



## Kuder High School Graduate Follow-Up Study: Survey of Kuder Navigator Users who Graduated from 2010 to 2012

December 5, 2012 / Dr. Jerry Trusty / The Pennsylvania State University

Correspondence regarding this study should be directed to Dr. Jerry Trusty, Department of Educational Psychology, Counseling, and Special Education, Pennsylvania State University; University Park, PA, [jgt3@psu.edu](mailto:jgt3@psu.edu).

### Abstract

In Spring of 2012, 334 recent high school graduates who had used Kuder Navigator responded to an on-line survey. Respondents were from 35 states and 4 U.S. territories, and the sample closely reflected the racial-ethnic makeup of the U.S. The survey solicited responses on graduates' perceptions of the helpfulness of Navigator and its components. Graduates' demographics and some of their high school experiences and behaviors were also assessed. Recent graduates rated Navigator as highly helpful in their educational and career development, with a large majority rating Navigator as highly helpful in (a) self-awareness (leaning interests, skills, and values), (b) awareness of educational and career opportunities, (c) setting educational and career goals and making plans, (d) developing motivation for education and career, and (e) generating hope for the future. Ratings were similar across genders; but with regard to racial-ethnic groups, African American graduates rated Navigator's helpfulness most positively.

### Kuder High School Graduate Follow-Up Study: Survey of Kuder Navigator Users who Graduated 2010 to 2012

Educational and career planning are salient in the academic development and career development of youth (American School Counselor Association, ASCA, 2012; Trusty, 2002; Trusty, Niles, & Carney, 2005). In the ASCA (2012) National Model for School Counseling Programs, academic and career development--along with personal-social development--are the three areas of EC-12 development central to the model and to school counselors' work. In addition, the ASCA (2004)

National Standards for Students are in integral part of the ASCA National Model. These Standards for Students contain numerous competencies and indicators focused on educational and career planning. For example, the academic development Competency A:B2 is students will “plan to achieve goals,” and one indicator under that competency is that students will “identify post-secondary options consistent with interests, achievement, aptitude and abilities.” (p. 6). In the career development domain, Competency C:B1, for example, is students will “acquire career information,” and one indicator within that competency is that students will “identify personal skills, interests and abilities and relate them to current career choice.” (p. 7)

The purposes and goals of Kuder Navigator (Kuder, 2012) are highly consistent with the purposes and goals of the ASCA (2012) National Model and the ASCA (2004) National Standards for Students. Kuder Navigator is an Internet-based career planning system designed for middle school and high school students. Navigator focuses on helping students (a) acquire self-knowledge (e.g., interests, skills, values); (b) gain knowledge of educational and vocational opportunities (e.g., postsecondary educational options, knowledge of occupations); and (c) find a match between their personal characteristics and careers, including setting goals, developing plans, and taking actions toward meeting goals.

### **Purpose of the Study**

The purpose of the present study was to determine recent high school graduates’ perceptions of the helpfulness of Kuder Navigator in various areas of educational and career development. I selected recent high school graduates for my target population for two main reasons. First, the transition from high school to postsecondary education or employment is a crucial time for students. That is, career planning experiences during middle and high school come to bear in this time period. The second, and related, reason is that the time period immediately after high school graduation is likely one where students most accurately reflect on their career planning experiences. Because educational and career planning have immediate salience, students responses are likely more reflective of their actual experiences.

Secondary purposes of the present study were to assess student demographics and several of their high school behaviors (e.g., course-taking, parental support). Assessing student demographics allowed the researcher to disaggregate responses (e.g., helpfulness of Navigator by gender and by racial-ethnic group). High school behaviors were assessed to determine if relationships exist between particular behaviors and other behaviors or perceptions (e.g., relationship between parental support and school behaviors).

### **Methods**

#### **Development of the Survey**

The survey assessed students’ demographics, high school experiences, perceptions of the helpfulness of Navigator’s separate components, and perceptions of Navigator’s overall helpfulness. A total of 48 items were included.

