

College Aspirations and College Knowledge:  
Students' Preparation for Post-Secondary Aspirations

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*This study analyzed the relationship between eleventh and twelfth grade students' postsecondary aspirations and their preparation for achieving those aspirations in a sample of 8106 high school students. Eleventh and twelfth grade student responses to items on a survey measuring the Four-part Model of College and Career Readiness were analyzed to determine which items predict aspirations to attend four year college, work, and which items predicted students responded that they did not know their plans to work after high school. Findings indicate that the skills and strategies related to college readiness do predict aspirations for after high school, particularly for twelfth grade students.*

Keywords: Academic Outcomes, Student Knowledge, Survey Research

“Educational aspirations are critical to educational attainment because people cannot achieve what they do not dream” (Cooper, 2009, p. 616).

### **Objectives**

The purpose of this study was to determine the relationship between students' preparation for post-secondary success and their aspirations. Student responses on a survey measuring college and career readiness were regressed with students' aspirations for students who planned to attend four-year college, who planned to work, and who didn't know what they planned to do after high school. The results of this study indicate that the development of students' Contextual Skills is related to their aspirations for after high school. In order to encourage students to plan to attend four-year college after high school, schools can teach students about the types of careers available for individuals with just a high school education versus the opportunities available for individuals with a college degree. Furthermore, schools can teach students about the types of financial aid available, the college admissions process, and the differences between high school and college.

### **Theoretical Framework**

Students with postsecondary aspirations are more likely to apply to college, and students who apply are more likely to attend. In the National Educational Longitudinal Study (NELS) seniors who aspired to earn a bachelor's degree (BA) were 28% more likely to apply to a four-year institution than students with no aspirations to attend college, and seniors aspiring for an advanced degree were 34% more likely to apply (Cabrera & La Nasa, 2001).

Even if students aspire to college, they cannot attend if they are not prepared. Of students in the (NELS) dataset who had obtained college qualifications such as the requisite GPA, class rank, aptitude test scores, SAT and ACT scores, 69% enrolled in college whereas only 9% of unqualified students enrolled (Cabrera & La Nasa, 2001). The NELS data also revealed that many students were not college ready: 40% of students in the study took at least one remedial course in college costing at least \$1 billion a year (Adelman, 1999; Attewell, Lavin, Domina & Levey, 2006, Conley, 2010). In surveys conducted by NCES and the Census Bureau, just 57% of students graduated from college within 6 years (Aud, et al., 2010).

College eligibility differs from *college readiness*, which is the level of preparation a student needs to enroll and succeed without remediation in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree (Conley, 2005, 2007, 2010). In order to address this lack of preparation, Conley (2005, 2007, 2010) developed a four-part model of college readiness (see Table 1).

Table 1

*Four Dimensions of College Readiness*

Dimension	Definition
Key Cognitive Strategies	The patterns of intellectual behavior that lead to the development of skills and capabilities necessary for college work. These include problem formulation, research, interpretation, communication, and precision/accuracy.
Key Content Knowledge	The strong, grounding foundation for the understanding of academic disciplines. Includes English and language arts (ELA), mathematics, natural science, second language(s), and social science.
Academic Behaviors	The attitudes and behavioral attributes that students who succeed in college must demonstrate. Academic Behaviors require students to take responsibility for their own learning through self-awareness, self-monitoring, and self-control.
Contextual Skills	The privileged knowledge and skills that are necessary to enroll in college and understand how college operates as a system and a culture, these include a general understanding of college admissions processes, career and college culture, and tuition and financial aid.

*Note.* Adapted from Conley (2005, 2007, 2010)

The *Contextual Skills* dimension of the four-part model involves the information students need to successfully prepare for, apply to, and succeed in college and careers. *Contextual Skills* includes four aspects: Academic Awareness, College Admissions Process, College and Career Culture, and Tuition and Financial Aid and these Aspects are further divided into Components (see Table 2).

