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Increasing College Access through the Implementation of Naviance: An Exploratory Study



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ABSTRACT

High school counselors play a key role in increasing students' access to college. With increasing student-to-counselor-ratios as well as demands on their time, school counselors often lack the ability to provide adequate college counseling. In this article, we explored how school counselors can use educational technology, specifically the online program Naviance, to supplement college counseling in an effort to increase college access for all students.

Results showing that students who logged in to Naviance more frequently had higher college application rates indicated that Naviance is an appropriate way for school counselors to promote college access.

Keywords: Naviance, college access, college counseling, educational technology

college education has never

been more important. Identified

benefits of a college education

range from lower unemployment, increased ability to compete in a global marketplace, better health, and increased earning potential (King, 2016). In fact, Abel and Deitz (2014) reported that during their working lives, individuals with a bachelor's degree made approximately \$1 million (56%) more and individuals with an associate's degree made approximately \$325,000 (21%) more than high school graduates. In addition, according to the U.S. Department of Education (n.d.), a college

education is vital for socioeconomic advancement. Choosing a major with a good return on investment such as engineering (21%), math/computer/health (18%), and business (17%) is an important step in accessing college (Abel & Deitz, 2014). However, students need information beyond the potential physical, psychological, and economic benefits when exploring college options.

School counselors are tasked with helping students obtain the knowledge and information necessary for them to make an informed decision regarding college application and enrollment (Akos, Lambie, Milsom, & Gilbert, 2007; Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011; Belasco, 2013). Originally, counselors were placed in schools to help guide students through the career and college exploration process. Over time, school counselors have seen their role in schools expand from college and career counseling to include administrative duties as well as being campus mental health experts (McDonough, 2005). In addition to being overwhelmed with responsibilities that leave little time for



college counseling, student to school counselor ratios have ballooned to a national average of 491:1 (American School Counselor Association [ASCA], n.d.). With all of these responsibilities and increasing caseloads, school counselors often allocate less time and attention to college counseling (McKillip, Rawls, & Barry, 2012). However, both ASCA (2013) and current research (Belasco, 2013; McKillip et al., 2012) emphasize the importance of college counseling; therefore, it should receive more attention.

One way that school counselors can increase the availability of information and resources related to college access is by utilizing online technology (Steele, Jacokes, & Stone, 2015; White House, 2014) to implement self-service type technologies such as Naviance (Hobsons, n.d.). Naviance is a college and career readiness platform that school counselors can use to provide students with activities focused on academic planning, college readiness, and career exploration in an attempt to increase academic achievement and college access. Although Naviance appears to be gaining popularity with superintendents and school counselors nationwide, a brief search of the literature using Naviance as the key search term turned up zero scholarly articles. Whereas previous research has looked at how access to a school counselor affects college application rates (Bryan et al., 2011), the goal of this study was to explore how access to Naviance influenced college application rates.

Literature Review

Research has clearly established that variables such as gender, ethnicity, socioeconomic status (SES), and academic achievement play a role in college access. Previous research has shown a gender difference related to college access with females typically having higher aspirations and being more likely to attain their educational goals (Akos et al., 2007; Trusty & Niles, 2004). Female students are also more likely to apply to college (Bryan et al., 2011). Socioeconomic status is a particularly strong predictor of application rate with students from higher-SES families being more likely to apply to (Bryan et al., 2011) as well as enroll in college than those from lower-SES families (Belasco, 2013). In fact, Valadez (1998) found that SES was a more powerful predictor of students' desire to access college than race or gender. Research has also revealed differences between ethnicities with African American and Asian students having higher application rates than that of White or Hispanic students (Bryan et al., 2011). In addition, students with higher levels of academic achievement, typically have higher application rates (Bryan et al., 2011) and are more likely to be successful in college (Adelman, 2006).

