Project-based strategic management education: A client perspective on key challenges

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ABSTRACT

This paper explores the benefits of project-based learning from the small business client perspective. The reflections of a sample of small businesses were collected through a feedback survey after participating in a semester-long project-based learning process developed for the Strategic Management curriculum in the College of Business at Western Carolina University (WCU). The clients that participated in projects are primarily local and regional businesses in Western North Carolina; they were sourced through the Small Business Centers (SBC) located at the area community colleges and the Small Business and Technology Development Center (SBTDC) located at WCU. Most participating organizations are existing small businesses or start-ups with a high probability and capacity for growth that will enhance the economic development of the region. Literature review of both small business and project-based pedagogy challenges demonstrated the potential for co-creation of value. This study laid out the steps we took to organize a project-based Strategic Management pedagogy. Our analysis of both close- and open-ended client feedback revealed four key success factor themes for developing a mutually beneficial project-based pedagogy: communication and interaction, project organization and student preparation, quality of work, and co-creation of value; the specific priority actions for each theme are detailed in the paper.

Introduction

Project-based pedagogy with industry clients offers students practical learning opportunities linking conceptual knowledge and skills with the reality of business dynamics and complexities. To build a sustainable applied educational model, a meaningful partnership with students, faculty, local business clients, industry liaisons, and the educational institution is a must. Several studies have explored ways to develop healthy pedagogical designs for applied-learning and investigated students' reflection on their applied pedagogical experiences (e.g., Kraft & Goodell, 1991; Thompson, & Edwards, 2009; & Gaumer, Cotleur, & Arnon, 2012).

In addition, it has become critical for universities to offer students project-based learning opportunities to provide a workforce with practical experience. These opportunities are also meaningful to universities to accomplish their strategic objectives for student engagement and establishing community relationships and development activities. Given this, project-based learning appears to be beneficial to the student and educational institution; however, the perspective from the small business client on the benefits derived from their experiences must also be taken into consideration (Wolf, 2010). Carnegie has a prestigious award that recognizes higher education's commitment to community engagement in which project-based learning falls. Building on Driscoll's (2006) defined importance of community engagement for universities, Carnegie Community Engagement Classification defined community engagement as those activities and collaborations between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity (Carnegie Foundation, 2013). It seems we are measuring the benefits from project-based learning

but not from the client perspective; and given Carnegie's definition of community engagement, we cannot claim to have accomplished engagement without acknowledging first the benefits to all parties involved.

To build on this repository of knowledge in developing project-based pedagogy with industry, this study reflects on over four years of collaborative experience with small business clients and analyzes 140 complete client survey responses to understand their experience participating in a project-based learning context as part of the Strategic Management capstone program at WCU.

Small Business Challenges

Small businesses, defined by Small Business Administration (SBA) as companies with less than 500 employees or $7.5 million in average annual receipts, have consistently served as the economic foundations creating jobs, encouraging innovation, and fostering competitiveness to stimulate economic growth. Although small businesses are more flexible and adaptive to changes, global competition continues to exert pressure on them (Moutray, 2008). Technology advancements shifted the economic structure, innovation, governance, and trade and gave new meaning to "global village" and "global competition" (Markman, Devinney, Pedersen, & Tihanyi, 2016). Thus, more than ever, strategic innovation is the driving force for sustainable competitive advantage (Taneja, Pryor, & Hayek, 2016) demanding the integration of business knowledge and technical knowledge in small business education (Penley, 2001).

Business strategic innovation is closely related to leveraging, securing and organizing resources (Achtenhagen, Ekberg, & Melander, 2017). Small business owners need a clear understanding of the competitive environment and organizational resources and capabilities while cultivating an internal strategic focus to improve performance (Harris, Gibson, & McDowell, 2014). However, with limited marketing budgets, dated marketing techniques (Jelfs & Thomson, 2016), staffing, time, resources and expertise, small businesses cannot afford competitive intelligence programs for long-term strategic planning (Prescott & Miree, 1998). Thus, a lack of a strategic plan is one of the current crucial weaknesses of small businesses, especially in family-owned businesses (Ward, 1997).