Table 2  
*Contextual Skills*

Aspect	Definition	Components
Academic Awareness	Students understand the range of expectations and structure of college coursework. They engage in pre-planning and get experiences needed to apply and be admitted to college.	College and Career Preparation College and Career Expectations
College Admissions Process	Students gather information, navigate the admissions process, and take steps to apply to college.	College Selection College Application
College and Career Culture	Students understand how to navigate the social environment of college and careers, including how to secure resources they need to manage emotionally, socially, and academically (e.g., writing center, health center, social organizations). They explore interests, college, and career options that may prepare them for the work world after high school or college.	College Awareness Career Awareness
Tuition and Financial Aid	Students gather information, navigate the financial aid process, and take steps to apply for aid.	Tuition Awareness Financial Aid Awareness

*Note.* Adapted from Conley (2005, 2007, 2010)

### Data Sources

Data were collected in an administration of The CollegeReady School Diagnostic (Diagnostic), an online, school-level measure that assesses the four-part model of college readiness described above (see Table 1 above). The Diagnostic enables schools to identify the areas in which they already excel and offers approaches for incorporating strategies not yet used through questions about the activities, policies, and programs at participating schools. Upon completion of the Diagnostic, each school receives a descriptive report outlining its results, allowing schools and districts to see how well their programs compare with best practices. The report provides individualized, actionable recommendations to help administrators and

teachers see where instruction could be made more effective and how best to target limited resources. This study analyzed the relationship between eleventh and twelfth grade students' responses to items in the Contextual Skills dimension (see Table 2 above) and their responses to the question, "What are you plans for the fall after you graduate from high school?"

### **Methods**

Data were analyzed using multiple regression analysis to determine the relationship between students' aspirations for after high school and their responses to School Diagnostic items in the Contextual Skills dimension of the four-part model of college readiness.

### **Results**

Students were asked what they planned to do the fall after high school graduation, 54% reported that they planned to attend four-year college, 10% planned to work, and 9% of students reported that they did not know what they planned to do after high school.

#### **Four-year College Aspirations**

The items in the Contextual Skills dimension were significant predictors of students responding that they planned to attend four year college after high school (see tables 3 and 4 below).

#### *Career Awareness Items*

Overall, the Career Awareness item set was a significant predictor of students' aspirations to attend four-year college three months after high school for students in:

- Grade 11 ( $F(11, 391) = 2.18, p < .05$ ), explaining 6% of the variance; and
- Grade 12 ( $F(11, 366) = 2.95, p < .001$ ), explaining 8% of the variance.

#### *Tuition & Financial Aid Items*

Overall, the Tuition & Financial Aid items were a significant predictor of aspirations to attend four-year college for students in:

- Grade 11 ( $F(10, 469) = 5.2, p < .001$ ), explaining 12% of the variance; and
- Grade 12 ( $F(10, 376) = 12.6, p < .001$ ), explaining 25% of the variance.

#### *College Awareness Items*

Overall, the College Awareness Items were a significant predictor of students' plans to attend four-year college for students in:

- Grade 11 ( $F(4, 408) = 14.2, p < .001$ ), explaining 11% of the variance; and
- Grade 12 ( $F(4, 382) = 21.9, p < .001$ ), explaining 18% of the variance.

#### *College and Career Expectations Items*

Overall, the College and Career Expectations items were a significant predictor of students' four-year aspirations for students in:

- Grade 11 ( $F(9, 408) = 16.99, P < .001$ ), explaining 27% of the variance; and
- Grade 12 ( $F(9, 381) = 28.24, p < .001$ ), explaining 40% of the variance.

#### *College Admissions Process*

Overall, the College Admissions Process items were a significant predictor of students' four-year aspirations for students in:

- Grade 11 ( $F(10, 406) = 8.83, P < .001$ ), explaining 16% of the variance; and
- Grade 12 ( $F(10, 378) = 18.51, p < .001$ ), explaining 31% of the variance.

