

College and High School Educators' Perceptions of Current College Readiness Levels

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Abstract

The purpose of this study was to identify the college readiness attributes of students at the high school and college levels based on the perceptions of educators. The study attempted to determine proficiencies or deficiencies in college readiness levels of students as perceived by educators using quantitative methodology to collect and analyze data. The College Readiness Survey was used to gather data on seven main areas of college readiness from high school educators of seniors and college educators of freshman students. Analyses included descriptive statistics and Mann-Whitney U tests to compare ordinal data on the differences between educators' perceptions at the high school and collegiate levels. The findings indicated a significant difference in the perceptions of high school and college faculty concerning the college readiness of their students. High school educators rated students as college ready while college faculty perceived students as deficient on many college readiness indicators.

Keywords: College readiness, readiness attitudes, high school educator perceptions of readiness, college perceptions of readiness, identifying college readiness

1. Introduction

Becoming a productive member of society is an American goal. Students graduate from high school then proceed to college. If they are successful, they may benefit economically, politically, and socially. However, Greene, Winters, and Forster (2004) found 70% of all students in public high schools graduate, but only 32% leave high school qualified to attend 4-year colleges. Additionally, two-thirds of all students who start high school and more than half of those who graduate do not meet the minimum requirements needed to be admitted into a 4-year college or university.

While some colleges are more selective than are others, nearly all 4-year colleges require students to take certain courses and possess certain basic skills before they will even consider an application. Further, Greene et al. (2004) stated that high school graduates who do not meet these requirements are not "college ready" and they are shut out of the college market. For these students, this lack of access to college becomes a lifelong barrier to higher incomes and greater opportunities.

American college-bound students with low college readiness levels have increasingly become an issue for colleges and universities. In response, the U.S. Department of Education (DOE) made college readiness one of its seven national education priorities (McClure, 2007).

Those priorities include the following:

1. Reading independently and well by the end of third grade.
2. Mastering challenging mathematics including the foundations of algebra and geometry by the end of eighth grade.
3. Being prepared for and able to afford college by the age of 18.
4. Implementing challenging and clear standards of achievement and accountability for all children and effective strategies for achieving college readiness standards.
5. Putting a talented, dedicated, and well-prepared teacher in every classroom.
6. Connecting every classroom to the internet by the year 2000 to reach the goal of all students becoming technologically literate.
7. Every school is strong, safe, drug-free, and disciplined.

The problem of students not being college ready was recognized in the 1980s and colleges responded by requiring placement testing to determine college readiness. According to Haycock (2010), college readiness involved placement tests to predict student readiness. Colleges and universities initially used placement tests; however, later research found that the predictive value of these tests was questionable and showed little or no relationship between test scores and student potential, performance, or success in class. Conversely, research has found that student characteristics, skills within the context of the college, and social integration are positively correlated with student success (Yamamura, Martinez, & Saenz, 2010).

Byrd and MacDonald (2005) examined the preparedness of entering college students. They reported that 41% of entering community college students and 29% of all entering college students were unprepared in at least one of the basic skills of reading, writing, and math. Participants reported that they felt overwhelmed when they began university-level work because high school required little intellectual stimulation, which resulted in lowered vocabulary and math skills (Byrd & MacDonald, 2005). Additionally, participants who were currently or had been college students indicated that their previous high school and community college experiences left them unprepared for the university.

Educators who participated in the Byrd and MacDonald (2005) study recommended increased student preparation in the areas of reading, writing, and math because they are the foundations of all college coursework. Time management skills, such as studying outside the classroom, manipulating course load requirements, and managing work and family priorities are critical for college readiness (Byrd & MacDonald, 2005). Other factors that influence college readiness included family, work experiences, career motivations, the need for a college degree, and financial concerns.

To remedy this situation, some entrepreneurs have developed experimental approaches intended to have practical results. For example, since 2008, the Bill and Melinda Gates Foundation has worked with schools to achieve two initiatives aimed at ensuring that a high school education results in college readiness, and postsecondary education results in degrees or certificates with genuine economic value. Nationwide, the foundation invested nearly \$4 billion to these initiatives, particularly among low-income and minority youth (Greene et al., 2004). The result of these efforts has been entire graduating classes prepared to attend 4-year colleges. Since 2000, the Gates Millennium Scholars program has awarded more than 12,000 scholarships to low-income students and nearly 8 out of 10 of these students have graduated college within 5 years (Greene et al., 2004).

Despite some successes, researchers still feel the pace of system-wide change is simply too slow to meet the readiness needs of the increasing numbers of high school students to ensure that they succeed in the 21st Century. Even though the Gates Millennium Scholars program has worked in two cities, administrators of the program feel a large number of students are still not getting the futures they desire (Greene et al., 2004).