Small business owners believe philanthropy and community social commitments positively contribute to personal or business sustainability (Besser & Miller, 2004); hence, they frequently align to social engagements based on enlightened self-interests (Matten & Crane, 2005; Jenkins, 2006; & Peake, Harris, McDowell, & Davis, 2015). This strategic opportunism with abundant resources and capabilities allows firms to capture opportunities; however, small businesses lack the resources, which results in limited commitment, coordination, trust, and quality communication. As a result, their participation with these alliances cannot be successful or sustainable (Mohr & Spekman, 1994).

Table 1 summarizes some of the key challenges of small businesses in no particular order that emerged from the review of the literature.

Table 1
Small Business Key Challenges

Small Business Key Challenges	Citations
Pressure of global competition	Moutray, 2008
Family business dynamics limit innovation	Chang et al., 2011
Difficulties in recruitment and retention	McMillan, 2016
Poor knowledge of strategy and competition	Ward, 1997; Harris et al., 2014; & Taneja et al., 2016
Marketing resource constraints	Jelfs & Thomson, 2016
Need to leverage, secure, and organize resources	Prescott & Miree, 1998; & Achtenhagen et al., 2017

A key leveraging resource for many small businesses is the regional economic development centers, such as America's Small Business Development Centers (SBDC). SBDC was formed in the 1970s as a partnership among U.S. Congress, SBA, state government, and universities, providing free counseling and training to small businesses in business planning, marketing, compliance, capital investment and more. The very first partnership of this kind was the Rutgers MBA Team Consulting Program, recognized as the inspi-

ration behind the Small Business Institute (SBI) program encouraging cooperation between SBA and U.S. universities and colleges (Cook & Belliveau, 2005). In 1984, Small Business Technology Development Centers (SBTDC) was established as an extension of SBDC to strengthen technical assistance. Although a key resource to small businesses, many of these centers also face difficulties attracting and retaining skilled counselors and lack the resources needed from host institutions to appropriately provide extended

service to the business community (Gray & Black, 2015).

SBDC and SBTDC networks are usually located within a university or have a direct connection to the higher education systems within the state that they are located. This makes these centers the most logical sourcing mechanism for small businesses to identify and engage in project-based learning experiences with universities. The universities' teaching and learning spaces complement the resources provided by the SBDC and SBTDC. Therefore, project-based pedagogy appears to have the potential to contribute to the co-creation of value among participants (i.e. university students, small businesses, small business development centers). This is one of the key premises the paper is attempting to demonstrate.

Applied-Learning in Strategic Management Education

Beyond the traditional textbook-based approaches, three primary experiential methods have been adopted in Strategic Management education: case studies, simulations, and project-based learning (Jennings, 2002). Case study method was introduced by Harvard's School of Business Administration in 1910 and has since occupied a major role in Strategic Management education (Alexander, O'Neill, Snyder, & Townsend, 1986). Although case studies offer students a clear contextual framework for analysis and synthesis, they are limited in representing the realities of an organization and its environment (Yin, 1989). Gilbert Ryle (2009) distinguished applied-learning from abstract theoretical knowledge with two labels: *knowing how* vs. *knowing what* and sustainable knowledge intelligence requires the integration of the two. The use of simulations no doubt elevated the complexity of decision-making and allowed students to immediately re-strategize based on direct evaluations of previous decisions; it still only offers students confined and controlled parameters without direct interactions with the environment and the opportunities to manage uncertainty and unknown (Solomon, 1993; Gilgeous & D'Cruz, 1996).

Project-based learning moves Strategic Management education from the confinements of a classroom and hypothetical situations to the realities of the world we live in with real problems and challenges (Jennings, 2002). Improving organizational performance is difficult even when challenges are clearly defined and understood (Boje, Hillon, & Cai, 2007). Project-based learning in Strategic Management exceeds traditional formats in achieving the desired learning outcomes (Watts & Jackson, 1995). It helps students develop insights into how theories translate to actions, gain a deeper understanding of organizational complexity, encourages critical reflection of assumptions and beliefs shaping practices, improves professional and interpersonal

skills (Hillon, Cai-Hillon, & Brammer, 2012), and increases self and greater socio-cultural awareness (Marsick & O'Neil, 1999; Weinstein, 1997).

