the suggestions are things you already do (if any)? Explain which one(s) seem most obvious to you as suggestions to be happier?
- Assignment Seven** Read Myers text pp 498-499: Thinking Critically About- Astrology & Palm Reading  
Briefly respond to the following prompts.  
12.) What are some techniques employed by 'seers' to convince customers that they are right?  
13.) In your opinion, is there a way to really predict the future?
- Assignment Eight** Read Myers text p 563: Thinking Critically About- ADHD- Normal High Energy...  
Briefly respond to the following prompts.  
14.) Do you think ADHD should be diagnosed as a psychiatric disorder?  
15.) Assess the long-term effects of stimulant drugs.
- Assignment Nine** Read Myers text pp 86-87: Right-Left Differences in the Intact Brain and Myers text p 88: Brain Organization and Handedness  
Briefly respond to the following prompts.  
16.) The left-brain/right-brain argument is also called lateralization. Do you think you are more left-brained or right-brained (despite the oversimplification)?  
17.) Do you think there are real differences between right-handed and left-handed

people? If so, what might they be? (Consider behavioral, cognitive, and emotional differences)

- Assignment Ten** Read Myers text p 508: Close-Up- Toward a More Positive Psychology  
Briefly respond to the following prompts.  
18.) Do you think there will be a shift towards positive psychology in this century? Why?  
19.) Assess Martin E. P. Seligman's views on positive psychology.
- Assignment Eleven** Read Myers text pp 121-122: Subliminal Stimulation  
Briefly respond to the following prompt.  
20.) Do subliminal messages influence our behavior?
- Assignment Twelve** Read Myers text pp 188-top of 191: What We Dream & Why We Dream  
Briefly respond to the following prompts.  
21.) What do we dream?  
22.) Why do we dream?
- Assignment Thirteen** Read Myers Appendix C-9 (towards the back of the book): Thinking Critically About Complementary and Alternative Medicine  
Briefly respond to the following prompts.  
23.) Why might some people believe in the power of alternative medicine?  
24.) Table C.1 lists subfields of alternative medicine. Which one(s) (if any) seem most implausible for use to you or do they all seem credible?
- Assignment Fourteen** Be familiar with one of the following topics.  
You do not need to conduct intensive research on these topics. Select one that sounds most interesting and *briefly* read about it in the Myers textbook.  
A- Do Animals Exhibit Language?: Appendix D-3  
B- Eating Disorders: pp 337-339  
C- Mood Disorders/Depression: pp 579-581  
D- Schizophrenia: pp 589-top 592  
E- Sexual Orientation: Begins pp 354-357  
25.) Which topic did you select? Summarize your findings and briefly describe the conclusions you have drawn from the reading.
- Assignment Fifteen** Read Myers text pp 642-649, 657(Group Influence)-692  
This reading is a portion of Unit 14, Social Psychology. We will have an assessment (a test) on this portion of Unit 14, which will also include the above reading assignments (one-fourteen). We will have some brief in-class time to discuss this chapter and to answer questions. We will not have the assessment (the test) the first session of school. Don't worry. I will give you time to review.

We will usually have ten-pages of assigned reading each session. Try and note how long it takes you to complete this assignment. It will give you a better idea of how much time you may need to set aside for psychology class once the semester begins.

That's it!!! ☺

- Did you find any EE ideas?
- How long did it take you read about ten pages of text from the Myers book?
- Are you dropping Psych as soon as school starts to pick up another science?
- Did you FB me to say hello & introduce yourself?

See you Session One with your completed Summer Assignment.



## Appendix N: Social Media Policy

### 4213.01 – COMMUNICATIONS WITH STUDENTS VIA ELECTRONIC MEDIA

(1) The School Board encourages positive and professional communication between staff and students by means which best protect the interests of all concerned. Communications via personal electronic media such as Facebook, Twitter, cell phone messaging, and other personal electronic means regarding school matters have the potential to create both public records and education records, or to contain personally identifiable student information. The School Board is ultimately responsible for the maintenance and proper disposal of such records and for the protection of such confidential information, and is dependent upon its employees to meet this responsibility.