Role of School Counselor

Provide access to information. Recent research has identified school counselors as an important resource for students as they seek to access college. From a social capital



perspective (Coleman, 1988), through contact with school counselors, students gain important information and resources related to the process of applying to college (Belasco, 2013; Bryan et al., 2011). Belasco (2013) stated that "in the case of postsecondary attainment, information is paramount; without information, students cannot navigate and subsequently meet college entry and graduation requirements" (p. 783). Having early and continuous exposure to college information is also important for increasing college access (McKillip et al., 2012). Providing students with quality information regarding college access is key to students' reported level of satisfaction with their school counselors (Farmer-Hinton, 2008; Kimura-Walsh, Yamamura, Griffin, & Allen, 2009). Yet, research suggests that students need more practical information pertaining to searching for colleges that are a good fit, the actual application process, and how to decide on which college to attend (Roderick, Nagoka, Coca, & Moeller, 2008). In a 2011 article, Bryan et al. explored how contact with their high school counselors regarding college information influenced students' college application rates. They found that contact was a good predictor of college application rates, with increased contact leading to higher application rates. Students who meet with the school counselors regarding college information are also more likely to actually enroll (Belasco, 2013).

Growing up in the internet age, current students require accurate, individualized, and immediately accessible information (Steele et al., 2015). This need for rapid delivery of high volumes of information has required educators to innovate. After contemplating society's transition from service based industries, such as travel agents to self-service technology like travel booking websites and applications, Herndon (2011) described the utilization of self-service type technologies to meet the needs of community college students. By utilizing a self-service type technology, Herndon (2011) argued that school personnel, facing limited resources, can "provide high quality information that enhances student success" (p. 28).

Assist with individual planning. In addition to providing information, school counselors often help students make curricular decisions that will not only determine the type of courses they take during high school, but also affect their access to college (Akos et al., 2007). Research has shown that students who enroll and do well in more rigorous coursework are more likely to apply to and be successful in college (Mau & Bikos, 2007; McKillip et al., 2012). Although most students have aspirations that will require some form of postsecondary education, previous research indicates that many students do not complete the appropriate coursework required to help them accomplish their goals (Akos et al., 2007; Feller, 2003). Students from lower-SES backgrounds are at an increased risk of



enrolling in courses that are less rigorous and that do not encourage or prepare them to go to college (U.S. Department of Education, n.d.).

It is important that students make curricular decisions based on individualized information and in a way that will assist in meeting their college and career goals (McKillip et al., 2012). Steele et al. (2015) encouraged school counselors to assist students in creating online graduation plans that can be updated regularly using individualized information. Further, they encouraged this planning process to be ongoing and dynamic rather than a static event that occurs during a scheduled meeting.

Create college-going culture. In a review of research regarding the role of high school counselors for improving college access, McKillip et al. (2012) identified the need for school counselors to create a campus-wide college-going culture. Research indicates that creating a college-going culture where all school personnel communicate the importance and attainability of postsecondary education is a key predictor of whether or not students are likely to apply for college (Roderick, Coca, & Nagaoka, 2011). As part of a college-going culture, it is imperative that students have early and ongoing exposure to college information, that school counselors enlist the help of the entire faculty and staff to create a college-going culture, and that they utilize a variety of

resources to assist in providing access to college for all students (McKillip et al., 2012; Roderick et al., 2011).

Previous research has revealed that students with earlier exposure to college information are more likely to apply to college (Bryan et al., 2011). Attempting to implement college counseling at the end of high school is insufficient (McKillip et al., 2012) whereas students with early exposure to college information have adequate time to create an appropriate path to college comprised of rigorous coursework and numerous opportunities to explore their interests, abilities, and aptitudes. Hawkins (2015) recommended that college counseling begin no later than the ninth grade. Bloom (2010) stressed the impact that teachers can have on college-going culture by providing rigorous instruction as well as adopting the attitude that all students should have access to college. Finally, by implementing a variety of resources related to course planning and college access campus-wide, school counselors communicate the expectation that all students have the potential to access college (Akos et al., 2007; Steele et al., 2015).