Project-based learning, is cross-disciplinary and provides students an opportunity to link concepts taught in the classroom with real world applications and challenges (Kenworthy-U'Ren, 2008; & Dekkers, Howard, Adams, & Martin, 2014), reflect and learn in unfamiliar environments, and interact with diverse audiences and situations (Ash & Clayton, 2009). The learning is only "maximized when it is active, engaged, and collaborative" (Ash & Clayton, 2009: p. 25). Helping students develop higher order of thinking skills such as comprehension, problem solving, and complex forms of mental processing continues to be important but also challenging for educators (Glaser, 1984; & Nickerson et al., 1985). Since the mid-1990s, applied-learning in management education have gained attraction as exemplified by the special issues in the *Academy of Management Learning and Education* in 2005 and the *Journal of Management Education* in 2007. Project-based applied-learning, partnering with small businesses or non-profit organizations, delivers specific domains for problem solving and has shown to acclimate students to the reality and expectations of a post-graduation professional world (Kramer-Simpson, Newmark, & Ford, 2015).

However, an overwhelming celebratory scholarly narrative of applied-learning resulted in a "love fest" while overlooking the critical knowledge and success factors (Schwartzman & Henry, 2009). In 2008, Kenworthy-U'Ren pointed out that a key concern in moving project-based learning forward is *designing effective and sustainable university/community partnerships*. To reinforce this point, the heart of this partnership is the individuals and their commitment to this co-creation of value (Hillon, Hillon, & Bunch, 2015), a co-creation of value that would benefit all constituents: "the client, the student team, the student, and the instructor" (Cook & Belliveau, 2005: p.7).

Thus, this inspired the inquiry of this paper: How to develop a project-based applied-learning pedagogy, that not only benefits student learning but also helps address small business challenges.

Most of project-based learning introspective research, specifically reflecting on projects with industry in business education, has primarily focused on either the professors' or students' self-reported experiences (e.g., Kraft & Goodell, 1991; Thompson, & Edwards, 2009; Parsons & Lepkowska-White, 2009; Bove & Davies, 2009; Gaumer et al., 2012; Gray, Stein, Osborne, & Aitken, 2013). Therefore, a study from the clients' viewpoint could add value to the repository of knowledge in developing successful applied pedagogy

with industry that results in constructive socio-cultural impact (Craig, 1999).

Additional key challenges behind developing project-based learning framework with clients include a time-consuming process in establishing partner relation-ships with businesses, the tension between meeting client needs and providing a valuable learning experience for students, and students' tendency for quick-fix solutions instead of developing independent critical thinking (Lamond, 1995).

Table 2
Project-Based Pedagogy Key Challenges

Project-Based Pedagogy Key Challenges	Citations
Balancing client needs and student learning	Lamond, 1995
Selecting appropriate clients	Lopez & Lee, 2005; & Hillon et al., 2012
Sustaining long-term partnerships	Lamond, 1995
Managing team-client interaction	Carvolho, 2012; & Kramer-Simpson, et al., 2015
Managing team dynamics	Kotval, 2003
Training students to think critically	Lamond, 1995
Co-creating value	Runquist et al., 2006; & Johnson & Johnson, 1975

To overcome some of the key challenges of project-based pedagogy (see Table 2) emerged from the review of the literature and create a mutually beneficial learning environment, the professor must monitor, coach, and sometimes provide interventions throughout the project. She or he also has the responsibility to integrate course learning objectives with project deliverables (Hillon et al., 2012). This entails two main activities: One, collaborating with the industry liaison starting with exercising care when selecting clients (Lopez & Lee, 2005; Hillon et al., 2012), and two, creating a learning framework that encourages collaborative and co-creation of value (Johnson & Johnson, 1975; Runquist, Kerns, Fee, Choi, & Glittenbery, 2006) for students, clients, industry liaison, professors, and other community partners.

WCU Project-Based Strategic Management Pedagogy

The Strategic Management curriculum at Western Carolina University (WCU) College of Business makes an effort to facilitate project-based learning to enhance senior business students' transferable professional skills prior to graduation. An experience that is only possible because of the collaboration and alignment of the strategic directions among all participants:

- University of North Carolina System
- Western Carolina University (WCU)
- WCU College of Business
- North Carolina Small Business Technology Development Center (SBTDC)
- North Carolina Small Business Centers (SBCs)

This symbiotic relationship aims to strengthen economic development and community engagement for a stronger state economy through building partnerships, alliances, leveraging resources, and community-based learning. The student engagement process leverages human resources, organizational development tools, and faculty expertise and leadership for the benefit of the community.