Conley (2003) noted that the lack of college readiness creates a burden on educators, administrators, and policymakers who must develop the curriculum. Educators at the public secondary or college levels are on the frontlines of the classroom; however, they are rarely consulted on issues that involve college readiness standards and assessments. Additionally, educators and administrators at the high school and college levels have their own perspectives of preparing students for college. Considering the possible differences in these perceptions, researchers must identify and align the perceptions of these stakeholders regarding college readiness proficiencies or deficiencies (Conley, 2007b).

2. Purpose of the Study

The first purpose of this study was to identify educators' perceptions of college readiness attributes at the high school and college levels. The second purpose was to determine the proficiencies or deficiencies in college readiness levels of students as perceived by educators.

3. Research Questions

The following research questions formed the basis for this study:

1. What are high school educators' perceptions of the college readiness of high school seniors?
2. What are college educators' perceptions of the college readiness of college freshmen?
3. What do high school and college educators feel are major student proficiencies and deficiencies in relation to college readiness?
4. Do statistically significant differences exist between public senior high school and public college educators' perceptions of the college readiness of students?

4. Methodology

The study design used descriptive and nonparametric statistics to investigate the differences between the perceptions of high school and college educators on college readiness. Descriptive statistics were used to examine differences in the responses of high school and college educators on survey items that represented different aspects of college readiness. A Mann-Whitney U test was used to determine differences in the ranked position of scores between high school and college educators (Field, 2005).

Selection and Development of Instrument

The survey used for this study was designed and copyrighted by Dr. Frank Bernier, a college planning advisor at Lansing Catholic High School in Lansing, Michigan. The College Readiness Survey evaluates educators' perceptions of the seven major areas associated with college readiness of students: academic maturity, academic motivation, learning styles, assertiveness, social and interpersonal skills, and advice seeking. Each section lists supporting skills associated with the primary category and is rated on a 4-point Likert scale (1 = *not at all true*; 4 = *completely true*).

Dr. Frank Bernier has over 30 years of college planning experience and has used this instrument to aid in college selections of over 2,700 potential college students. During his time as a high school guidance counselor, he strengthened this tool by identifying common trends and patterns. The survey instrument is a hybrid tool that combines two nationally recognized benchmarked surveys: Community College Survey of Student Engagement (CCSSE, 2004) and the National Survey of Student Engagement (NSSE, 2005; 2006). Their study established validity across academic, longevity and persistence measures. The National Survey of Student Engagement has reported content, construct, concurrent and predictive validity (NSSE, 2005; 2006).

The researcher established reliability with the current set of participants using Cronbach's alpha. The reliability coefficients for each subscale were: Academic Maturity, .955; Academic Motivation, .906; Learning Styles, .931; Assertiveness, .900; Social Interpersonal, .862; Advice Seeking, .896; and Planning and Goal Setting, .918. All reliability coefficients were greater than .7, which is the recommended minimum value (Field, 2005).

Selection of Participants and Sites

The study used a Survey Monkey audience criterion-based sampling to identify acceptable participants. This system chose from a database of over 30 million potential participants nationwide based on the following three criteria:

1. Public high school educators who teach graduating seniors.
2. College educators at public, degree-granting universities who teach incoming freshmen.
3. Participants must be a minimum of 18 years old.

The minimum number of participants needed for the study was 150 at the high school level and 150 at the college level for 300 total participants. The total number of participants were determined using the statistical software G*Power. Results yielded that 300 was an acceptable sample size provided the alpha level of .05 did not change. The use of G*Power to select a sample size uses any of the ANOVA testing groups for the data analysis is acceptable (Myers & Well, 2003).

Collection of Data

For this study, the College Readiness Survey was administered through Survey Monkey. Survey Monkey is an online service that offers survey development, administration, and data collection for research. This service was used to distribute and collect data generated by the survey. A Survey Monkey email transmission was sent to potential participants a letter, informed consent, and the survey. The letter described the purpose of the study and detailed participants' responsibilities. Participants were also asked to sign an informed consent form to indicate that they understood they could withdraw from the study at any time, survey responses would be confidential, and data would be stored in electronic and hard copy formats. The survey included questions about demographics and institutional affiliation and the College Readiness Survey.

A follow-up email was sent 3 weeks after the initial email to remind participants to complete and return the survey if they had not already done so. All participants and necessary institutional personnel received copies of the study for their records and thank you letters that acknowledged their participation in this study. At the conclusion of the data collection period, Survey Monkey sent the researcher all results via an Excel spreadsheet. To preserve anonymity, the researcher disabled the storage of email and internet protocol addresses (IP address). As an additional measure of anonymity, Survey Monkey filters all responses through a secure website and posts public copies of its privacy policy on the website.