(2) The School Board has provided staff with the means to communicate electronically with students concerning school matters. These means currently include PCS Portal, Moodle, and district email (Outlook), and are sufficient for the purposes intended. For staff to communicate on school matters with students by personal electronic means when sufficient School Board means are available exposes the School Board to a possible violation of its legal obligations. Such communication could cause the appearance of inappropriate association with students. Accordingly, staff shall utilize School Board resources in all electronic communications with students regarding school matters provided, however, private electronic media, such as a cellphone, may be used when District resources are not available, when such use is in the best interest of all concerned.

(3) Staff communications with students via private electronic media concerning non-school-related matters are governed in part by, and may lead to discipline under, Board Policies 1140, 3140, and 4140.

Effective Date: August 15, 2011

Adopted 6/14/2011

## Appendix O: Facebook profile of Mr. Valdéz

Phineas Gage

Update Info View Activity Log

Timeline About Photos Friends 257 More

What are your favorite sports teams? 2 more pending items

status Photo / Video Life Event

What's on your mind?

**ABOUT**

- Former Foreman at Rutland & Burlington Railroad
- Went to Palm Harbor University High School
- From Cavendish, Vermont

**PHOTOS - 5**

**Phineas Gage** 6 hrs · 21

Cog LOA; intelligence; cognition; nature vs nurture; critical period/sensitive period; neuroplasticity; developmental

**Smart Teenage Brains May Get Some Extra Learning Time**

It used to be that neuroscientists thought smart people were all alike. But now they think that some very smart people retain the ability to learn rapidly, like a...

NPR.ORG | BY SHANKAR VEDANTAM

Like · Comment · Share

Write a comment...

## Appendix P: IB Learning Objectives- Developmental Psychology

### Paper II- Optional Topics

#### Outcomes

##### General framework (applicable to all topics in the option)

1. To what extent do biological, cognitive and sociocultural factors influence human development?
2. Evaluate psychological research (that is, theories and/or studies) relevant to developmental psychology

##### Cognitive development

3. Evaluate theories of cognitive development (for example, Piaget, Bruner, Vygotsky, brain development theories)
4. Discuss how social and environmental variables (for example, parenting, educational environment, poverty, diet) may affect cognitive development

##### Social development

5. Examine attachment in childhood and its role in the subsequent formation of relationships
6. Discuss potential effects of deprivation or trauma in childhood on later development
7. Define resilience
8. Discuss strategies to build resilience

##### Identity development

9. Discuss the formation and development of gender roles



10. Explain cultural variations in gender roles
11. Describe adolescence
12. Discuss the relationship between physical change and development of identity during adolescence
13. Examine psychological research into adolescence (for example, Erikson's identity crisis, Marcia)

### Introduction

Developmental psychology is the study of how and why people change over time in the way they behave, think, and relate to others. Developmental psychology focuses on developmental themes such as identity, attachment and adolescence.

It is important to gain an understanding of the extent to which early experience may influence later development and if there are critical periods in development. Knowledge about the influence of biological, social and cultural factors in people's lives is helpful not only for families but also in childcare and education to create good opportunities for children and young people all over the world.

Controversies related to developmental psychology include the extent of the impact of early experiences and why some children seem to be more resilient than others after stressful experiences in childhood. In recent years knowledge about resilience has been used to develop programmes that can increase resilience.

## **About the Author**

David Valdéz has been a teacher at the same public high school in his county in Florida since 2003. He teaches psychology in an accelerated program for academically talented students. The school follows a three-day rotating block schedule which affords Mr. Valdéz a great deal of personal time with students. Each block is 99 minutes and class sizes generally range between 25 to 28 students.

Because of the nature of the program, students who take psychology with Mr. Valdéz during their junior-year of schooling return to Mr. Valdéz during their senior-year. That means that students who remain in the program will have Mr. Valdéz for two academic school years (approximately 360 days).

Overall, Mr. Valdéz successfully builds meaningful relationships with his students that have endured after their graduation. He has attended the weddings of former students who have maintained friendships with Mr. Valdéz and has followed the academic careers of several dozen students who have pursued the study of psychology in their undergraduate and graduate programs.

Relationship building and relationship maintenance have been a best practice of Mr. Valdéz. He values and respects the trust he creates with his students and their parents. This is a principle was informed from Dagget's (2014) theory of rigor, relevance, and relationships and inspires the teaching methods and instructional delivery of Mr. Valdéz.