Through a five-step process of project-based pedagogical engagement, developed in partnership by WCU Strategic Management faculty and SBTDC, professors partner with the SBTDC at WCU and regional SBCs to serve the small businesses and non-profits in Western North Carolina: 1) Determining Business Challenges and Needs; 2) Developing Specific Scope of Work for Student Teams; 3) Managing Client Projects; 4) Presenting Research and Deliverables; and 5) Feedback Gathering. These steps align with Cook & Belliveau's (2005) student team consulting process, with two areas of heightened emphasis in understanding client business challenges and needs (step 1) and feedback gathering at the end of the project collaboration (step 5).

Step 1: Determining Business Challenges and Needs

Before each semester, SBTDC at WCU and regional SBCs survey clients to assemble a pool of small businesses with specific challenges and needs who are interested in working with students in the Strategic Management course. These challenges and needs might include market expansion, new product or market development, marketing strategy improvements, and process improvements. These needs are usually large enough to require significant research but are not notably time sensitive; they are also small enough to be accomplished during a semester through student projects. These projects require a significant amount of research

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and have the ability to drive the company forward creating economic development through job creation, increased owner wealth, or capital infusion for growth. Potential clients selected must also be fully aware of the time, energy and human resource investments necessary for the project and their active roles in shaping students into professionals. The selection of clients directly impacts the success of project-based learning outcomes for the students, clients, and instructors (Lacho, 2009).

Step 2: Developing Specific Scope of Work for Student Teams

SBTDC/SBC counselors and professors next interview the potential clients to determine best projects balancing Strategic Management course learning objectives and appropriate project deliverables. Lacho (2009) indicated that a clear definition of the project scope of work is one of the key project-based learning success factors. The information collected during this meeting consists of the following:

1. Information and history of the business

2. Challenge or need creating a barrier

3. Deliverable expected from the student team engagement

4. Willingness of the company to provide pertinent information

5. Availability of the company contact during the semester

6. Ability of the company to implement recommendations

7. Industry fit based on the professor's background and knowledge

Once the clients are selected, professors define project scopes and appropriate number of teams allocated for each client.

Step 3: Managing Client Projects

The Strategic Management curriculum is designed as a practicum giving senior business students, close to graduation, an opportunity to apply core knowledge acquired to address a real business need using a strategic mindset and tools. Project teams are formed based on best fit between project scopes and the students' majors (Management, Marketing, Sports Management, Accounting, Finance, Business Law, Computer Information Systems, and Entrepreneurship), grade point averages, and learning and work styles.

Over a three-month period, the students gain Strategic Management knowledge, learn about the company, conduct competitive intelligence research, assess the company's internal environment (i.e. strengths and weaknesses), work on client specific problems, and complete the project deliverables agreed upon. It is vital that students learn how to make recommendations based on facts obtained through secondary and primary research. This is accomplished through the development of a business Situational Analysis. Some of the specific content includes: Client Profile, External Situation Analysis (e.g. Environmental Scan, Industry Analysis, Market Analysis, Competitive Benchmarking), Internal Situation Analysis (Value Chain Analysis, Resource Analysis), and Summary of the key findings and recommendations from the Situational Analysis (Wright & Fowler, 2017). During the project, student-client interaction is a key motivator of students' enthusiasm towards the project (Lacho, 2009).