Table 3. *Items Predicting Eleventh Grade Students' Aspirations to Attend Four-year College*

Aspect	Component	Item	$\beta$
Academic Awareness	College and Career Preparation	NA	
	College and Career Expectations	I have taken the PSAT or PLAN or will take it this year.	.15**
		I have studied or plan to study for the SAT or ACT.	.29***
		I have taken the ACT or SAT or will take it this year.	.13*
		I know what scores I need on the ACT or SAT to get into the colleges I am interested in.	.19**
College Admissions Process	College Selection	I understand the basic differences between 2- and 4-year colleges.	-.17*
		I have visited or plan to visit college campuses to get a feel for the best match with my interests and personality.	.29***
	College Application	NA	
	College Awareness	I've thought about attending college and have ideas about where I may want to go or what I may want to study.	.16*
		I believe I will be ready to succeed in college after I graduate from high school.	.14*
I have identified what is necessary for entry into the careers that I may be interested in.		.07**	
College and Career Culture	Career Awareness	My school seems focused on getting students ready for careers after high school.	.07**
		When students graduate from this high school the vast majority will be well prepared for a career.	-.06*
Tuition & Financial Aid	Tuition Awareness	NA	
	Financial Aid Awareness	I know how to, or have done, research on scholarships that I may be eligible for.	.24***

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$



Table 4. *Items Predicting Twelfth Grade Students' Aspirations to Attend Four-year College*

Aspect	Component	Item	$\beta$	
	College and Career Preparation	NA		
Academic Awareness	College and Career Expectations	I have taken the PSAT or PLAN or will take it this year.	.18***	
		I have taken the ACT or SAT or will take it this year.	.25***	
		I know what scores I need on the ACT or SAT to get into the colleges I am interested in.	.19**	
		I understand the basic differences between 2- and 4-year colleges.	-.16*	
College Admissions Process	College Selection	I have visited or plan to visit college campuses to get a feel for the best match with my interests and personality.	.18**	
		I have practiced writing a personal essay for applying to college (either on my own or as part of a course assignment).	.23***	
		I know which adults I can ask to provide feedback on my college admissions essays.	.16*	
		I know the deadlines for completing and submitting all required college application materials.	.25**	
		College Application	I've talked with current college students about their experiences in college.	.15*
			I've thought about attending college and have ideas about where I may want to go or what I may want to study.	.14*
College and Career Culture	College Awareness	I believe I will be ready to succeed in college after I graduate from high school.	.16*	
		Career Awareness	I have identified what is necessary for entry into the careers that I may be interested in.	.07*
			I have a general idea how much tuition is for private colleges.	.32***
Tuition & Financial Aid	Tuition Awareness	I am confident that I know generally how much my college education will likely cost.	.23**	
		I have a general idea how much tuition costs for 2- and 4-year public colleges in my state.	-.18*	
	Financial Aid Awareness	I know that resources are available in my school to help me complete scholarship forms.	-.19*	
		I know how to, or have done, research on scholarships that I may be eligible for.	.25***	

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

## **Aspirations to Work**

The items in the Contextual Skills dimension were significant predictors of students responding that they planned to work after high school (see tables 5 and 6 below).

### *Career Awareness Items*

Overall, the Career Awareness items were a significant predictor of students' aspirations to work three months after high school for students in:

- Grade 11 ( $F(11, 391) = 1.95, p < .05$ ), explaining 5% of the variance; and
- Grade 12 ( $F(11, 366) = 6.68, p < .001$ ), explaining 10% of the variance.

### *Tuition & Financial Aid Items*

Overall, the Tuition & Financial Aid items were a significant predictor of aspirations to work for students in:

- Grade 12 ( $F(10, 376) = 5.9, p < .001$ ), explaining 14% of the variance.

### *College Awareness Items*

Overall, the College Awareness Items were a significant predictor of students' plans to work for students in:

- Grade 11 ( $F(4, 408) = 6.44, p < .001$ ), explaining 6% of the variance; and
- Grade 12 ( $F(4, 382) = 3.51, p < .001$ ), explaining 11% of the variance.