Treatment of Data

Data collected included descriptive statistics needed for an analysis of the seven areas surveyed to determine the proficiencies identified by high school and college educators. Mean scores for each of the seven areas were computed and compared to ascertain major proficiencies and deficiencies in students' college readiness as perceived by the participants. A Mann-Whitney U test was conducted to determine the differences in the ranked position of scores between the two groups of educators.

5. Findings

A total of 3,467 surveys were distributed electronically to educators using the Survey Monkey audience program. The response rate was 34.1% (1,185 completed the surveys) from 46 of the 50 states in the United States. Only Iowa, Minnesota, Maine, and Delaware did not have at least one response submitted. Females accounted for 57% (676) of the total responses and males accounted for 43% (509) of the responses.

Respondents were asked a qualifying question to be considered eligible to participate in the study; 34.1% responded to the survey; however, not all respondents qualified to participate.

The non-qualifying group not meeting the criteria set by the researcher included 70.9% (840) of respondents and the qualifying group made up 29.1% (345) of all respondents. Within the qualifying group, 51.3% (177) of respondents were high school educators and 48.7% of (168) respondents were college educators. The remaining report of the data reflects the 345 qualifying respondents. The subsequent sections of this paper will reflect the respondents who meet the qualifications to participate in this study.

Ages of the qualified respondents collected by the survey identified 7.8% (27) were 18-29 years of age, 18.3% (63) were 30-44 years of age, 38.3% (132) were 45-60 years of age, 15.7% (54) were over the age of 60, and 20.0% (69) did not respond to this question. The education levels of the qualified respondents were as follows: 0.9% (3) had less than a high school degree, 1.7% (6) had some college completed but no degree, 20.9% (72) had an associate's or bachelor's degree, and 56.5% (195) had graduate degree. (See table 1).

All the questions were answered to appropriately compare the two groups of high school educators and college faculty. To answer Research Questions 1 and 2, frequencies and percentages of responses were calculated for each item in the seven areas. Means and standard deviations for the seven areas of perceptions of college readiness were compared for high school and college educators to answer Research Question 3. To answer Research Question 4, a Mann-Whitney U test was used to determine the differences in the ranked position of scores between the two groups of educators. The Mann-Whitney U was an appropriate test to use because it makes fewer assumptions about the data collected (Field, 2005). The sample population included 345 participants; 177 high school educators and 168 college faculty. The participating groups of high school educators and college faculty presented a very clear pattern of results. Both high school and college faculty significantly differed from each other in every category examined.

A weakness and limitation was that both high school educators and college faculty had only their interpretations of the survey to determine the results, which could have caused varying degrees of inconsistency in their responses. Further, more than 56% of the responding groups had graduate degrees or higher; therefore, the researchers had a reasonable expectation that some relationship among answers would be detected. For the following section, descriptive statistics were used to determine whether an area was deficient or proficient. The researchers defined deficient as categories in the survey rated as marginal or higher by participants. Proficient was defined as categories in the survey rated as adequate or higher by participants.

The first section of the college readiness survey was academic maturity with 11 items. High school educators rated five of the 11 areas proficient whereas college faculty rated all areas deficient. For example, high school teachers rated the items of effort, comfort with testing, work under pressure, problem-solving skills, ability to self-direct, and critical thinking skills as proficient for college readiness. College faculty rated every measure in the academic maturity groups as deficient in terms of college readiness. These findings showed that high school teachers perceive academic maturity differently than do college faculty.

Section two, academic motivation, measured seven attributes. High school faculty rated five areas as proficient: thirst for knowledge, interest in attending college, reasons for attending college, creative ideas and tasks, and interest in science and math. College faculty felt that interest in attending college was the only proficient area in the list of attributes. College faculty rated all other attributes as deficient. Again, these findings show that high school teachers perceive academic motivation differently than college faculty.

The learning styles section of the survey contained six attributes. High school and college faculty only rated one similar characteristic as proficient, use of library and computers. High school teachers also rated class participation, listen and take notes, and ability to study, as proficient for graduating high school seniors. On the other hand, college faculty rated the same attributes as deficient. Thus, high school teachers and college faculty perceived the learning styles section differently except for use of library and computers.

Assertiveness was the next section with five attributes. High school teachers and college faculty rated each of these attributes as similar. The attributes rated as proficient included comfort with stresses, sharing your opinion, competitive, and self-conduct. High school teachers and college faculty were aligned more on their thought is this section compared to other sections of the surveyed.