Figure 1 briefly describes the project's investigation process from the initial company research to developing recommendations. The students are responsible for managing all aspects of the process and the client relationship.
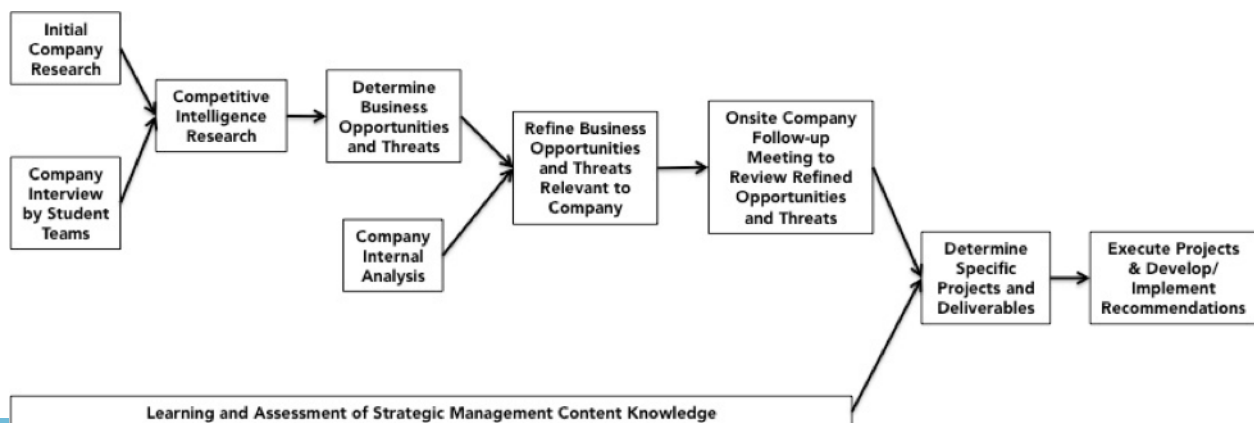

Figure 1. Strategic Management Project Investigation Process

Step 4: Presenting Research and Deliverables

Students present and provide detailed reports of project research and actionable priorities to the clients and SBTDC/SBC counselors at the end of the semester. The presentations generally range eight to ten minutes followed by one-on-one meetings to address specific questions. Next, SBTDC/SBC counselors set up a meeting with their clients to assist in analyzing the findings and moving forward with implementing proposed action steps. This collaboration creates a seamless process and long-term business development companionship, where the client company continues to feel supported after the semester.

Step 5: Feedback Gathering

The final key step in the project is gathering feedback from students, client companies, and industry liaisons at the end of each semester so the professors can reflect on continuous improvement needs. To do so, students complete a 360-peer review (Hazucha, Hezlett, & Schneider, 1993) of member contributions and a written project reflection report, professors follow up with industry liaisons to assess impact, and client companies fill out an evaluation of team performance and overall experience. As noted by Ash and Clayton (2009), this critical reflection process helps students deepen sustained learning and educators overcome one of the biggest challenges of project-based learning, which is facilitating and assessing learning beyond the superficial interpretations of complex issues.

The exploratory study described in the following sections helped us understand how small business partners perceive the value of a project-based Strategic Management program and what are some key success factors to developing a meaningful project-based pedagogy while addressing small business challenges and needs.

Research Strategy and Methods

The research strategy for this study is to explore client experience participating in a project-based Strategic Management program. A sample of 140 client company project evaluations, collected over a four-year period, was analyzed. These participating organizations were at different stages of maturity from ideation to well-established. Client companies offered feedback at the end of the semester using a nine-question survey (see Table 3).

The analytic interests of this study include the investigation of client experience correlations, key success indicators, and clients' overall satisfaction. These living experiences offered insight into whether project-based pedagogy helps address small business challenges and needs (Creswell, 1994). The study used a single approach design

using a survey. The analysis of quantitative and qualitative feedback offered multiple viewpoints and served multiple analytic research interests (Morgan, 1996; Neuman, 2006; Johnson, Onwuegbuzie, & Turner, 2007; Tashakkori & Teddlie, 2010; Andres, 2012). Researchers tell stories about the data (Lyotard, 1979/1984) and even statistical work in social sciences use narrative and rhetoric to explain discoveries (Gephart, 1988).

This survey strategically included both closed and open-ended questions to better understand the relationship among experiences impacting client's perceived value and provide a space for client companies to voice opinions and highlight new issues not captured in the closed-ended questions (e.g. Geer, 1991; & Krosnick, 1999). If open-ended questions provide value-added insight (Geer, 1991; Roberts, Stewart, Tingley, Lucas, Leder-Luis, Gadarian, Albertson, & Rand, 2014), the responses would afford researchers an additional perspective and reliability into the respondents' thinking (Roberts et al., 2014, Krosnick, 1999).