Introduction to Naviance

Clearly, school counselors play a significant role in helping students access college. Specifically, school counselors can be an important source of social capital for students as they navigate the path from high school to college (Bryan et al., 2011). But as



aforementioned, there are a variety of barriers that can impede school counselors' ability to provide adequate college counseling, thus limiting students' exposure to this important source of social capital (McKillip et al., 2012). Previous literature has pointed to the important role that technology, specifically online resources, should play in providing students with college information (Carey & Dimmitt, 2005; Frome, 2014; Steele et al., 2015). A specific online, self-service type program that school counselors can employ as a tool for developing skills and knowledge needed to make informed college-going decisions is Naviance (Hobsons, n.d.).

Naviance (Hobsons, n.d.) is a web-based, onestop-shop self-service type technology that assists students with college and career readiness. Students can access it at any time, from any internet connected electronic device. It serves as a warehouse for student information including scores on college entrance exams, grade point average (GPA), and annually updated individualized personal graduation plans (PGP) for each student. Counselors help students align these PGPs with potential college majors and careers to help them recognize the connection between current curricular choices and future college and career goals. Students can build resumes, set goals, and gain personal insights and awareness through a variety of assessments housed in Naviance. Using the SuperMatch™feature, students can do targeted college searches based on their

strengths and goals, GPA, scores on college entrance exams, and a variety of preferred college characteristics. Students can then utilize information from SuperMatch™ results as well as other college search functions to maintain a list of colleges they are considering, allowing them to compare schools. Additionally, students can request transcripts and recommendation letters, as well as link to college applications and financial aid forms provided by the school counselors, through Naviance. Students can also search careers that match individualized information gleaned from a variety of interest, ability, and aptitude inventories/assessments with career information from the U.S. Department of Labor's O*Net Online website.

Purpose of the Study

The purpose of this study was to explore how access to Naviance, an online self-service type program, influences college application rate. After review of the previous literature, we created the following research questions and made the following hypotheses:

Research Question 1: Does the length of time students have access to Naviance predict their college application rate?

Research Question 2: Does the number of times students access Naviance predict their college application rate?



Hypothesis 1: Years of access to Naviance is positively correlated to college application rate.

Hypothesis 2: The number of times students access Naviance is positively correlated to college application rate.

Method

Participants

Participants in the study consisted of students who had graduated over the past four years from a large suburban, public high school in the southwestern U.S. The class of 2013 had 456 graduates, 2014 had 499 graduates, 2015 had 485 graduates, and 2016 had 477 graduates for a total of 1,917 participants. Of the total sample, 51% were male and 49% were female. A majority of the sample identified as white (62%), while 23% identified as Hispanic, 9% as Black/African American, 3% as Asian, 1% as American Indian/Alaska Native, and 2% as other. A minority of participants were identified as low-SES (19%). Finally, 4% of the participants were receiving special education services.

Procedure

The local school district implemented Naviance starting in the fall of 2012. Thus, each cohort had increasing exposure and access to the program with the class of 2013 having access the shortest amount of time (one year) while the class of 2016 had access to Naviance throughout their entire high

school career (four years). School counselors were responsible for implementing Naviance on the campus based on the campus implementation plan. The plan had specific goals for the campus counselors, but also encouraged them to utilize Naviance as much and as frequently as possible with students. As part of the implementation plan, counselors utilized Naviance in guidance lessons, individual planning meetings, and parent/teacher conferences. During guidance lessons, students completed various career interest and aptitude inventories such as Career Cluster Finder (ninth grade), Career Interest Profiler (10th grade), and Do What You Are (11th grade). After completing each of these assessments during guidance lessons, students then completed assignments utilizing their results such as identifying potential future careers as well as college majors and colleges that offered their potential major. By their senior year, students have completed a minimum of six personality and career assessments that they utilized to develop their personalized PGPs and explore colleges. Also based on the personality and career assessment results, students were instructed to explore projected growth, salary, and job opportunities in geographical locations where they might want to live in the future for a career in which they are interested. During guidance lessons, students had to review their current GPA and rank as listed on their Naviance home page, set academic and personal goals, as well as create a resume and keep an updated list of



potential colleges. In addition to the college and career planning piece, school counselors utilized the Course Planner feature to have students create four-year graduation plans, similar to a college degree plan, that they were required to update each year. Students used information from their aforementioned assessments to select courses that would help them achieve their stated academic, career, and personal goals. During course selection or pre-graduation meetings, students and counselors would use the information in Naviance to help students make informed and intentional decisions that would assist students in achieving their goals. After the implementation of eDocs, a portion of Naviance that allows counselors and students to upload college application materials such as letters of recommendation and transcripts directly to colleges, school counselors required students to use Naviance to request letters of recommendation as well as transcripts.

