

**The Curious Role of Teachers in College Guidance: Are Teachers  
Institutional Agents of College Access?**

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## Abstract

A teacher's primary responsibility is the academic skill development of students. However, as detailed in this study, high school students report that they are more likely to reach out to teachers for college guidance than any other adults. Thus, teachers are uniquely positioned as "institutional agents" for students interested in college (Stanton-Salazar, 1997, 2011), but they often lack the training and time to confidently provide college guidance. This mixed-methods study analyzed survey data from students and teachers and interviews with administrators and college counselors to investigate factors that increase the likelihood that teachers support students in navigating college-going processes.

## **The Curious Role of Teachers in College Guidance: Are Teachers Institutional Agents of College Access?**

College and career readiness have emerged in recent years as central objectives of high school education in the United States (Conley, 2017; Darling-Hammond, Wilhoit, & Pittenger, 2014). Coinciding with the steadily increasing value of a college degree, government policies and high school programs have adopted a *college-for-all* approach to guide as many students as possible towards college-going pathways (Rosenbaum, 2001). Academic instruction has become a centerpiece of college readiness efforts and a majority of states have adopted standards emphasizing college and career readiness skills. Teachers have accordingly begun to adapt their pedagogical strategies and curricula to address the college readiness of their students. While scholars, policymakers, and practitioners view teachers' academic instruction as central to college readiness, discourse on college preparation largely overlooks teachers as potential resources for college guidance (American School Counselor Association [ASCA], n.d.; Corwin, Venegas, Oliverez, & Colyar, 2004).

The processes of obtaining information on college life, applying to college, procuring financial aid, and choosing a college are often presumed to fall entirely under the purview of academic and college guidance counselors. Little attention has been paid to the broader ecosystem of college guidance available to students, especially in low-income communities. This study contends that teachers play a significant, if ill-defined, role in the college guidance process. Our purpose is to delineate how teachers might serve as support for school counselors in guiding students from high school to college. The research addresses the following two research questions:

1. What role do teachers play in offering college guidance to low-income students?
2. What are the school conditions and teacher characteristics associated with (a) perceptions of responsibility about college guidance, and (b) self-reported behaviors about engaging in informal college guidance conversations?

These questions are motivated by the challenges of college access that manifest in United States high schools. In particular, high school counselors are substantially overburdened with college preparatory responsibilities (Bardhoshi, Schweinie, & Duncan, 2014; Kolodinsky, Draves, Schroder, Lindsey, & Zlatev, 2009). Despite ASCA's recommended student-to-counselor ratio of 250:1, a 2016-17 report described the national average ratio as 455:1 (ASCA, 2019). In California, where this research was conducted, the ratio was 663:1 (ASCA, 2019). These numbers refer to student to school counselor ratios – they do not reflect student to *college counselor* ratios. If a student attends a school with high student-to-counselor ratios, they run the risk of not receiving adequate and sustained support from school counselors and/or college counselors (Corwin et al., 2004; Goodman-Scott, Sink, Cholewa, & Burgess, 2018).

Given their own expansive set of responsibilities, asking teachers to completely fill these gaps is an unfair request; however, teachers can be more than suppliers of content knowledge and curricula. They are called upon to develop cognitive and non-cognitive capacities regarding college readiness. Non-cognitive factors include mindsets and behaviors related to college success (Duncheon, 2015). In response to calls for educating the *whole child* (Noddings, 2005), teachers often advise students regarding a variety of personal and educational matters. Strong student-teacher relationships are grounded in empathy and support (Cornelius-White, 2007). The literature calls upon

teachers to support students beyond academic needs and to understand them holistically for who they are and who they hope to be. For 90% of students in the United States, these hopes include earning a college degree (Wolniak, Davis, Williams, & Casano, 2016).

Like school counselors, teachers' time and energy are stretched thin, but many are engaged in relationships with students that involve more than just academic subject matter. Research has shown that teachers negotiate the boundaries of the traditional teacher-student interaction and maintain a sizable non-academic influence in the lives of their students (Aultman, Williams-Johnson, & Schultz, 2009). Below we offer a framework to understand the influence of school-level structures and individual teacher characteristics on the role of teachers as facilitators of college-related social capital.

### **Social Capital – Understanding Teachers as Brokers of College Guidance**

Stanton-Salazar (1997) argues that adults on school campuses can serve as *institutional agents* who “can choose, and do often choose, to transmit institutional support as part of an *explicit* and *strategic agenda* ... when they do so, the impact on minority children and youth is considerable, if not life-altering” (p. 15). Despite the potential of social capital from “important non-parental adults” to transform student realities, Stanton-Salazar (2011) also outlines exclusionary structures that constrain access to the type of social capital that allows for social mobility for marginalized youth. He argues that schools often prioritize bureaucratic efficiency over individual attention, lack clarity with respect to the role of teachers as conduits of information and support for students, and are structured to cultivate shallow relationships. According to Stanton-Salazar (2011), many educators emphasize student pathology and egoistic conceptions

of student success and neglect the development of productive social capital. However, empowerment agents, who are knowledgeable of oppressive structures and capable of providing access to dominant structures and practices, can enhance social mobility for marginalized students (Stanton-Salazar, 2011).