Project-Based Strategic Management Education: Client Experience Analyzed

Data Analysis: Closed-Ended Survey Questions

Table 3 presents the questions included in the survey distributed to clients at the completion of the project-based learning engagement.

Table 3
SBTDC Client Project Evaluation - Questions

Client Survey – Questions	
Q1	Did you find the team's communication and behavior to be polite and professional?
Q2	How many times were you in contact with your student team over the course of this project?
Q3	Was the content of the team's report meaningful and of adequate depth?
Q4	Was the content of the team's final presentation meaningful and of adequate depth?
Q5	Do you foresee making changes to your business based upon the recommendations by the team?
Q6	How likely are you to recommend a student project to another company or organization?
Q7	Overall, how satisfied were you with the student project you participated in this semester?
Q8	How would you rate your satisfaction with the student team logistics this semester? (This includes communication with your lead counselor and other SBTDC counselors about the project and scheduling the initial meeting and team presentation, if applicable).
Q9	Please add any additional comments you would like to share.

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With the research study strategy in mind, a factorial ANOVA was performed to measure the effect of Q1, Q2, Q3, Q4, Q6, Q7, and Q8 have on Q5. Q5 - *Client's willingness to make changes based on student recommendations* was selected as the dependent variable because it best measures project-based pedagogy's potential impact on addressing small business challenges and needs. Results shown in Figure 2 indicated:

- A significant main effect for the *client's perceived quality of presentation (Q4)*, $F(3, 116) = 3.290$, $p=0.023$.

- A significant main effect for the *client's likelihood to recommend the program to another organization (Q6)*, $F(2,116) = 5.005$, $p=0.08$.

- A significant main effect for the *SBTDC/SBC counselors' interaction (Q8)*, $F(3,116) = 5.104$, $p=0.02$.

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Q5

F	df1	df2	Sig.
0.837	56	83	0.759

Tests the null hypothesis that the error variance of the dependent variable is equal across groups[a]

a. Design: Intercept + Q1 + Q2 + Q3 + Q4 + Q6 + Q7 + Q8

Tests of Between-Subjects Effects

Dependent Variable: Q5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	24.905[b]	23	1.083	3.784	0	0.429
Intercept	24.046	1	24.046	84.028	0	0.42
Q1	0.451	1	0.451	1.575	0.212	0.013
Q2	1.671	7	0.239	0.834	0.561	0.048
Q3	1.699	3	0.566	1.979	0.121	0.049
Q4	2.825	3	0.942	3.29	0.023	0.078
Q6	2.865	2	1.432	5.005	0.008	0.079
Q7	0.679	3	0.226	0.791	0.501	0.02
Q8	4.382	3	1.461	5.104	0.002	0.117
Error	33.195	116	0.286			
Total	2187.5	140				
Corrected Total	58.1	139				

a. Computed using alpha = .05

b. R Squared = .429 (Adjusted R Squared = .315)

Figure 2. Factorial ANOVA Results

Further, strong positive correlations were found between *client's overall project satisfaction (Q7)* and the following factors:

- *Client's likelihood to make changes based on student recommendations (Q5)* (r=0.427, n=140, p<0.001)

- *Client's perceived quality of report (Q3)* (r=0.717, n=140, p<0.001)

- *Client's perceived quality of presentation (Q4)* (r=0.620, n=140, p<0.001)

Data Analysis: Open-Ended Survey Questions

Open-ended responses are considered to be more difficult to analyze than closed questions (Schuman & Presser, 1996; Roberts et al., 2014). However, the analysis of the responses allows researchers to identify patterns that may provide the basis to support certain conclusions. The techniques traditionally developed to analyze qualitative data are commonly used to analyze responses to open-ended survey questions (Strauss & Corbin, 1998). One of these techniques is content analysis, which includes coding. In this study, the following process was used to analyze open-ended responses (see Figure 3).

Through this iterative reading, coding, and re-coding analysis process, key themes emerged that helped our understanding of clients' perspectives of their project experience. The discovery of these themes is supported by direct quotes from the clients to minimize researcher narrative bias inhabited when telling someone else's story (Boje, 2001).