### *College and Career Expectations Items*

Overall, the College and Career Expectations items were a significant predictor of students' work aspirations for students in:

- Grade 11 ( $F(9, 408) = 2.57, P < .01$ ), explaining 5% of the variance; and
- Grade 12 ( $F(9, 381) = 6.47, p < .001$ ), explaining 13% of the variance.

### College Admissions Process

Overall, the College Admissions Process items were a significant predictor of students' four-year aspirations for students in:

- Grade 11 ( $F(10, 406) = 2.57, p < .01$ ), explaining 4% of the variance; and
- Grade 12 ( $F(10, 378) = 6.53, p < .001$ ), explaining 13% of the variance.

Table 5. *Items Predicting Eleventh Grade Students' Aspirations to Work*

Aspect	Component	Item	$\beta$
Academic Awareness	College and Career Preparation	NA	
	College and Career Expectations	I have taken the PSAT or PLAN or will take it this year.	-.12*
College Admissions Process	College Selection	I have visited or plan to visit college campuses to get a feel for the best match with my interests and personality.	-.13*
	College Application	NA	
College and Career Culture	College Awareness	I believe I will be ready to succeed in college after I graduate from high school.	-.19*
		When students graduate from this high school the vast majority will be well prepared for a career.	.13*
	Career Awareness	My school seems focused on getting student ready for careers after high school.	-.15*
Tuition & Financial Aid		I have identified what is necessary for entry into the careers that I may be interested in.	-.20**
	Tuition Awareness	NA	
	Financial Aid Awareness	NA	

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

Table 6. *Items Predicting Twelfth Grade Students' Aspirations to Work*

Aspect	Component	Item	$\beta$
Academic Awareness	College and Career Preparation	NA	
	College and Career Expectations	I have taken the ACT or SAT or will take it this year.	-.22**
College Admissions Process	College Selection	NA	
	College Application	NA	
	College Awareness	I have written a resume and cover letter listing my skills and experiences as part of a class assignment.	.14*
College and Career Culture	Career Awareness	I know adults I can talk to who work in a career that interests me.	-.16*
		I have thought about what kind of career I might like to have.	-.18**
		I have received feedback on my resume from a teacher, counselor, or other adult.	-.18*
	Tuition Awareness	NA	
Tuition & Financial Aid	Financial Aid Awareness	My high school guidance office is helping me identify and apply for scholarships and financial aid.	.13*
		I know how to, or have done, research on scholarships that I may be eligible for.	-.29***

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

### Unknown Aspirations

The items in the Contextual Skills dimension were significant predictors of students responding that they did not know their plans for after high school (see tables 7 and 8 below).

#### *Career Awareness Items*

Overall, the Career Awareness items were a significant predictor of students responding that they did not know their plans for three months after high school for students in:

- Grade 11 ( $F(11, 420) = 4.01, p < .001$ ), explaining 10% of the variance;
- Grade 12 ( $F(11, 379) = 3.00, p < .001$ ), explaining 8% of the variance.

#### *Tuition & Financial Aid Items*

Overall, the Tuition & Financial Aid items were a significant predictor of unknown aspirations for students in:

- Grade 11 ( $F(10, 430) = 3.07, p < .001$ ), explaining 7% of the variance; and
- Grade 12 ( $F(10, 389) = 2.58, p < .01$ ), explaining 6% of the variance.

#### *College Awareness Items*

Overall, the College Awareness Items were a significant predictor of unknown aspirations for students in:

- Grade 11 ( $F(4, 438) = 9.86, p < .001$ ), explaining 8% of the variance; and
- Grade 12 ( $F(4, 395) = 7.81, p < .001$ ), explaining 7% of the variance.