Informed by Stanton-Salazar's (2011) concept of empowerment agents, a framework for understanding the role of teachers in providing college support at high schools is presented here. The framework highlights access, time, expertise, critical consciousness, and technological capacities. Teachers have the advantage of regular access to students. Seeing students for four to five hours each week provides multiple opportunities to offer college support. However, since their primary role is academic instruction, teachers' time to provide guidance and expertise on the college-going process is limited. Figure 1 highlights the tensions and potential for enhanced college guidance collaboration among teachers who have consistent contact with students and counselors who have greater expertise and dedicated professional time for college guidance activities.

	Training & Expertise	Time	Access
College/Academic Counselor	↑	↑	↓
Teacher	↓	↓	↑

**Figure 1.** Positioning of School Personnel as College Empowerment Agents

Additionally, an asset-based critical consciousness regarding the academic potential of low-income, minoritized student populations may encourage teachers to adopt college-

support roles (Stanton-Salazar, 2011). Lastly, given the centrality of online tools to the college application process, a teacher's comfort with digital tools may play a role in their willingness to serve as brokers of college access.

In this paper, we address the following research question: Can teachers serve as institutional empowerment agents for minoritized students who hope to attend college? This study suggests four ways in which teachers can adopt such a role. First, teachers must have the institutional expertise. Without knowledge of college application processes, teachers cannot offer procedural or knowledge-based support to students seeking a college education. Second, teachers must have clear institutional roles that are conducive to information-brokering. Third, serving as empowerment agents to students necessitates that teachers adopt an asset-based, critically conscious approach to educating students. This could entail believing that students are capable of becoming college ready and understanding structural barriers that limit their access to educational opportunity. Lastly, given the prevalence of online tools for college access, technological confidence and capacities may play a role in the extent to which teachers are willing and able to provide college guidance to students. The study design aims to uncover the ways in which teachers are able to act as empowerment agents for students who desire a college degree.

### **Method**

From 2014-2018, the University of Southern California's (USC) Pullias Center for Higher Education utilized a \$3.2 million, four-year grant from the United States (U.S.) Department of Education's Fund for the Improvement in Postsecondary Education's First in the World (FITW) program to develop a series of college access digital tools and

conduct a randomized control trial (RCT) on the effects of those tools on improving access to college for low-income and minoritized students. Conducted at the school-level, primary study goals included: (a) leveraging technology to attain effective college access practices in low-cost ways; (b) increasing the rates of FAFSA and California Dream Act applications, college applications, and college enrollment at participating schools; (c) recording implementation challenges and strategies associated with the digital intervention at the school-level; and (d) conducting research to better understand how high schools develop and sustain college-going culture in a digital era.

### **Participants**

The RCT study sample consisted of 52 high schools in 20 school districts located in California. In order to be eligible to participate in the study, high schools had to serve at least 80% students from under-served and/or low-income backgrounds. The sample was randomized into two groups: treatment ( $n = 25$ ) and control ( $n = 27$ ). Treatment and control high schools were statistically similar in key demographics, including size of student body (treatment mean = 1,206, control mean 1,206, mean  $SD = -0.18$ ), percentage of students eligible for Free and Reduced Price School Meals (treatment mean = 72%, control mean = 72%, mean  $SD = -0.06$ ), and percentage of students that met or exceeded the standard in English language arts and mathematics (see Reichardt & McClelland, 2018 for all specific school sample descriptions). The school-level focus of the larger study was the graduating class of 2017 over the course of their junior (2015-2016) and senior (2016-2017) years.

## Materials

The online game-based tool available to treatment schools included a digital role-playing game that mimicked the college application process embedded within a website that offered curated college guidance related content and activities, including quizzes, articles, and videos.

## Procedure

Treatment schools implemented the online game-based digital tool during the spring and fall of the 2015-2016 and 2016-2017 academic school years, respectively. Schools were provided support from USC researchers and staff from the college access non-profit, the Get Schooled Foundation prior, during, and after each implementation. Control schools were instructed to conduct “business-as-usual.” Both treatment and control schools participated in research-related activities, including student and teacher surveys.

**Focus on teachers.** All teachers at each of the 52 participating high schools were eligible to participate in one teacher survey. Practitioners that served as point-of-contact for the study and/or were heavily involved in implementation were invited to participate in interviews. All students at treatment schools were also invited to participate in a series of surveys over the course of the study.

**Quantitative measures for teachers.** Survey measures included closed-ended (i.e., multiple choice, Likert-type) and open-ended (i.e., write-in) items designed to capture self-reported college preparation and technology use in the classroom, college guidance beliefs and behaviors, and basic demographics such as subjects taught and length of employment as a teacher.