First, clients appreciated students' courteous and professional communication skills as well as the centralization of communication on one team member to reduce duplication and miscommunication. Second, clients appreciated students' breadth, depth, and thoroughness of research showcased in the presentations and reports. Third, clients satisfied with the overall experience, indicated that the teams' assessment and recommendations validated their current strategies, plan to make or consider several changes to their businesses based on the recommendations from the student teams, and would be excited to participate again and recommend the program to other suitable organizations. Fourth, clients highlighted that the program is a valuable asset for the small businesses, especially for those with limited resources and business experience in certain areas such as social media marketing. Fifth, clients recognized or hinted that there must be a clear definition of project objectives and a match between project deliverables expectations and course learning outcomes to build a successful partnership.

While clients appreciated students' engagement, some also pointed out opportunities for improvements, which included: More frequent and better quality communication and interaction and better site visit / meeting scheduling and punctuality; additional research and/or more elaboration on certain aspects of the project in the reports and during presentations; enhanced data-driven and originality of rec-
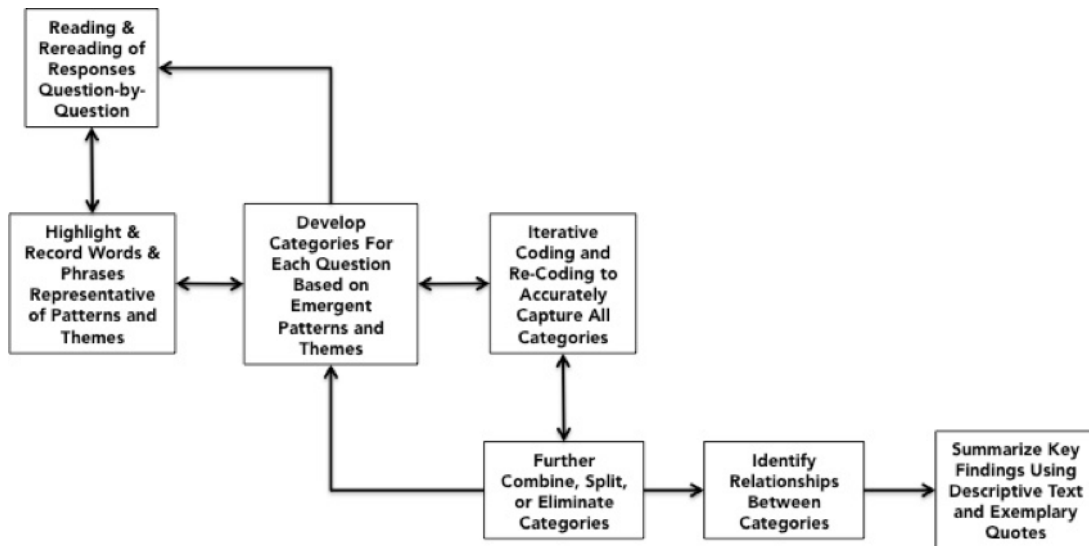
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Figure 3. Content Analysis Process of Open-Ended Responses

ommendations; allocating more time for final presentations and client interaction with student teams; enhancing student training on business etiquette and professionalism; and more engagement from SBTDC/SBC counselors during the project.

Feedback also showed that many clients appreciated their partaking in the co-creation of value for a win-win experience for businesses and students. The clients recognized their role as mentors in shaping students as future professionals and were able to observe their growth throughout the project.

How could we strengthen project-based pedagogy to address small business challenges? Integrating our quantitative and qualitative analyses of client project feedback with

existing scholarly contributions on small business challenges and project-based pedagogy challenges, we compiled a list of key success factors to answer this question (see Table 4).

Discussion and Future Research

Existing research on project-based pedagogy has largely emphasized its impact on student learning (e.g. Kraft & Goodell, 1991; Thompson & Edwards, 2009; Gaumer et al., 2012; & Gray et al., 2013) and program competitive advantages (Rundle-Thiele, Bennett, & Dann, 2005), and little on the impact on industry collaborators. Wolf (2010) urged researchers to "pay more attention to the 'client' perspective in industry-integrated learning opportunities". In fact, Wolf