Finally, the school counselors created an online meeting request form, only accessible through Naviance, in an attempt to increase their availability to students. By making this change, the counselors were able to eliminate the use of paper request forms, have immediate access to students' needs, and increase students exposure and proximity to important college information. Having access to transcript requests or scheduling a meeting with their counselor via Naviance increased students' control over the application process

and allowed them to work on the process when and where they chose. For example, if a student decided to work on her application at 11:30PM on a Saturday evening, she could complete her entire application, including transcript and letter of recommendation requests, all from the comfort and convenience of her home. If, during the process, she experienced a complication, she could request a meeting with her counselor via Naviance, and anticipate a meeting upon her return to school on Monday.

The ultimate goal of the school counselors as they implemented Naviance was to increase students' exposure and proximity to important information that would help them make informed college and career decisions. By having more access to information related to their current academic performance, interests, and abilities, as well as career options and the role college played in attaining their goals, students could make better post-secondary education decisions. The goal of this study was to explore how Naviance had influenced the application rate for the first four graduating classes that had access to Naviance.

Research Design

The Institutional Review Board (IRB) at the first author's university granted approval to complete this study. The school district providing the student data issued a letter of approval for the research collaboration to occur as part of the IRB process. Only



archived data was used and all identifiable information was removed for this article in order to protect students' privacy.

We extracted all information for this project from Naviance and cross checked it against data provided by the school's registrar. The district regularly uploaded demographic information directly to Naviance from a data file created using its data information management system, eSchoolPLUS (Sungard K-12, n.d.). Socioeconomic indicators as well as GPA and student rank were also included in these regular updates. A particularly beneficial Naviance feature is the ability to run reports to access student information. Unfortunately, we encountered a few limitations that complicated our ability to secure and analyze certain variables. After consulting with Naviance technical support, we determined that we would need to run multiple reports and combine them with original data files containing demographic information in order to gather the data necessary to complete this research project. We ran a college report called "applications by student" in order to obtain application rate data. This type of report contains data regarding GPA, rank, scores on college entrance exams, names of colleges where students have applied, students' application status, and where they plan to attend postgraduation. It is important to note that students self-report the last three points of data during completion of a graduation survey. We cross checked information from

the self-reported data with data provided by the National Student Clearinghouse as part of the Naviance Alumni Tracker feature. This information is available in Naviance on students' Post-grad tab. In order to obtain student usage information, we ran a student usage report. One limitation of this report was that Naviance only provides the total visits a user has made over their lifetime of use. We discuss in detail how we handled the discrepancies in the four cohorts below. Naviance does not provide a report with specific demographics pertaining to gender or ethnicity; therefore, we had to use the original data files uploaded to Naviance for this information.

Variables

Dependent variables.

We chose to use application rate as our dependent variable based on previous research indicating a correlation between application rate and acceptance to college (Roderick et al., 2008) as well as our desire to replicate Bryan et al.'s (2011) findings using access to Naviance as an independent variable instead of access to actual school counselors. We obtained our dependent variable, application rate, using the applications by student report in Naviance. All graduating seniors were required to complete a graduation survey on Naviance. In addition to questions about their high school experience, students answered questions related to their college application process



and future enrollment plans. As part of the survey, students updated information they had stored in Naviance related to colleges in which they were interested in and/or to which they were applying. Based on their responses, Naviance updated the number of colleges to which each respondent had applied, been accepted, and were planning to attend. Naviance also integrates enrollment information from the National Student Clearinghouse and although that information is available for these cohorts, it is beyond the scope of this initial, exploratory study.

Independent Variables.

