Improving Urban Students’ College Readiness as a Driver of High School Curriculum Enhancement

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Abstract

Many factors inhibit college completion by African-American high school graduates who come from low socio-economic backgrounds. Some factors are “cognitive,” while others can be classified as “non-cognitive.” Variables in the latter classification are examined in this study conducted at an urban high school in the Midwest with an African-American student population five times the national average, and in a city with a median income well below that of the nation. An instrument designed and validated to predict success of impoverished minority students in college was administered to over 200 students at this school. This paper outlines the connection between findings and specific curricular plans put forth by high school and district staff, assisted by two researchers from an area public university, as a way to prioritize the school resources aligned with non-cognitive variables leading to curriculum enhancement and successful student transition to college.

Keywords: non-cognitive variable, curricular change, urban high school students, higher education

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Introduction

Recent conversations on the future of the American society and economy in the 21st century have been increasingly focused on identifying the attributes of teaching and learning in a globalized world. According to the P21 Framework definitions developed by the Partnership for 21st Century Skills, the core of these attributes should support students’ “blend of content knowledge, specific skills, expertise and literacies” (2009, p. 1). Connecting these 21st century skills to a set of expectations expressed by employers surveyed by Hart Research Associates on behalf of the Association of American Colleges and Universities in Fall 2009, individuals graduating from high school and then college should demonstrate the necessary skills and “higher levels of learning and knowledge” (2010, p. 1). There needs to be a flexible balance between broad knowledge and discipline-specific, more focused knowledge. Both types of knowledge should lead to the development of “intellectual and practical skills,” “personal and social responsibility,” as well as “integrative learning” (2010, p. 2). Along the same lines, the 21st century skills movement has emphasized the connection among global awareness, financial literacy, information, media, innovation, life and career skills (Johnson, 2009). Recent data show that most high school graduates in the U.S. are not sufficiently prepared to meet the rigor of college education or workplace requirements (Barnes & Slate, 2010; Santos, 2011). Consequently, the sense of urgency in dealing with the current “aspirations-attainment gap” (Roderick, Nagaoka, & Coca, 2009, p. 185) is reiterated by a call for action to prevent the possibility for today’s generation to lag behind its predecessors in terms of educational achievement (Complete College, 2011).

Completion of a four-year college degree by Americans over the age of 25 was 28% in 2006, an increase from 21% in 1990 (National Center for Education Statistics, 2007). As encouraging as this trend appears, it does not allow us to see the higher education “achievement gap” that certainly exists. For Whites, the college completion rate was 32% and over 49% for Asian-Americans. On the other hand, African-Americans completed college at a 19% rate, and Latinos fared even worse at a 13% level (National Center for Education Statistics, 2007). If equal opportunities are to exist for all Americans, minority populations must be better prepared for success in higher education. For this to happen, stakeholders in education should realize the wide range of obstacles that prevent underserved populations from accessing postsecondary education opportunities, followed by appropriate corrective measures (Martinez, 2006; Reid & Moore III, 2008). More recently, the Obama administration reinforced the American Graduation initiative by releasing the College Completion Tool Kit in March 2011 (Russell, 2011), coupled with proposed K-12 education reforms related to higher standards and improved assessment systems, better teaching and school leadership workforce, with a particular focus on turning around our lowest-achieving schools (The White House, 2013). Under these circumstances, any future agenda aimed at improving high school graduation and successful transition to college, leading to retention and completion, should factor in cognitive and metacognitive skills, content and contextual knowledge, as well as academic self-management (Conley, 2008).

Traditionally speaking, college admission decisions have relied heavily on standardized tests, such as the Graduate Record Examinations (GRE), even though it has been argued that such assessment tools do not provide an accurate representation of test takers’ “relevant abilities” (Kuncel, Hezlett, & Ones, 2001, p. 163), attrition risk, or non-traditional students’ readiness for college (Adebayo, 2008; Sommerfeld, 2011). Therefore, in an attempt to increase the selection
process accuracy, college readiness includes factors that help high school graduates to manage the various demands of college work and life. Identified either as “non-cognitive” or “soft” skills, they focus on the complementarity to the academic side of schooling of personal independence and responsibility, time and goal/task management, self-awareness and advocacy, community service, and leadership initiatives developed in a variety of non-academic aspects of the educational enterprise (Adebayo, 2008; Adams, 2012; Byrd & MacDonald, 2005; Skelly & Laurence, 2011).