Table 4

Key Factors for a Project-Based Pedagogy to Address Small Business Challenges

Key Success Factor Themes	Theme Priorities
Communication and Interaction	Timely and centralized communication
	Frequent interaction
	Courteous, punctual, and professional
Quality of Work	Thorough research with breadth and depth of content
	Data-driven recommendations
	Originality of ideas
Project Organization and Student Preparation	Adequate time for presentation and follow-up
	Learn client company story and business
	Engagement from counselors
Co-Creation of Value	Clear match between project deliverables and learning outcomes
	Client has a role in student professional development
	Client desires new perspectives
	Alignment of strategic priorities among all participants

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(2010) identified six types of distinctive clients through a study of 12 client-centered learning experiences over three and half years: "The Social Justice Advocate, The Lifelong Learner, The Indebted Graduate, The Self-Promoter (It's all about me!), The No Budget client, The Doing a Favor client, and Emergence of the Community Partner" (p.120).

The analysis of a sample of 140 client company project evaluations revealed four key success factor themes for developing a mutually-beneficial project-based pedagogy that addresses small business challenges: communication and interaction, quality of work, project organization and student preparation, and co-creation of value. These key success factor themes support the thesis that project-based Strategic Management education directly addresses some of the small business challenges identified in the literature (Ward, 1997; Prescott & Miree, 1998; Harris et al., 2014; Jelfs & Thomson, 2016; Taneja et al., 2016; Achtenhagen et al., 2017).

This study therefore deepens the understanding of the typologies of clients in client-centered projects by identifying clients' perceived value of project-based learning engagements and their impact on addressing business challenges. Clients perceived a heightened collaborative value when working with an engaged team whose members exercised professionalism and effective communication; when the project was well organized and students were well-prepared; when recommendations were well-supported, original, actionable, and relevant; and when the project process encouraged a co-creation of value for all participants involved, including alleviating the limited workforce challenges of SBDCs (Gray & Black, 2015). These key success factors might seem straight forward, but designing a project-based pedagogy that incorporates them requires the effective management of complex networks of collaborators.

Three future directions for research emerged from this study. First, utilize the key success factors in client selection (Lopez & Lee, 2005; Hillon et al., 2012) and determine if they are effective predictors of successful outcomes. For instance, some clients were more interested in solution implementation than the necessary research to produce those deliverables. Second, study the role of industry liaison in project-based pedagogy in order to determine skills and characteristics for facilitating meaningful partnerships (Hillon et al., 2012; & Gray & Black, 2015). Finally, explore whether clients implemented students' recommendations to understand the authentic impact of project-based learning on client business success.

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Appendix A
SBTDC Client Project Evaluation Form

sbtdc
Your business. Better.

Thank you for your participation in the business student team program at WCU. Below you will find a survey to assess the work the students from WCU completed with your company. Your comments are greatly appreciated and will be used to improve the program for future semesters.

Date: _____ Your Name: _____

Your Company or Organization: _____

(Please circle the most accurate answer to each of the questions below; include additional comments in the space provided)

1. Did you find the team's communication and behavior to be polite and professional?

   Always   Generally   At Times   Seldom   Not At All

   Comments:_____

2. How many times were you in contact with your student team over the course of this project?

   More than 15   15   10   5   1

   Comments:_____

3. Was the content of the team's report meaningful and of adequate depth?

   Very Much So   Generally   Neutral   A Bit Weak   Not At All

   Comments:_____

4. Was the content of the team's final presentation meaningful and of adequate depth?

   Very Much So   Generally   Neutral   A Bit Weak   Not At All

   Comments:_____

5. Do you foresee making changes to your business based upon the recommendations by the team?

   Yes, Major Changes   Yes, Several Changes   Yes, But Only Minor Changes   Doubtful   Not At All

   Comments:_____

6. How likely are you to recommend a student project to another company or organization?

   Very Likely   Somewhat Likely   Neutral   Unlikely   Very Unlikely

   Comments:_____

7. Overall, how satisfied were you with the student project you participated in this semester?

   Very Satisfied   Somewhat Satisfied   Neutral   Unsatisfied   Very Unsatisfied

   Comments:_____

8. How would you rate your satisfaction with the student team logistics this semester? (This includes communication with your lead counselor and other SBTDC counselors about the project and scheduling the initial meeting and team presentation, if applicable).

   Very Satisfied   Somewhat Satisfied   Neutral   Unsatisfied   Very Unsatisfied

   Comments:_____

9. Please add any additional comments you would like to share.

   Comments:_____