**Quantitative measures for students.** Survey measures included closed- and open-ended items designed to capture student self-reported college knowledge, college-going efficacy, and interest in college at three separate times over the course of the digital intervention. Actual college-going behaviors, technology use, engagement with the intervention, and basic demographics, such as parental educational attainment, gender, and age were assessed once during the study duration. The current study was particularly interested in the question: *Who has helped and/or is currently helping you with your college applications? Check all that apply.* Students were able to indicate any number of the following: my guidance counselor; college counselor; teacher(s); friend(s); parent(s)/guardian(s); college prep program(s) like Upward Bound, Cal-SOAP, GEAR Up, etc.; religious institution (church, mosque, synagogue, etc.); Other.

**Qualitative measures for teachers.** In addition to the survey data, we conducted face-to-face and/or phone interviews at a majority of the participating school campuses to better understand the localized manifestations of college-going cultures. The interview protocol included logistical questions about the structure of the counseling department and programs that support them, as well as the general college-going culture, relationships with teachers, and parental/community involvement. Through these interviews, researchers were afforded the opportunity to more comprehensively examine the ways in which the cultures were understood by the school-level personnel responsible for generating college-going practices. The interview data allowed researchers to better understand how particular patterns observed in the survey data unfolded at school sites.

**Teacher survey.** The survey was made available to teachers over the winter of 2016-2017. The method of distribution for the teacher survey varied by school site, either via links emailed by the study's on-site point of contact to survey participants or the survey was completed in faculty meetings. The target of distribution varied as well: some schools reported sending it out to a sub-group of teachers rather than the entire faculty body. In addition to the survey data, a member of the research team conducted an intake interview with an on-site contact at each school, typically a counselor, but occasionally an administrator or teacher. The site contact was the primary liaison between the project team at USC and the high school site.

**Student survey.** Surveys were made available three times: (a) prior to the first round of implementing the digital intervention in January 2016, (b) after the first round of implementation in February 2016, and (c) after the second round of implementation in November 2017. Student survey distribution was facilitated through the digital intervention.

### **Data Analysis**

Quantitative data were analyzed using both descriptive and predictive analyses in *Stata 14* (an integrated statistical software package). Analysis of the qualitative data was a collaborative process undertaken by a team of principal investigators, postdoctoral researchers, and graduate students at USC. The team met to propose codes and categories, apply those codes to select data, and then iterate on the coding scheme based on the initial coding process. Qualitative data were uploaded to *Dedoose* (an online qualitative software analysis tool) and coded twice. Both quantitative and qualitative data were given equal weight in our study and patterns uncovered from each

analysis were used to mutually reinforce one another. The qualitative data suggested ways in which particular social phenomena regarding college guidance unfolded on high school campuses, and the quantitative data revealed the extent to which those processes were occurring more broadly across our sample of California schools.

## Results

During one of the study interviews, a high school counselor articulated a concern guiding this article:

*How can we all work together? It's not just my responsibility, my job, but it's how can we all contribute to it? How can we all help our students to move forward? ... Because it can't be just be me.*

Study findings indicate that teachers were somewhat hesitant to provide college guidance, but they were also viewed by students as important sources of guidance and support. Despite this general inconsistency, teachers at some schools appeared to be meeting the needs of their students. Interview and survey data suggested ways that schools might leverage teachers to provide college guidance. The study also reveals the structural barriers that limit what teachers are able to do.

Data were derived from student surveys administered after the second round of implementation of the college access digital intervention. The total number of eligible survey takers was 6,394 and surveys were collected from 1,302 seniors in the graduating class of 2017, yielding a response rate of 20%. Teachers at all schools were given the opportunity to complete one survey over the winter of 2016-2017. Response rates varied across all schools, but the total number of submitted surveys received was 628. Qualitative data were derived from 50 practitioner intake interviews conducted in the fall of 2015.

## Teachers as an Untapped Resource for College Guidance

When asked, “*Who has helped and/or is currently helping you with your college applications? Check all that apply.*” students ( $n = 606$ ) reported most frequently turning to their teachers (55%) for help. The second most frequent points of contact were guidance counselors (46%), followed by parents/guardians (35%) and friends (27%). Less than a quarter of students surveyed cited their college counselor (24%) or college-preparatory programs, like Upward Bound, GEAR Up, etc. (22%). While the absence of dedicated college preparatory personnel and programs on some school campuses may help explain their infrequent citation from the students surveyed, this finding frames teachers as being uniquely positioned to contribute to students’ college decision-making.

Counselors generally agreed that teachers were well positioned to support the college application process, emphasizing the importance of teachers’ relationships with students. One counselor remarked, “Teachers have those students in the classroom every single day. They know them better than we do.”