Sedlacek’s (2004) study that is the premise for this paper identifies “non-cognitive” variables that have been tested to affect the success of minorities in college. Based on the study’s findings, it was determined that different actions could be undertaken by school personnel in an attempt to improve college readiness by addressing student performance from the non-cognitive perspective.

The site of the current study is the only public high school that serves two so-called “inner-ring” suburbs of a highly impoverished midwestern city. The median household income for people living in the suburb where the high school is located is only at a range of 85% of the national median. Of the 25,000 combined residents from the two suburbs served by the high school, 35.65% are White and 62% are African-American (U.S. Census Bureau, 2010). The high school’s demographics mirror that of the two communities: of its nearly 1300 students, 74% are Black while only 21% are White. Free-and-reduced lunch rate is at 30% compared to 24% nationally. The school’s graduation rate is at 71% while the state average is 93%, and 18% of the city’s residents have a 4-year degree or higher compared to a national average of over 25% (U.S. Census Bureau, 2010).

Study Focus

The focus of the current study is placed on generating and interpreting individual profiles for participating high school students based on their respective NCQ scores, with a particular emphasis on school-specific factors impacting changes in these profiles that could be tied to expected success in college. In this light, the following research questions are intended to meet specific needs of teachers, counselors, and administrators from the participating high school, while providing the two researchers with data based on which to initiate conversations about curricular change with school stakeholders:

- What is the non-cognitive profile of each student in a college-bound freshmen cohort?
- How will these non-cognitive profiles change over two consecutive administrations of the instrument?
- What factors (curricular or otherwise) contribute to the changes in non-cognitive strengths and weaknesses?
- What trends can be found in the 180+ student cohort based on the results of the NCQ?
- How do the eight non-cognitive variables predict success in college for the cohort of students?

Theoretical Framework

School success depends on the degree to which students have opportunities to engage in learning activities that gradually lead to knowledge acquisition as well as skills and dispositions
development (Li & Lerner, 2013). To that effect, school curricula should be structured in a way that strikes a balance between academic and non-academic foci designed to meet the needs of all students by taking into account their “varying needs and abilities” (Sedlacek, 2004, p. 22). In today’s increasingly diverse student population, there needs to be a conscious and concerted effort toward creating and sustaining multicultural learning environments where students can engage in challenging tasks preparing for college and/or the workforce. Under these circumstances, well-informed career decision-making relies on a clear “sense of vocational goals, strengths, and interests,” as shown for samples of Black and Latino/Latina high school students (Flores, Navarro, & DeWitz, 2008, p. 491).

Traditional means of assessing student learning are associated with standardized tests and grades, and they have become the guiding principle in the current age of accountability, leading to a reactive perspective on determining student progress (Kellow & Jones, 2008). Non-cognitive variables focused on “adjustment, motivation, and perceptions” provide a fuller picture of student potential (Sedlacek, 2004).

Given the ability of non-cognitive variables to help measure student non-traditionality, a Midwestern school district asked two urban education faculty members at a nearby state university to help identify their students’ readiness to be successful in college. The district had recently instituted a College Exploratory course that is mandatory for its nearly 400 freshmen students. While much research has been conducted determining what students should know academically to be successful in schools (Conley, 2005), only a small strand of research examines “non-cognitive” assets. William Sedlacek has spent over three decades determining the non-cognitive variables that enable students to be successful in four-year institutions, developing a questionnaire used by some colleges and universities for placement of freshmen and actual admittance into the university (Sedlacek, 2004). The eight variables identified by Sedlacek and his colleagues are briefly described below, as they apply to successful non-traditional students:

- **Positive self-concept**: Demonstrate confidence, strength of character, determination, and independence, as this non-cognitive variable is expected to be predictive of “success in higher education for students of color and other non-traditional students” (Sedlacek, 2004, p. 39). Scores range from 7 to 27.
- **Realistic self-appraisal**: Recognize and accept any strengths and deficiencies, especially academic, and work hard at self-development; recognize need to broaden their individuality, as it leads to self-monitoring and development. Scores range from 4 to 14.
- **Successfully handling the system (racism)**: Exhibit a realistic view of the system on the basis of personal experience of racism; committed to improving the existing system; take an assertive approach to dealing with existing wrongs by not assuming a hostile perspective on society, while being able to handle a discriminatory system. Scores range from 5 to 25.
- **Preference for long-term goals**: Respond positively to deferred gratification; plan ahead by setting goals; demonstrate ability to understand “the relationship

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1 “For traditional students, this non-cognitive variable takes the form of handling they system without the addition of racism and might better be labeled ‘negotiating the system’” (Sedlacek, 2004, p. 43).
between current efforts and future outcomes” (Sedlacek, 2004, p. 44) by using role models as a reinforcement system. Scores range from 3 to 15.