The fifth section of the survey was social and interpersonal skills which contained five attributes. All but one area was rated as proficient by both groups. College faculty rated the attribute leadership skills as deficient, and high school teachers rated this attribute as proficient. College faculty perceived leadership skills differently than did high school educators for college readiness.

Advice seeking was the sixth section of the college readiness survey and had six attributes. High school faculty rated all attributes as proficient; whereas, college faculty were split on three of the six attributes. Specifically, college faculty rated value parental advice, seek college planning advice, and seek teacher feedback as deficient.

The final section was planning and goal setting, which had four attributes. Again, high school teachers rated all areas as proficient. College faculty rated only one attribute as proficient. These faculty thought students were not college ready within the areas of college goals defined, career goals defined, and have plans for the future.

The null hypothesis of the study was that no difference exists regarding the perceptions of college readiness between a group of public senior high school teachers and a group of public college faculty who teach freshmen students. Although high school teachers and college faculty agreed on some attributes within the different sections of the survey, a significant difference existed in how each group perceived college readiness levels. Therefore, this hypothesis failed to be accepted at a .05 alpha level of significance.

6. Conclusion

A clear difference was demonstrated on how high school teachers and college faculty perceived college readiness levels. Specifically, high school teachers perceived that their students were ready for college in the areas of academic maturity, academic motivation, learning styles, assertiveness, social and interpersonal skills, advice seeking, and goal setting. As a whole, in these same areas college faculty felt that students were entering college unprepared. In conclusion, there appeared to be an impasse or failure of communication between the two groups of educators. Without a collaborative effort by both sides this impasse may never be overcome and a true change or improvement may never be realized.

7. Implications

It appears from the current findings that high school and college faculty would benefit from collaborative efforts to address college readiness levels. This research may justify the difference in perceptions because high school educators often focus on benchmarks and typically follow a prescribed curriculum that may tell high school educators that students are achieving in the necessary areas if they succeed within their curricula. On the other hand, college faculty based their evaluation of students on their abilities in higher-order thinking and expressing ideas critically. If this ability is not detected in a student, then college faculty will judge the student as not being college ready.

Even though limited research was found that identified the perceptions and differences or likeness between these two populations of educators, this study suggests that a more consistent stream of communication needs to take place at this level. In 2008, the federal government mandated seven educational priorities to bridge the gap between high schools and colleges. These priorities included councils from preschool through college to work nationwide to align high school and university curricula. It is hopeful that results of their efforts are having a positive effect.

If dialog among educators is meaningful and productive, the gap between high school and college will be minimal or not exist. When this occurs, high schools will begin to allow for change within their curricula to prepare students for college entrance. In turn, college faculty will feel they are not having to deviate from their curricula, but will be able to enhance and add to their overall student experience and development.

8. Recommendations for Further Research

These findings should cause the education community to begin to evaluate the value of high school courses taught for college credit to determine whether they are truly equivalent and adequately prepare students for college level work. The following recommendations for future research are based on the findings of this study:

1. The lack of research that directly identifies educators' perceptions points to the need for qualitative research that challenges the reasoning behind administrative decisions on curriculum and testing in preparation for college.
2. Future research can evaluate the effectiveness of the P-16 councils using a longitudinal study to determine whether change in procedures occurs as efforts are implemented to reduce the gap between high school and college.
3. This study had some limitations that a qualitative approach might be able to eliminate such as the vagueness of the answers. For example, one educator might evaluate a category differently than another; therefore having the ability to follow the surveys with interviews to solidify thoughts and interpretations would strengthen the value of the individual responses.
4. A random review of various age groups of educators could add meaning to the results. For example, younger educators may believe that students are college ready because they may relate current standards of their students to their own more recent experiences in college, whereas older educators may have the same relation with their students but different perspectives of preparedness because of time in the field and experience.

Table 1: Demographic Information of the Respondents

Category	N	%
Survey Data		
Surveys distributed	3,467	100.0
Total respondents	1,185	34.1
Non-qualifying respondents	840	70.8
Qualifying respondents	345	29.1
Groups of Study based on Qualifying Respondents		
High school educator	177	51.3
College educator	168	48.7
Gender of Qualified Respondents		
Female	165	47.8
Male	111	32.2
Did not answer	69	20.0
Age of Qualified Respondents		
18-29	27	7.8
30-44	63	18.3
45-60	132	38.3
>60	54	15.7
Did not answer	69	20.0
Education Levels of Qualified Respondents		
Less than a high school degree	3	0.9
Some college no earned degree	6	1.7
Associates or bachelor's degree earned	72	20.9
Graduate degree earned	195	56.5
Did not answer	69	20.0

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