Of these 48, 15 items were developed to assess respondents’ overall perceptions of the helpfulness of Navigator across various components and materials students had used. Respondents rated Navigator’s helpfulness on an 11 point scale ranging from 0 (not helpful at all) to 10 (most helpful). These 15 items were grouped into the five following areas:

1. graduates’ self-awareness (learning their interests, skills, and values; 3 items)
2. awareness of educational and career opportunities (learning about educational programs and careers, seeing connections between school and work; 3 items)
3. setting educational and career goals and making plans (developing goals, formulating plans; 3 items)
4. developing motivation for education and career (focus on academics, improving school attendance, participation in extracurricular activities; 5 items)
5. graduates’ hope for the future (1 item)

The 15 survey items were developed from three major sources: (a) from the goals, purposes, and components of Kuder Navigator, (b) from empirical research on students educational and career development, and (c) from the ASCA (2004) National Standards for Students and the ASCA (2012) National Model. The three sources are related to one another in important ways, with most of the items being attributed to more than one source. Some of the 15 survey items, however, came from only one source.

**Items from Kuder Navigator. Navigator has 10 major components:**

1. Kuder Career Interests Assessment (KCIA)
2. Kuder Skills Confidence Assessment (KSCA)
3. Super Work Values Inventory
4. Kuder Person Matches
5. Occupational Search and Information
6. Education Plan
7. Résumé
8. Cover Letter
9. Job-Seeking Information
10. E-Portfolio

*(Note that the names of some of these components have changed with some new versions being introduced in August of 2012, after data collection was completed.)*

Self-awareness is the major purpose of Navigator assessments of interests, skills, and work values. Results from these assessments, particularly the interests assessment, are used to generate priority lists of occupational clusters most directly related to students indicated interests. Education and work knowledge, and planning and goal setting are directly related to the remaining components of Navigator.

**Items from empirical literature.** The items focusing on motivation for education and career are derived mainly from empirical studies. Several studies (Adelman, 1999, 2006; Trusty 2002, 2004; Trusty & Hutchinson, 2004; Trusty & Niles, 2003, 2004) have identified the high school variables most important to positive educational outcomes (i.e., completion of postsecondary degrees). These studies are longitudinal and used national (U.S.) data. The high school variables identified as most important, in descending order of importance are

- the intensive math and science courses taken in high school (academic engagement)
- students' attendance behavior in high school (both attending school and classes)
- participation in extracurricular activities (social engagement)
- parental involvement

For example, Trusty and Niles (2003) found that when students added one intensive math course (one unit) to their high school curriculum, their chances of completing the bachelor's degree doubled (i.e., the likelihood of completing the bachelor's – as opposed to not completing it--increased by roughly 100%). Thus, the survey included items on high school course-taking, attendance, participation in extracurricular activities, and parental involvement.

In addition, an item was included assessing Navigator helpfulness in giving students hope for their futures. Hope is a relatively new concept in the career development literature, and research on hope is somewhat limited (Niles, Amundson, & Neault, 2010). Hope, however, is emerging as an important concept, acting as a means for implementing career self-efficacy and leading to positive career development actions.

**Items from the ASCA National Standards for Students.** In addition to standards, competencies, and indicators around self-knowledge and the worlds of education and work, ASCA (2004, 2012) includes student competencies on decision making, goal setting, and student planning. In particular, the ASCA Standards focus on connections between academics and career and motivation toward academic achievement (see Brown & Trusty, 2005).

**Items specific to Navigator components.** In addition to the 15 items assessing Navigator’s overall helpfulness, 10 items corresponding to the 10 components were included in the survey. Respondents rated the helpfulness of separate Navigator components on an 11-point scale (0 to 10) with a 0 being not helpful at all to a 10 being most helpful. Note that most students do not use every Navigator component and many students may use only one or two.