We hypothesized that six dependent variables were likely to be good predictors of college application rate. We coded students as 0 if they were male and 1 if they were female. Socioeconomic status was coded 0 for students who were not identified as economically disadvantaged based on not qualifying for free/reduced lunch and 1 for students who were identified as economically disadvantaged based on qualifying for free/ reduced lunch. The only GPA data we were able to obtain for all students using Naviance was a weighted GPA where grade points awarded for an advanced placement or honors course was given an extra point (A=5 points instead of 4 points) thus making the highest attainable GPA for a student a weighted 5.0 instead of the typical unweighted 4.0. We calculated years of using Naviance for students based on the initial implementation of Naviance and the cohort to which each student belonged. Students in the class of 2013 used Naviance for one year, 2014 for two years, 2015 for three years, and 2016 all four years. Student usage of Naviance proved to be the most difficult variable to operationalize due to the limited information Naviance reports provide. Because each cohort's years of access varied, lifetime logins would have been an inaccurate measurement of student usage. Instead, we decided to calculate the average annual logins by dividing the number of lifetime logins provided in the Naviance report by the number of years each student had access to Naviance.

Analysis

We conducted a multiple regression to evaluate the six independent variables' ability to predict college application rate. Because this is an initial study designed to explore how implementing a self-service type program like Naviance into a comprehensive school counseling program, we determined that a multiple regression analysis would suffice. We suggest and anticipate conducting future research regarding the role Naviance plays in school counseling using additional variables and more complex statistical analyses.

Data Screening

In order to assess what factors could predict college application rate, we utilized archived data stored in Naviance from 1,917 students who had graduated in the past for years (2013)



-2016). We dummy coded the categorical ethnicity variable in order to utilize it in the analysis. No data was missing and thus we conducted a regression analysis to test our initial model using all 1,917 participants. Thirty seven outliers were detected that had an extreme standardized residual (z>±3). We excluded these cases from further analysis.

We inspected bivariate scatterplots between the continuous predictors and application rate to verify linear relationships between variables. All continuous variables were satisfactorily normally distributed except average annual logins which was leptokurtic. To correct for this, we used a Log10

Table 1. Regression Summary Table.

Model	Sum of Squares	df	Mean Square	F	Sig.	R	R ²	Adj.R²
Regression	2177.16	5	435.43	161.71	<.001	.549	.301	.300
Residual	5045.98	1874	2.69					
Total	7223.14	1879						

transformation. Finally, a standardized residuals and standardized predicted values scatterplot was evaluated to assess whether the assumption of homoscedasticity was met. The scores were reasonably evenly distributed, indicating that the assumption was acceptably met and thus we proceed to conduct a multiple regression analysis using the data set.

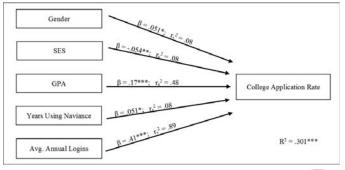
Results

Regression

In order to test our hypothesized model, we conducted a regression analysis using all predictor variables. Beta weights indicated that the dummy ethnicity variables were not a good fit and therefore removed from the model. We conducted a second regression analysis using the remaining five predictor variables to create our final model (see Figure 1 below). The result was statistically significant, F (5, 1879) = 161.71, p<.001. According to Cohen (1988), a large effect size of R²=.301 was calculated, meaning approximately 30% of the variance in college application rate can be explained by the predictor variables. The adjusted R² (Ezekiel, 1930) is 30%, indicating minimal reduction

due to theoretical correction for sampling error. Regression summary is presented in Table 1.

Figure 1. Final Regression Model





the strongest predictor of college application rate. It explained approximately 89% of the effect and had the largest beta weight. This combination would further indicate that not

Table 2.
Regression Coefficients for Gender, SES,
GPA, Years Using Naviance, Avg. Annual
Log-ins.

weights and each accounted for 8% of the effect. Exploration of the correlation matrix (see Table 3) uncovered strong correlations between these three predictors and the average number of times a student logged in to Naviance each year as well as the GPA, suggesting that Gender, SES, and years using Naviance each had a significant amount of shared variance with the other two variables.