- **Availability of strong support person:** Seek and take advantage of a strong support network or have someone to turn to in a crisis or for encouragement. Scores range from 3 to 15.

- **Leadership experience:** Demonstrate strong leadership in any area of their background, some of which could be quite atypical (church, sports, non-educational groups, gang leader and so on). Scores range from 3 to 15.

- **Community involvement:** Participate in their respective community from which they receive support. Scores range from 2 to 8.

- **Knowledge acquired in a field:** Acquires knowledge in a sustained or culturally related way in any field (Sedlacek, 2004). Scores range from 2 to 8.

As the questionnaire was administered to junior students in high school, the researchers made a few minor changes to the original survey that do not affect the instrument’s validity or reliability, as follows: a) directions made it clear that the focus of the survey is on attending and completing college, while requesting that students do not place their name on the paper; b) the item dealing with the percentage of students dropping out of college was modified by adding the phrase “before I am 25” as it applied to all participating high school students; c) the item stating that universities should play a role in shaping social conditions in the world was modified by adding the phrase “high schools;” d) finally, the item dealing with tutoring services availability “on campus” was qualified to apply to “my school,” based on the age composition of the participants. The first 6 items are focused on demographic information, followed by 4 items dealing with how much education the participants expect to get during their lifetime, potential reasons for which they might have to leave college before receiving a degree (to which the researchers added “before I am 25,” as mentioned earlier), and a list of three things the students are proud of having done. The next 19 items are based on a 5-point Likert scale ranging from 1 being “strongly agree” to 5 being “strongly disagree,” all of which rely on students’ current feelings or future expectations, thus connecting to all 8 non-cognitive variables.

**Methodology**

School district officials granted permission to the two researchers to administer Sedlacek’s Non-cognitive Questionnaire (NCQ) to 47 junior students in the College Exploratory class in October 2009. Sedlacek provides a scoring rubric for the NCQ that was used by the two researchers and a graduate assistant involved in the project. The scores were shared with the school district, and a profile developed for each student based on the scores for all instrument parameters described above.

Over the past six decades, non-cognitive variables have been used to determine a variety of attributes supporting student success, ranging from personal involvement, social integration, study skills, to socio-economic background as well as environmental variables (Sedlacek, 2004). Personality traits identified by Goldberg (as cited in Sedlacek, 2004) and non-cognitive variables used by Sternberg (as cited in Sedlacek, 2004) to analyze experiential and contextual domains are reflected in Sedlacek’s (2004) NCQ.

As there were no means available for high school students, the researchers and school administration representatives agreed to use the community college benchmarks established by Sedlacek (2004). Following an analysis of the findings of the initial administration, it appeared
that the area in which most students scored below the national average dealt with the availability of a strong support person. Consequently, district officials asked the authors to provide university personnel to speak to the College Exploratory classes about freshmen year experience, thus emphasizing the effective transitioning to college life, both in social and academic terms. Nine university students formed a panel to discuss their experiences and make suggestions on how the district students can learn from their successes and failures. The panel (including the Dean of Student Life, Admissions personnel, and the two co-authors) responded to questions from the high school students about how best to navigate preparation for college and what they could be doing as 11th graders to deal successfully with this challenge. A second administration of the NCQ took place in October 2010 (N=172).

According to the original design of the research project, the teachers at the site high school would utilize their students’ non-cognitive profiles as impetus for curriculum enhancement. The questionnaire would be administered to the same students each year until graduation and, it is hoped, to those matriculating to college each and every year they attend college. Every consecutive year, the researchers would analyze the data for the October 2010 freshman cohort, discuss their findings with the district’s teachers and administrators, and act as consultants to make curricular changes. Additionally, the district would like to administer the NCQ to subsequent freshman classes in their College Exploratory course, and continue the practice of administering the questionnaire each year in high school; the researchers may be employed as consultants but will not be collecting these data, as they would only collect and analyze data for the 2009-10 freshman class.

Findings

A comparison of the findings from the data collected in March 2010 and October 2010 shows variation. In the March administration of the instrument (N=47), the only variables that were out of the national norms range for high school seniors entering a community college (this norm range was selected collaboratively by the school district and the researchers) were Positive Self Concept, which was slightly above the range, and Availability of a Strong Support Person, which was below range (see Table 1 and Table 2 below).