While students and counselors saw teachers as valuable partners in the college guidance process, the extent to which teachers expressed a belief that supporting students with college guidance was their responsibility was mixed. About two-thirds of respondents surveyed reported that they *agreed* or *strongly agreed* that *It is my responsibility to provide college guidance to my students*. Whereas the remaining third responded *somewhat agreed*, *disagreed*, or *strongly disagreed*, though most fell in the *somewhat agreed* category.

Additionally, we were interested in teacher self-reports of having informal conversations about going to college. Similar to the beliefs about their responsibilities to provide college guidance, 75% of teachers indicated they have informal conversations with students about college or applying to college either daily, weekly, or monthly. Using interview and survey data, we explored the extent to which teachers' beliefs and behaviors about college guidance were influenced by four factors: expertise, time, critical consciousness, and technology. We hypothesized that enhanced expertise about college guidance, dedicated time for college guidance, an asset-based consciousness about students, and technological capacity would each be associated with the likelihood that a teacher would view college guidance as their responsibility and engage in self-reported guidance relevant behaviors.

In conjunction with interview data, logistic regressions were used to investigate the contribution of these variables in predicting teachers' beliefs of college guidance responsibility and their self-report frequency of informal conversations with students. However as logistic regression requires a dichotomous outcome variable (0, 1), we defined teachers who believed it was their responsibility as those who responded *strongly agree*, *agree*, or *somewhat agree* to the responsibility question (0 = *not my responsibility*, 1 = *my responsibility*) and teachers who had more frequent informal conversations (daily, weekly, or monthly) received a value of 1 whereas all other frequencies were scored as 0. Appendix Table 1 provides a summary of the variables used in the analyses.

## Testing the Framework

The findings from the interviews and two logistic regression models wherein all predictor variables are entered into the model simultaneously in order to understand their combined effect on the outcomes, beliefs, and self-report behaviors respectively are outlined below.

## Training and Expertise

In order for teachers to serve as college guidance resources for students, teachers and counselors emphasized the importance of teachers' college knowledge. Teachers' lack of knowledge of college requirements was a significant limitation in their ability to support students. One teacher commented in a survey on the barrier of "knowing what is actually effective in getting them into college, not just from personal (possibly outdated) experience." A counselor explained about the teachers, "They're good about the motivating, like, 'Hey, you gotta do this!' I think some of them don't feel comfortable with their knowledge base." Some schools found success in policies to enhance teacher knowledge of the college application process. "Teachers go through training. For example, we just had an unassigned day and during that time some teachers went through different workshops where they were briefed on the college application process." Thus, practitioners reported expertise as a significant factor regarding how teachers were able to engage in college guidance with their students.

Results of a logistic regression provided further support for this relationship (see Appendix Table 2). With teacher demographic variables in the model including age, gender, and first generation status, results indicated that more frequent attendance of professional development (PD) for college (at least once a year) was a significant

predictor of group membership (odds ratio [OR] = 3.15,  $p < .001$ ), indicating that teachers who attended more frequent PD for college had 3.15 times higher odds of believing it is their responsibility to provide college guidance to students.

Results of a separate logistic regression indicated that (similar to the analysis on teacher beliefs) more frequent attendance at PD was associated with 5.38 times higher odds ( $OR = 5.38$ ,  $p < .001$ ) of having informal conversations with students about college going.

### **Time**

Teachers often believed that their primary responsibility was to deliver content to students; this responsibility left little time for providing college support. An interview participant iterated: “A lot of our teachers are focused on their own content ... With all the state testing and all of those benchmarks, that’s their priority.” Regarding college, a counselor explained, “We still have teachers who are kind of like, ‘well, that’s not my job.’” Many teachers’ survey responses conveyed insufficient time for college guidance. To be sure, classroom teachers often face substantial pressures to develop students’ academic skills, and content knowledge, and to improve performance on standardized tests. Thus, little time is left for additional activities, such as college guidance, even if beneficial to students.

At some schools, however, advisory programs allowed time and space to include college guidance activities. One counselor explained, “advisory teachers, at each grade level, have a curriculum already established ... senior year, it's getting them – it's writing, and applying, and getting them ready.” Based on this insight, we created a categorical variable (0 = advisory period absent; 1 = advisory period present) to

understand the effect of a school policy on teachers' perceptions of college guidance responsibilities and engagement in informal conversations with students. While some schools labeled this period "advisory," others called it a "home room" or offered some other moniker.

Again, a logistic regression was used to investigate the contribution of this school policy in predicting teachers' perceptions of responsibility and self-reported frequency of informal conversations with students. Teachers who taught at a school with an advisory period had 1.79 times higher odds of believing it was their responsibility to provide college guidance to students. However, when we explored the effect of advisory periods on the behavior of having informal conversations about college, we found that it did not predict having more or fewer conversations with students ( $p = .22$ ). This pattern revealed that while the school policy of advisory periods may influence teacher *beliefs* about their role in college support processes, it did not significantly influence their behavior of having informal conversations with students about college (see Appendix Table 2).