Variable	r_{s}	r_s^2	β	t	Sig.
Gender	.28	.08	.051	2.59	<.05
Socio-Economic Status	29	.08	054	-2.72	<.01
GPA	.70	.48	.17	7.45	<.001
Years Using Naviance	.28	.08	.051	2.50	<.05
Avg. Annual Logins	.94	.89	.410	17.97	<.001

Note. r_s =structure coefficient; r_s^2 =squared structure coefficient; sig.=significance.

only did the average number of times a student logged in to Naviance each year account for the largest part of the variance in the effect, but it is also likely that it accounted for the largest percentage of unique variance in effect. Grade point average was the second best predictor of college application rate explaining 48% of the effect and with the second largest beta weight. Gender, SES, and years using Naviance had the smallest beta

Table 3.

Correlation Matrix for Application Rate,
Gender, SES, GPA, Years Using Naviance,
Avg. Annual Log-ins.

	Application Rate	Gender	SES	GPA	Years Using Naviance	Avg. Annual Logins
Application	1.00	.153*	157*	.382*	.153*	.517*
Rate						
Gender		1.00	.004	.201*	024	.167*
SES			1.00	249*	082*	137*
GPA				1.00	019	.461*
Years using					1.00	.249*
Naviance						
Avg. Annual						1.00
Logins						



Discussion

According to the results, the independent variables were good predictors of college application rate. A large effect size was calculated ($R^2 = .30$) and there was little shrinkage when adjusted for sampling error (Adj. $R^2 = .30$). As we hypothesized, the average number of times a student logged in to Naviance each year was the strongest predictor. This result is consistent with Bryan et al.'s (2011) findings that students who reported having more access to school

counselors for college information had a higher college application rate. They suggested making school counselors more accessible to students in order to increase application rate and college access. Our results suggest that having students utilize Naviance is also a good way to increase student

exposure to college information in order to increase application rates. Also as hypothesized, level of academic achievement was positively related to application rates with students who had higher GPAs also having higher college application rates. This finding is also consistent with previous research (Bryan et al., 2011; Mau & Bikos, 2007; McKillip et al., 2012) and underscores the importance of ensuring students have access to as well as take advantage of rigorous coursework that will increase their academic performance. Although gender only accounted for 8% of the effect, our results indicated that female students tended to have higher application rates than male students. This finding is also consistent with Bryan et al.'s (2011) results. The high correlation between gender and GPA, suggests that gender had a significant amount of shared variance with GPA. This finding is consistent with previous research that has shown that female students tend to have higher GPAs

> than male students (Nord et al., 2011). Also, accounting for only 8% of the effect, the number of years using Naviance appeared to have a significant amount of shared variance with the average number of times a student logged in to Naviance each year based on the strong correlation between the two variables.

This finding is consistent with the implementation plan presented above. Over time, the counselors utilized Naviance for an increasing number of college related tasks such as college searches and transcript requests as well as in school counseling tasks such as guidance delivery and individual planning. Finally, SES, accounting for only 8% of the effect, was negatively correlated with application rate, meaning that students from lower-SES households were less likely to



"Our results suggest that

having students utilize

Naviance is also a good way to

increase student exposure to

college information in order to

increase application rates."



apply to college. Socioeconomic status also likely had a significant amount of shared variance with GPA based on the strong correlation between the two variables. Consistent with previous research, students in our study who were from lower SES households had lower GPAs (Walpole, 2003).

Based on the data, the average number of times a student logged in to Naviance each year, GPA, years using Naviance, SES, and gender were good predictors of college application rate. The answer to both of our research questions appears to be yes, the length of time students has access to and the number of times students access Naviance both predict college application rates. Naviance appears to be a beneficial tool for school counselors to utilize in an effort to increase their students' college application rate. Implications for how school counselors can utilize these results when implementing Naviance follows.