<table>
<thead>
<tr>
<th>Positive Self Concept</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>19.43</td>
<td>21.90**</td>
<td>20.88**</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>16*</td>
<td>21**</td>
<td>18.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>21.82**</td>
<td>20.63**</td>
</tr>
</tbody>
</table>

Note: * denotes national median, ** denotes above national median

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Table 2. Comparative data showing variation in terms of the second particular non-cognitive variable based on the two consecutive NCQ administrations

<table>
<thead>
<tr>
<th>Support Person</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>13</td>
<td>11.8**</td>
<td>12.29**</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>11.91**</td>
<td>12.37**</td>
</tr>
</tbody>
</table>

| National Median| 13, 14 |

Note: * denotes below national median, ** denotes above national median

These did not raise a great concern for the researchers, as the degree to which both were out of range was small. However, the district did see the holistic value of the findings and decided to have all 11th graders take the NCQ. As a result, 172 students were administered the questionnaire in October 2010; this was approximately one-half of the 11th grade population at the school, as the other half would take the course in the spring semester.

The findings for the second administration (Table 3 below) were interesting and a bit unsettling. As can be seen, six of the eight variables were out of the national median range: Self-Appraisal, Racism, Preference for Long-Term Goals, Availability of a Support Person, Leadership Experience, and Knowledge Acquired in a Field. The following sections represent the analysis of findings based on Sedlacek’s assumptions supporting his theoretical framework and the instrument used for this research project. It should be noted that 165 of the 172 students taking the questionnaire self-identified as Black or Multi-Racial. Therefore, it was determined by the district and the two researchers that there was no need to aggregate the data by race, as the number of White, Latinos, and others would be too low.

Table 3. Averages of October 2010 NCQ Administration

<table>
<thead>
<tr>
<th></th>
<th>Self-Concept</th>
<th>Self-Appraisal</th>
<th>Racism</th>
<th>Goals</th>
<th>Support Person</th>
<th>Leadership</th>
<th>Community</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20.00**</td>
<td>8.50*</td>
<td>14.50*</td>
<td>6.50*</td>
<td>7.00*</td>
<td>7.50*</td>
<td>7.50**</td>
<td>5.00**</td>
</tr>
<tr>
<td>Female</td>
<td>17.87*</td>
<td>7.62*</td>
<td>14.87*</td>
<td>7.12*</td>
<td>7.75*</td>
<td>6.25*</td>
<td>5.62**</td>
<td>2.87*</td>
</tr>
<tr>
<td>Total</td>
<td>18.30</td>
<td>7.80*</td>
<td>14.80*</td>
<td>7.00*</td>
<td>7.60*</td>
<td>6.50*</td>
<td>6.00</td>
<td>3.30</td>
</tr>
<tr>
<td>National Median</td>
<td>18, 19</td>
<td>9, 10</td>
<td>17, 18</td>
<td>9, 10</td>
<td>13, 14</td>
<td>8, 9</td>
<td>5, 6</td>
<td>3, 4</td>
</tr>
</tbody>
</table>

Note: * denotes scores that were below national average, ** denotes scores that were within national range
Self-Appraisal
Scores for both male and female students were slightly below the norm range. According to Sedlacek’s work, this could be from a lack of understanding about what is involved to attain one’s goals or, in general to be successful in career, school, and life. The respondents may not be aware of their own abilities, how evaluations are done in school, how others rate their performance, or the consequences of grades, actions, and skills.

Racism/Navigating a System
Scores for both male and female participants were quite a bit below the national norm range, indicating that the students may not understand how the system of schooling works, could blame others for their own problems, or their strategies for handling the system and/or racism could be interfering with their academic development.

Preference for Long-Term Goals
Again, scores for both male and female respondents were below the national norm range. This could mean that the students lack evidence of setting and accomplishing goals and may proceed without clear direction, they are not future-oriented spending too much energy in the present, or their goals are vague or unrealistic.

Availability of a Support Person
These scores were drastically low for both males and females, which could leave the researchers and district to consider that the students either avoid turning to a mentor or have no one to whom they can turn.

Leadership Experience
Both genders were slightly out of range, although the scores for female students were surprisingly lower. This could indicate that the girls (and to a lesser extent, the boys) lack confidence in their leadership skills, are passive or lack initiative, or avoid controversy.

Knowledge Acquired in a Field
Here, the scores for male students were slightly above the range, while those of female students were slightly below. According to Sedlacek’s (2004) research, the male students could be working independently in a field of their choice, therefore, gaining skills perhaps unrelated to schoolwork. Girls could be more traditional in their approach to learning, not know their interests or the possibilities that exist for them.