### **Critical Consciousness**

The results documented a sentiment among teachers that many students lack the skills or work ethic to earn a college degree. This deficit orientation limited the extent to which teachers were willing to support students in achieving college-going aspirations. As one teacher stated in a survey, "Students today are lazy and entitled ... our school is on a rampage campaign for higher rigor standards, yet here we are holding their hands to fill out their college apps." Tracking practices at schools also seemed to influence whether teachers offered college-going support. In particular if

students were not AP (Advanced Placement students), teachers were less likely to report in their surveys that they offered college related guidance. Some teachers, however, exemplified critical consciousness, adopting asset-based conceptions of their students from minoritized backgrounds and devising work-arounds when students needed additional support.

Based on the importance of asset-based thinking documented in the qualitative data, we used a logistic regression to predict teacher membership in believing it is their responsibility to provide college guidance using teachers' self-reported values of *how many students should go to college*. This variable was used to operationalize teachers' overall views of the skills and resources students bring to school. Similar to our other analyses, we used this "should go to college" variable to predict if teachers had more or fewer informal conversations with students. The study results documented that teacher responses to the "should go to college" variable were significant predictors of beliefs in responsibility ( $OR = 1.02, p < .001$ ) and behavior related to having more informal conversations ( $OR = 1.01, p < .001$ ). These results indicate that for beliefs in responsibility and self-reported behaviors, a one percent increase in the percent of students a teacher believes should go to college is associated with approximately 1.02 times higher odds that a teacher believes it is their responsibility to provide college guidance to students and 1.01 times higher odds of having more frequent informal conversations about college with students.

### **Technological Competence**

The qualitative data highlighted the ways in which computing devices and Internet connectivity were a core component of college guidance activities designed by

counselors. Online computers, Chromebooks, and iPads were central to college guidance activities at the majority of study schools. One counselor described the “constant” barrage of students she deals with in her room looking to access computers for college searches and application purposes. “I have kids in there all day long,” she explained. Some students request to take the devices with them when they leave campus. “It’s because they don’t have computers at home.” The counselors reported a variety of online activities that their schools employed to help students prepare for the college application process. Students were guided through college searches while attempting to find potential universities where they had a realistic likelihood of acceptance. They engaged in career searches online, tracked their grades, signed up for push notifications about college deadlines, received resume-writing support, exchanged emails with teachers and administrators, and received school updates over social media. Some college counselors communicated with parents via email.

Despite the extent to which computing devices and Internet connectivity were essential tools for college guidance, counselors expressed reservations about the feasibility of students being able to get the appropriate guidance by themselves online. The first concern regarded computer access. They believed that many of their students lacked adequate Internet access at home, and the number of computers dedicated specifically to college counseling were often insufficient to meet the demand from the students. Secondly, many called into question whether students’ digital literacy was adequate to engage meaningfully with college-related activities online. They lamented that students did not know how to send professional emails or use search engines effectively. One counselor said that students were adept at SnapChat and other social

media sites, but they would leave important college-related emails unopened. Another counselor explained:

*You know what's funny that I'm finding really interesting about teenagers right now? Technology is moving much faster than they're able to adapt. You know how you used to think that adults were the ones that couldn't handle the technology and had to be taught by their kids? Now it's like I'm looking at my kids and they're falling behind.*

Given the prevalence of digital tools to the college guidance practices we observed at schools and the support that students may need in navigating online college material, we questioned whether teachers' Internet navigational capabilities would be associated with their perceptions of responsibility and self-reported behaviors related to college guidance. This study focused on the role of attendance at PD related to technology, a rating of Internet confidence in the classroom, and a measure of Internet quality which is the average of teacher-reported Internet speed and reliability.

Appendix Table 2 provides a summary of these logistic regression coefficients. As implicated by the qualitative data, two of the three technology variables entered into the model were significant predictors of teacher beliefs and behaviors. While we failed to document significant effects for more frequent attendance at PD for technology on beliefs or self-report behaviors, Internet confidence ( $OR = 1.39$ ,  $OR = 1.26$ ) was a significant predictor of beliefs in guidance responsibility and frequency of informal conversations respectively. Interestingly, for both outcome variables, Internet quality had a negative relationship with believing it is their responsibility to provide college guidance. Interestingly, a one unit increase in Internet quality, defined as the average of Internet speed and reliability was associated with 18% lower odds of agreeing it is their

responsibility to provide college guidance and 16% lower odds of having more informal conversations.

### **Discussion**

The role of the high school teacher in providing college guidance is amorphous. While counselors struggle with overwhelming caseloads, some express a desire to partner with teachers on college guidance at their schools. Students, meanwhile, report that teachers are the most likely source of college guidance. However, teachers are primarily tasked with academic preparation, often measured by performance on standardized tests. Indeed, the task of improving students' academic skills is a substantial obligation. Regardless, well over half of the teachers surveyed in this study believed it was their responsibility to support students with college guidance and therefore believed that supporting college counselors aligns well with their work as teachers. However, not all teachers agreed. Interview data and survey data helped to delineate under what circumstances teachers would be willing and able to support students in the college application process. Overall, college guidance expertise, time outside of academic instruction, a critical consciousness, and technological competence were associated with either teachers' beliefs about their role in college guidance or the frequency of engaging in informal conversations.