Implications for School Counselors

Naviance has numerous features that school counselors can use to address the college access needs previously mentioned. It provides students with a plethora of college information at their convenience, its features can be used to create individualized graduation plans with courses tailored to help students meet their college and career goals, and by utilizing it with all students in all education settings, it promotes a collegegoing culture. Based on the results of this

study, it appears Naviance is an effective selfservice type technology that school counselors can implement to help increase students' access to college. However, due to the design of this study, it is impossible to know with certainty whether it was Naviance alone or a combination of the variables and circumstances responsible for the increase in the college application rate. It is probable, based on aforementioned previous research reinforcing the impact school counselors have on application rate, that it is the manner that the school counselors implemented Naviance that increased application rates. Therefore, we make the following suggestions for school counselors implementing Naviance in the future.

First, it is important to remember that Naviance should be a supplement for college counseling services already provided, not a replacement. During the implementation process, the counselors involved in this study inserted Naviance into college focused guidance lessons they were already providing to all four grade levels throughout the school year. They also inserted it into individual college meetings they held with every eleventh grade student as well as to create PGPs for all incoming ninth grade students. Second, counselors should make Naviance available no later than the ninth grade. Third, it is important for school counselors to make Naviance necessary for all students. The counselors involved in this study believed that making Naviance necessary would



increase usage and students exposure to important information related to college access. They encouraged all students to search careers and colleges on Naviance as well as complete various inventories and assessments. They hoped proximity to the information would lead to exploration of that information, resulting in increased knowledge for students as they made college decisions. Fourth, school counselors should use Naviance to help students select rigorous coursework. School counselors can work with students to create individualized graduation plans utilizing the overabundance of personal information stored in Naviance. School counselors can then review students' plans to ensure students enroll in appropriate courses based on their academic ability, interests, and college and career goals. Finally, counselors need to involve all stakeholders in the implementation of Naviance. The school counselors in this study provided parents and teachers access to Naviance. As teachers became more familiar with the program, they began to utilize it with increasing frequency in class. For example, a math teacher had students use the career feature in Naviance to identify a potential career based on their interests and abilities. Students then used income data provided by Naviance to complete a finance/budget assignment. An English teacher had his students use Naviance to search for and select a potential college, identify the application requirements, and then write a college essay as their assignment.

Limitations

Although we have provided evidence that school counselors can use Naviance to increase college access, specifically college application rate, the results are limited by the sample being comprised of predominantly middle class, white students at a suburban public high school in the southwest. Another limitation of this study is that, although the results support the relationship between how often students log in to Naviance and their application rate, we cannot speak to the nature of students' activities once logged in to Naviance. In addition, it is impossible to know if students with higher application rates would have had higher application rates even without Naviance. We cannot say that logging in to Naviance more frequently causes students to apply to more colleges. It is possible that students' decisions to apply to more colleges caused them to log in to Naviance more because they had to complete certain tasks of the application process, such as transcript requests, on Naviance. However, students could make multiple transcript requests while only logging on one time. Finally, not having the access to the exact number of times students logged in during their senior year when they were applying to colleges is a limitation of the study as well as of Naviance the program.

Implications for Future Research

Future research could explore the connection between college information exploration on Naviance and college application rates. This



would require additional information that school counselors could collect using survey features in Naviance or developers could add the ability to track specific tasks, such as SuperMatchTM college searches, completed by students. Also, having precise logins per year would have added to the accuracy of our comparisons and would also have provided a glimpse at how student usage changed during the implementation process as well as at different grade levels. Finally, this project was an initial exploratory study to see if, like contact with a school counselor, access to Naviance influenced college application. Further research utilizing more sophisticated statistical analyses and a variety of other variables is warranted. For example, it would be interesting to explore if access to Naviance influenced college enrollment. It would also be beneficial to explore how school counselors can use Naviance to close the gaps in college access underscored by the results of this study. Specifically, how can school counselors utilize Naviance to increase application rates of lower-achieving, male students from lower-SES households?

Conclusion

School counselors play an important role in ensuring that students have access to college. They help provide important information, help students make appropriate curricular choices, and foster a college-going culture on their campuses. As demands on their time and student-to-counselor-ratios increase, they have to employ creative methods to ensure

that all students continue to have access to college counseling. Based on the results of this study, it appears that Naviance is an appropriate self-service type technology that school counselors can use to increase students' access to college, specifically their college application rates.



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