Translating NCQ Data Into High School Curriculum Enhancement
After several discussions at the school district level involving teachers and counselors from the high school representing the site of the research project, one particular non-cognitive area was selected for emphasis over the course of the following academic year - availability of strong support person. According to Sedlacek (2004), this is where students seek and take advantage of a strong support network or have someone to turn to in a crisis or for encouragement, and it has proven to be crucial to success in college by minorities. Any follow-up actions in this respect
could involve the district in increasing its mentoring programs and outreach to the home community. After the dissemination of the March 2010 results, school district officials contacted the two researchers about having university students engage in formal mentoring relationships with select students participating in a college-bound cohort at the high school. This was possible by a small grant being awarded to the district by a local foundation that supported the initiative.

A call for participation was sent out to students from a nearby state university where one of the researchers works as a faculty member. In his attempt to disseminate the information about this mentorship opportunity, he contacted several department chairs, the director of the Honors program, as well as the Dean of Students. As a result, over 40 students expressed interest in participating in the project designed to start before the end of the Spring semester and extend into the following academic year. High school staff and the school district curriculum director decided to use an interest survey that they normally use for the college-bound cohort to determine the compatibility of university students with the prospective high school student participants in the project. Additionally, correlations were made between the background (major areas) of the university students and their high school mentees, so that common academic interests could support the mentoring relationship. Consequently, 20 university students were paired up with 31 high school students, which meant that most of the university students were assigned to 2 high school students. Eight of the 20 university students were in the Honors program, 8 were in the Social Work program (5 at the undergraduate level and 3 at the graduate level), while the remaining 4 students were majoring in other areas included in a College of Liberal Arts and Social Sciences.

In preparation for the initiation of the year-long mentorship program, one researcher worked closely with the school district curriculum director and several counselors at the high school to generate a set of preliminary meetings designed to prepare the participating university students for a successful mentorship relationship with their corresponding high school students. The first meeting took place on the state university campus, and it was intended to introduce university students to some background information on the mentoring project, college-bound cohort at the high school, and requirements as well as expectations related to their involvement in a range of activities aimed at improving the overall college readiness of the participating high school students.

The following event also took place on the state university campus a week later. This time, the “meet-and-greet” was the official start of the mentoring partnership. Due to the fact that not all mentors were able to attend (some of them were either in class or had some internship obligation that day), the participating high school students were assigned to work with the available university students present at the event (only for this occurrence). The follow-up plan took all mentors to the high school campus where they met their mentees for a March Madness event that provided the informal framework for a better acquaintance of each other. As the spring semester was coming to a close, future meetings were arranged between the mentors and their mentees, as part of the initial parameters of the project expectations for participation. The bulk of the preparation work for the selection of a college and its required paperwork for admission and registration would occur during the following academic year. As the mentoring project was underway, one of the researchers, the school district curriculum director, and a small group of high school teachers and counselors met to discuss how to capitalize on the NCQ data gathered the previous academic year. Once again, the area of “availability of strong support person” was selected to become the support for curriculum development initiatives designed to improve college preparedness. Prior to the beginning of a new academic year, the meeting focused on an
overview of the non-cognitive areas highlighted by Sedlacek’s work, the fall 2010 NCQ data, and their corresponding findings, which led to an outline of potential actionable items of interest to high school staff, as follows: a) characteristics of the population that would be targeted by any resulting curricular initiatives, b) existing programs/courses, c) staff availability (in terms of teaching and student support), d) instructional strategies and resources availability, e) student performance data, and f) facilities. All these items were intended to prompt ensuing planning conversations that would formalize curriculum changes informed by the NCQ data and the mentoring program. See Appendix A of an example of a working document used during the planning meeting. Zooming in on curriculum unit design, the group tackled issues such as the creation of a coherent and consistent template that could be used by the high school teaching staff and counselors, specifics related to the duration and initial composition of the units/lessons included in the curriculum development initiative, as well as appropriate ways to disseminate findings and progress with school staff, while documenting the impact on student learning (both in cognitive and non-cognitive ways).