College guidance knowledge, operationalized as having participated in professional development (PD) about college at least once in the past year, was associated with a three-fold increase in the odds that teachers reported they agreed or strongly agreed that college guidance was their responsibility and a five-fold increase in the odds of having more frequent conversations about college with students. This was

the strongest relationship in the model, indicating that PD might be a particularly important means by which school leaders can increase teachers' sense of ownership over their students' college-going futures and, by extension, engagement in supporting behaviors. Indeed, the qualitative analyses indicated that counselors who helped to develop college guidance PD at their schools reported experiencing supportive teaching staff. The college application process changes from year to year, and staying abreast of the nuances of applying to college may allow teachers to feel confident in their capacity to assist with college guidance. That confidence may translate to an increased sense of responsibility.

Secondly, the presence of a structural advisory period indicated differing influences on teachers' beliefs of responsibility and supportive behaviors. College guidance necessitates time that teachers often lack, and our analyses indicate that the presence of an advisory period predicted 1.79 times greater odds of believing that providing guidance is a teacher's responsibility, but is a non-significant ( $p = .22$ ) predictor of teachers engaging in more frequent informal conversations with students. Interestingly, our results indicated that while the structural affordance of an advisory period may bolster beliefs in responsibility, these beliefs may not manifest as behaviors.

Third, critical consciousness may be an important component of a teacher's perception of his or her job responsibilities and according behaviors. Many teachers on the surveys conveyed deficit frameworks in their descriptions of their students, and those frameworks seemed to inform whether they believed they were responsible for college guidance. Quantitatively, critical consciousness was operationalized by

attempting to measure the extent to which teachers thought their predominantly low-income students should go to college. While being a coarse operationalization of critical consciousness, the measure was a significant predictor of teacher perceptions and behaviors about their guidance responsibilities and behaviors. The final model predicted that a one percent increase in the proportion of students a teacher believed should go to college was associated with 1.02 times higher odds they would report believing that it was their responsibility to provide college guidance and 1.01 times higher odds of having more frequent informal conversations about college with students.

Lastly, the findings suggest a significant but contradictory relationship between several measures of technology and the teachers' perceptions of and engagement in college guidance. We hypothesized that enhanced technological capacity would be associated with greater perceptions of responsibility and more supporting behaviors. Teachers who expressed confidence in their classroom Internet abilities were significantly more likely to believe they were responsible for providing college guidance ( $OR = 1.39$ ) and having more frequent informal conversations ( $OR = 1.26$ ). This finding was robust to controls of teacher age, gender, and first-generation status.

However, for the structural measure of school Internet quality we found a negative relationship for beliefs of responsibility ( $OR = .82$ ) and supportive behaviors ( $OR = .84$ ). Increased Internet quality was associated with a lower odds of teacher belief in responsibility in addition to lower odds of engaging in more frequent informal conversations. Perhaps teachers assumed that fast and reliable Internet allows students to take on more personal responsibility for college search and applications.

Each of the above findings align well with Stanton-Salazar's (2011) theory of social capital and institutional agents. Stanton-Salazar emphasizes structural constraints may impede the development of meaningful social capital. In particular, the bureaucracy of content standards and compartmentalization of teacher responsibility limit the capacity of teachers to serve as brokers of college guidance. Additionally, teachers may apply individual pathologies to their students that highlight deficits and overlook structural barriers. For Stanton-Salazar, empowerment agents avoid deficit framings of their students and have the institutional freedom to support students in their individual aspirations. Corwin & Tichavakunda (2018) provide a discussion about how empowerment agents incorporate technology into their work. These agents can facilitate the growth and exchange of social capital with students by offering insight into the functioning of institutional processes like the college application process. Thus, structures like advisory and PD as well as positive orientations towards students' college capacities and online access can support teachers in contributing to college support at their high schools. The data we present here suggest ways in which teachers might be better positioned as institutional agents of college access.

### **Limitations**

This study's limitations include generalizability, lack of valid measures, and researcher bias. First, the data only include schools in California within districts which were willing to participate in the study using digital tools and college readiness. Whether findings are applicable beyond this context is uncertain. Also, measures on all four factors of teacher capacity for college guidance – expertise, time, critical consciousness, and technology – are beset with challenges of validity. Whether a

professional development session is a substantive determinant of a teacher's college counseling expertise, whether an advisory period is an adequate measure of time for college guidance, and whether teacher-reported Internet confidence and access are a holistic assessment of technological capacity can all certainly be contested on sturdy grounds. Admittedly, teacher assessment is a particularly loose assessment of critical consciousness. Third, findings from surveys and interviews conducted in classrooms and staff meetings, often with researchers present, may be influenced by researcher biases.