#### *College and Career Expectations Items*

Overall, the College and Career Expectations items were a significant predictor of unknown aspirations for students in:

- Grade 11 ( $F(9, 439) = 4.41, P < .001$ ), explaining 6% of the variance; and
- Grade 12 ( $F(9, 394) = 4.83, p < .001$ ), explaining 8% of the variance.

#### *College and Career Preparation Items*

Overall, the College and Career Preparation items were a significant predictor of unknown aspirations for students in:

- Grade 11 ( $F(10, 421) = 3.74, P < .001$ ), explaining 8% of the variance; and
- Grade 12 ( $F(10, 379) = 1.91, p < .05$ ), explaining 5% of the variance.

#### *College Admissions Process Items*

Overall the College Admissions Process items were a significant predictor of unknown aspirations for students in:

- Grade 11 ( $F(10, 436) = 5.44, p < .001$ ), explaining 11% of the variance; and
- Grade 12 ( $F(10, 391) = 3.49, p < .001$ ), explaining 8% of the variance.

Table 7. *Items Predicting Eleventh Grade Students' Unknown Aspirations*

Aspect	Component	Item	$\beta$
Academic Awareness	College and Career Preparation	I would be interested in connecting with a college professor in a subject area I am interested in studying for college.	-.18***
	College and Career Expectations	I have studied or plan to study for the SAT or ACT.	-.16*
College Admissions Process	College Selection	I have visited or plan to visit college campuses to get a feel for the best match with my interests and personality.	-.14*
	College Application	NA I've thought about attending college and have ideas about where I may want to go or what I may want to study.	-.16*
College and Career Culture	College Awareness	I believe I will be ready to succeed in college after I graduate from high school.	-.21**
	Career Awareness	When I graduate from high school I feel that I will be well prepared for a career.	-.16**
Tuition & Financial Aid	Tuition Awareness	NA	
	Financial Aid Awareness	NA	

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

Table 8. *Items Predicting Twelfth Grade Students' Unknown Aspirations*

Aspect	Component	Item	$\beta$
Academic Awareness	College and Career Preparation	I would be interested in connecting with a college professor in a subject area I am interested in studying for college.	-.17**
	College and Career Expectations	I know the graduation requirements for my high school. I have taken the ACT or SAT or will take it this year.	-.19*** .18***
College Admissions Process	College Selection		
	College Application		
College and Career Culture	College Awareness	NA NA	
	Career Awareness	I have thought about what kind of career I might like to have.	-.23***
Tuition & Financial Aid	Tuition Awareness	NA	
	Financial Aid Awareness	NA	

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

### Significance

The strongest predictor of students' aspirations to attend four-year college was the set of items measuring the Academic Awareness aspect of the Contextual Skills dimension of the College and Career Readiness model. In particular, the College and Career Expectations items explained 40% of the variance for twelfth graders. This finding is not surprising because these items asked students about their plans to take and study for college admissions tests such as the SAT and ACT, which they must do when applying to college.

A more interesting finding is that the items measuring the Tuition and Financial Aid aspect of the model explained 25% of the variance for twelfth graders' aspirations to attend four-year college. Of note, two items in this set were significant negative predictors of four-year aspirations (see table 4). This finding is surprising

given that the Diagnostic was administered in the spring when twelfth graders planning to attend college in the fall should be applying for financial aid.

For students who planned to work, the strongest predictors were the items measuring the Tuition and Financial Aid aspect. Of note, the items measuring the Career Awareness component of the model were negative predictors of students' plans to work (see table 6), indicating that the more students know about careers, the less they want to work immediately after high school.

For students who did not know their plans for after graduation, these items were significant negative predictors. Thus, the more students know about the Contextual Skills the less likely they were to respond that they did not know their plans for after high school.

The results of this study indicate that the development of students' Contextual Skills is related to their aspirations for after high school. In order to encourage students to plan to attend four-year college after high school, schools can teach students about the types of careers available for individuals with just a high school education versus the opportunities available for individuals with a college degree. Furthermore, schools can teach students about the types of financial aid available, the college admissions process, and the differences between high school and college.

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