The plan of action generated during that planning meeting centers on enhancing the current high school curriculum by establishing new as well as strengthening current programs that have proven to serve the needs of students well. This implies a holistic approach to curriculum improvement by sequencing content and associated skills in a developmental manner. Concurrently, the entire curriculum could be revisited in terms of how it supports the application of the entire range of knowledge bases and skills students possess to be able to meet the exit standards and progress seamlessly to college (Conley, 2005). New initiatives revolve around using the eight non-cognitive dimensions identified by Sedlacek (2004) as the basis for a lecture series that would deal with various ways in which students could develop self-appraisal skills that would be expected to improve their college readiness as demonstrated by an increase in NCQ scores in a subsequent administration in a pre-/post-test manner. The informal and formative data collected during these lecture series events intended to occur on the first Friday of each month during the following academic year would feed into discussion topics for a new support person/counseling group that would meet on a monthly basis.

In terms of the programs in place at the participating high school that would benefit from the integration of the non-cognitive dimensions into the curriculum, two additional cohort-based programs would be added to the college-bound group of students who would be involved in academic and career planning as early as grade 9. This initiative expands the scope of the NCQ research project initially focused on a select group of 11th graders. The rationale behind this decision stems from the high school staff’s interest in tracking student performance (both cognitive and non-cognitive) from the very first high school grade, which would allow the school-wide decision making process to mature and generate feasible curricular initiatives that would enhance college readiness. Part of the structure of this curricular enhancement informed by the non-cognitive framework is provided by a statewide career planning Web site (www.ocis.org) designed to guide high school students through the various stages of developing career interest and relevant choices.

Future Research

As the demographics of our school age populations change fast, stakeholders in the field of education should analyze how factors such as student differences account for education attainment and completion. Just as the demographics of first-year students relate to a wide range
of diversity characteristics – age, race/ethnicity, gender, enrollment status, institutional type, disabilities, sexual orientation, international, and/or first-generation students (Upcraft, Gardner, & Barefoot, 2005) – it would be useful to inform curricular changes by connecting these characteristics to the development of “significant learning experiences” (Fink, 2003, p. 7). Student engagement, high-energy instructional activities, long-lasting retention of information, and applicability of learning to real-life contexts and situations represent indicators of significance of learning opportunities. While the weight of these indicators seems to rely heavily on the academic side of schooling, their utility can have a great impact on students’ ability to lead meaningful lives by contributing to their communities while preparing for the next professional stage, be it college or the workplace. Consequently, the non-cognitive characteristics of students’ growth and development should be taken into account as we plan the future of all levels of formal instruction.

Under these circumstances, school district representatives and the two researchers are examining a wide range of possibilities designed to ensure that graduates of the participating high school have the necessary knowledge and skills to make an effective transition to college. Both parties have concluded that follow-up interviews with students are necessary to gain a full picture of areas of curricular improvement based on their respective NCQ-based profiles. In addition, advising and mentoring efforts should become an integral part of the program so that high school students have opportunities to develop their contextual knowledge based on which to make informed choices about college financial aid, campus student support services, and freshman curricula (Wilson, 2006), particularly connected to the two non-cognitive variable areas – Positive self-concept and Availability of strong support person – highlighted in the comparative study. It is the intent of the researchers to continue the partnership with the participating school in order to refine the set of strategies used to connect the various aspects of school life – academic and non-academic – at both high school and college levels (Martinez, 2006), especially as expectations of students can vary greatly between the two levels (Burns, 2006).

Future research will investigate the same non-cognitive variables in additional high school settings serving high Latino populations. Finally, further investigation needs to take place in order to determine the factors (curricular as well as extra-curricular) contributing to changes in the profile of non-cognitive variables for participating students from the high school representing the site of the research project. Once trends are identified in these cohort-based profiles and their evolution over time, it would be quite beneficial to focus on the degree to which the eight non-cognitive variables in this research project’s theoretical framework predict success in college. The latter requires a longitudinal approach necessitating a continual relationship with the district and the researchers as well as the study’s population throughout the next five to ten years.
References


## Appendix A

**Sample Course/Class-Specific Planning Document for Non-Cognitive Items**

Grade level: 10th  
Subject: ELA  
Grading period(s): 1st  
Teacher: Mr. Thompson

<table>
<thead>
<tr>
<th>Non-cognitive area</th>
<th>Lesson sequence (lesson 1 – X)</th>
<th>Knowledge acquisition (Introduced, Developed, Mastered)</th>
<th>Skills developed (Introduced, Developed, Mastered)</th>
<th>Follow-up Actions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-appraisal</td>
<td>Lesson 1</td>
<td>Introduced</td>
<td>Introduced</td>
<td>Connect self-appraisal to Social Studies curriculum</td>
<td>Talk to Ms. Sanford about team teaching a unit on ___ that would require self-assessment, as practiced in our class.</td>
</tr>
<tr>
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