### **Implications**

Our purpose here has not been to suggest that teachers must take on more responsibilities than they already have in order to prepare students to apply for college, but rather that these educators can serve as supplemental support for school counselors in assisting students with the college process. The nature of teaching as a "high-stress" profession is well documented in the literature (Kyriacou, 2001; von der Embse, Sandilos, Pendergast, & Mankin, 2016), and the expectations placed upon teachers are substantial. Nor do we suggest that college counselors are expendable, and teachers should absorb their duties. The work of effective college counselors is essential to student outcomes, and the literature calling for increased support for their work is compelling (ASCA, n.d.).

Instead, we contend that the current realities of college guidance in high school would benefit from an enhanced understanding of the contexts in which teachers are willing and able to support counselors with college guidance. Students name their teachers – more than any other person at their schools – as the primary source of

information about college. Creating the structures and systems at a school site that facilitate the capacity of teachers to support college guidance activities can help teachers and college counselors feel more efficacious in their roles and better support students through their college application and decision processes.

The findings here suggest a few ways school leaders might develop structures that facilitate the development of social capital towards college guidance support from teachers. School administrators might incorporate professional development opportunities that offer college guidance insights that teachers can pass on to their students. Additionally, structures like advisory classes may influence teacher beliefs in their responsibility to provide college guidance. Also, schools can work to ensure that teachers adopt asset-based, critically conscious conceptions of their students. While our findings on the relationship between computing devices, Internet connectivity, and college are unclear, finding ways to enhance teacher comfort with online resources to improve student college readiness is deserving of future research – as is research on understanding how infrastructure influences teacher beliefs and behaviors. Corwin, Maruco, Koulluri, Galan & Rocha, C. (2018) share knowledge about college-going culture in the digital era. Public schools' support of students achieving their college-going dreams may depend on how school leaders grant the necessary resources to teachers for their development in the process of becoming institutional agents of college access.

## References

- American School Counselor Association. (2019). Student-to-school-counselor ratio 2016-2017. Retrieved from [www.schoolcounselor.org/asca/media/asca/home/Ratios15-16.pdf](http://www.schoolcounselor.org/asca/media/asca/home/Ratios15-16.pdf)
- American School Counselor Association. (n.d.). The role of school counselors. Retrieved from <https://www.schoolcounselor.org/asca/media/asca/Careers-Roles/RoleStatement.pdf>
- Aultman, L. P., Williams-Johnson, M. R., & Schultz, P. A. (2009). Boundary dilemmas in teacher-student relationships: Struggling with “the line.” *Teaching and Teacher Education*, 25(5), 636-646.
- Bardhoshi, G., Schweinle, A., & Duncan, K. (2014). Understanding the impact of school factors on school counselor burnout: A mixed-methods study. *Professional Counselor*, 4(5), 426-443.
- Conley, D. T. (2017). The new complexity of readiness for college and careers. In K. L. McClarty, K. D. Mattern, & M. N. Gaertner (Eds.). *Preparing students for college and careers: Theory, measurement, and educational practice*. National Center on Measurement in Education Yearbook. New York, NY: Routledge.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research*, 77(1), 113-143.
- Corwin, Z. B., Maruco, T., Koulluri, S. Galan, C., & Rocha, C. (2018). *College going in a digital era*. Los Angeles, CA: Pullias Center for Higher Education.
- Corwin, Z. B. & Tichavakunda, A. A. (2018). Facilitating access: The role of digital empowerment agents. In W. G. Tierney, Z. B. Corwin & A. Ochsner (Eds.) *Digital*

- equity and educational opportunity*. Baltimore: MD: John Hopkins Press.
- Corwin, Z. B., Venegas, K. M., Oliverez, P. M., & Colyar, J. E. (2004). School counsel: How appropriate guidance affects educational equity. *Urban Education, 39*(4), 442-457.
- Darling-Hammond, L., Wilhoit, G., & Pittenger, L. (2014). *Accountability for college and career readiness: Developing a new paradigm*. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Duncheon, J. C. (2015). The problem of college readiness. In W. G. Tierney & J. C. Duncheon (Eds.), *The problem of college readiness* (pp. 3-44). Albany, NY: State University of New York Press.
- Goodman-Scott, E., Sink, C. A., Cholewa, B. E., & Burgess, M. (2018). An ecological view of school counselor ratios and student academic outcomes: A national investigation. *Journal of Counseling & Development, 96*(4), 388-398.
- Kolodinsky, P., Draves, P., Schroder, V., Lindsey, C., & Zlatev, M. (2009). Reported levels of satisfaction and frustration by Arizona school counselors: A desire for greater connections with students in a data-driven era. *Professional School Counseling, 12*, 193-199.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review, 53*, 27-35.
- Noddings, N. (2005). *The challenge to care in schools: An alternative approach to education*. New York, NY: Teachers College, Columbia University.
- Reichardt, R., & McClelland, A. (2018). *Mission: Admission initial FAFSA impact results: School level model*. Retrieved from <http://apaconsulting.net/wp-content/uploads/>

2018/06/Initial\_impact\_FITW\_6-1-18.pdf

Rosenbaum, J.E. (2001). *Beyond college for all: Career paths for the forgotten half*.

New York, NY: Russell Sage Foundation.

Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review*, 67(1), 1-41.

Stanton-Salazar, R. D. (2011). A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth. *Youth & Society*, 43(3), 1066-1109.

Wolniak, G., Davis, L., Williams, T., & Casano, K. (2016, August). *The state of our nation's youth: 2016*. Alexandria, VA: Horatio Alger Association of Distinguished Americans, Inc. Retrieved from <https://www.horatioalger.org/wp-content/uploads/2016/09/HA-2016-SONY-FINAL.pdf>

von der Embse, N.P., Sandilos, L.E., Pendergast, L., & Mankin, A. (2016). Teacher stress, teaching-efficacy, and job satisfaction in response to test-based educational accountability policies. *Learning and Individual Differences*, 50, 308-317.

## Biographical Statements

Suneal Kolluri is a PhD candidate at the University of Southern California. His research focuses on college access for marginalized students and social stratifications in high school. He was a high school teacher for nine years in Oakland public schools.

Neil Jacobson is an adjunct assistant professor and PhD student at University of Southern California. His research focuses on the role of emerging technologies as they relate to enhancing knowledge and interest in formal and informal learning environments including science, college-knowledge, and political knowledge.

Tattiya Maruco is a senior researcher with the Digital Equity in Education project at the USC Pullias Center for Higher Education. She earned her master's in social psychology from the University of Wisconsin-Madison.

Zoë Corwin is an associate professor of research in the Pullias Center for Higher Education at the University of Southern California. Her research examines college preparation programs and access to financial aid, college pathways for foster youth, and the role of social media and games in postsecondary access and completion.

## Appendix

**Table 1**

*Descriptive Statistics on the Categorical and Continuous Variables Used in the Analyses*

Variable			<b>N</b>	<b>Mean (SD)</b>	<b>Frequency</b>	<b>Range</b>
<b>Outcome</b>	Belief in providing college guidance	(0 = not my responsibility; 1 = my responsibility)	627		66% think it is their responsibility	0-1
	Behavior of engaging in informal conversations	(0 = never, once a year, several times a year; 1 = daily, weekly, monthly)	628		75% report having frequent conversations	0-1
<b>Training and Expertise</b>	PD college	(0 = once a year or several times a year; 1 = monthly, weekly or daily)	622		44% attended PD monthly, weekly or daily	0-1
<b>Time</b>	Advisory	(0 =no advisory; 1 = advisory)	570		22% had advisory	0-1
<b>Critical Consciousness</b>	Should attend college		625	77.14 (20.89)		0-100
<b>Technology</b>	PD tech	(0 = once a year or several times a year; 1 = monthly, weekly or daily)	592		84% attended PD for tech monthly, weekly or daily	0-1
	Internet confidence		614	4.25 (.95)		1-5
	Internet quality	Average of internet speed and internet reliability	620	3.74 (1.56)		1-5
<b>Demographic Variables</b>	Gender	(0 = male; 1 = female)	523		61% female	0-1
	Age		519	42.23 (10.79)		22-75
	First gen status	(0 = not first gen; 1 = first gen)	531		42.9% first gen teachers	0-1

**Table 2**

*Logistic Regression Results Predicting Teacher Beliefs About Responsibility and Self-Report Behaviors of Holding Frequent vs Infrequent Conversations with Students*

Predictor variable	Beliefs Model		Self-Report Behaviors Model	
	<i>b</i>	Odds Ratio	<i>b</i>	Odds Ratio
<b>Teacher Demographics</b>				
Sex	-0.00	0.99	0.02	1.01
First generation status	-0.04	0.95	-0.05	0.95
Age	-0.01	0.99	-0.00	0.99
<b>Expertise</b>				
PD for college	1.15***	3.15***	1.68***	5.38***
PD for tech	-0.06	0.94	0.01	1.07
<b>Technology</b>				
Internet confidence	0.33***	1.39***	0.23**	1.26**
Internet reliability	0.20***	.82***	-0.17**	.84**
<b>Time</b>				
Advisory period	0.59**	1.79***	-0.34	0.71
<b>Critical Consciousness</b>				
% "should go to college"	0.02***	1.02***	0.01**	1.01***
<b>Constant</b>	-1.47*	.23*	-0.27	.76
<b>Model chi-square</b>		58.37		44.19
<b>Pseudo R square</b>		.09		.08

Notes. <sup>a</sup>  $n = 455$ . *b* Standard errors in parentheses. \*\*\*  $p < .01$ . \*\*  $p < .05$ . \*  $p < .1$ .