### Survey Procedures

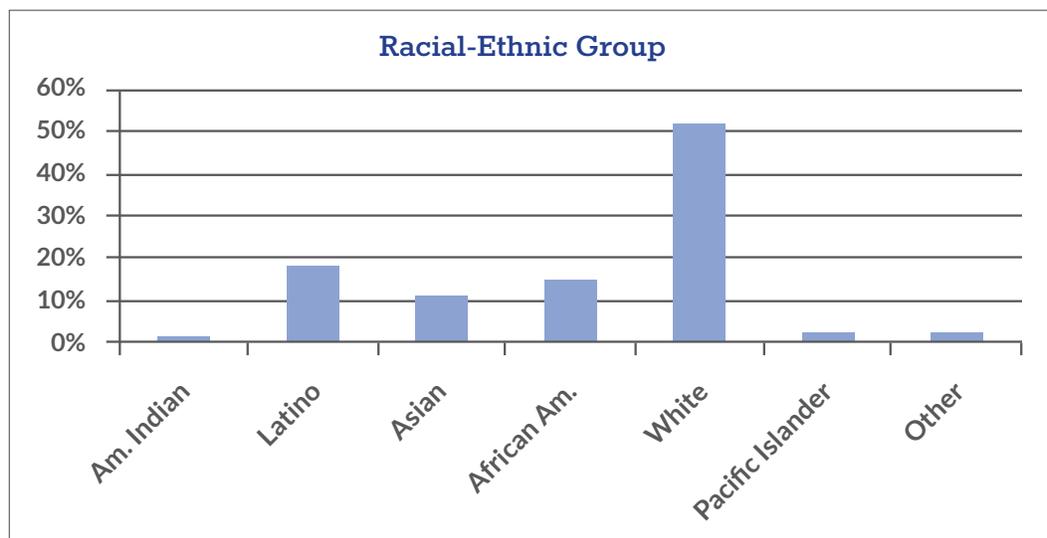
The survey was developed across the early Spring of 2012. It was piloted with a small group of high school seniors and recent graduates; and after editing, the survey was posted on Survey Monkey, a popular on-line survey tool. Respondents were solicited via email contact from the Kuder Navigator database. Respondents were entered into a random drawing for one of five prizes, including I-pods and other electronic media. The survey was available to recent high school graduates for three weeks.

At the end of three weeks, the responses were downloaded. All data from respondents who were ineligible for the study were removed, and these were mostly respondents who had not graduated from high school in the years spanning 2010 to 2012. Eleven respondents were disqualified from the study because of severely incomplete responses on the survey.

### Participants

A total of 334 recent high school graduates were included in the study. These students came from 35 U.S. states and 4 U.S. territories. The Southern and Southwestern U.S. were slightly overrepresented in the sample, whereas the Northeastern U.S. was slightly underrepresented. The largest numbers of respondents were from California (69) and Texas (44), the two most populated states. The sample closely reflected the racial-ethnic makeup of the U.S., with Latinos being slightly overrepresented (see Figure below).

### Racial-Ethnic Representation in the Sample.



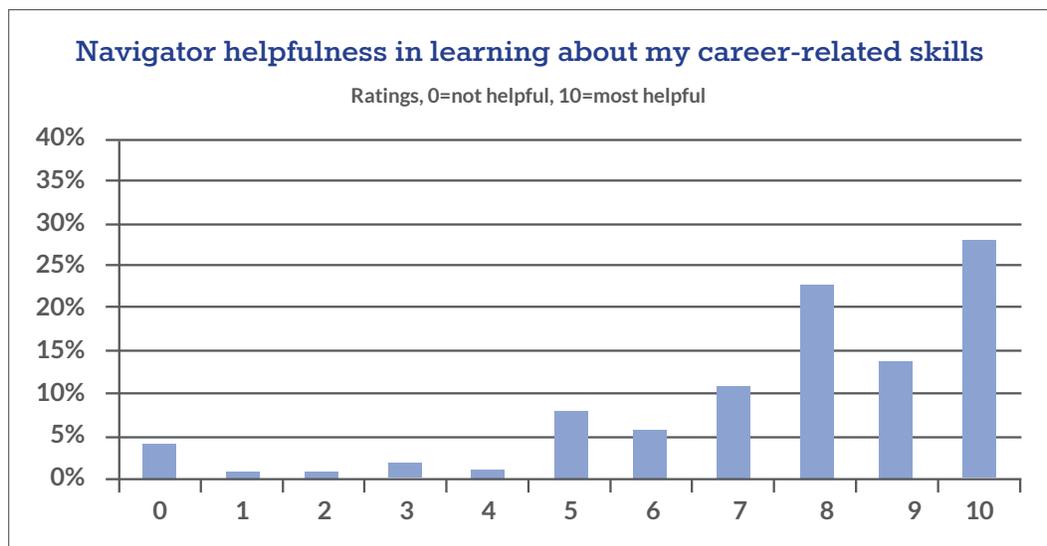
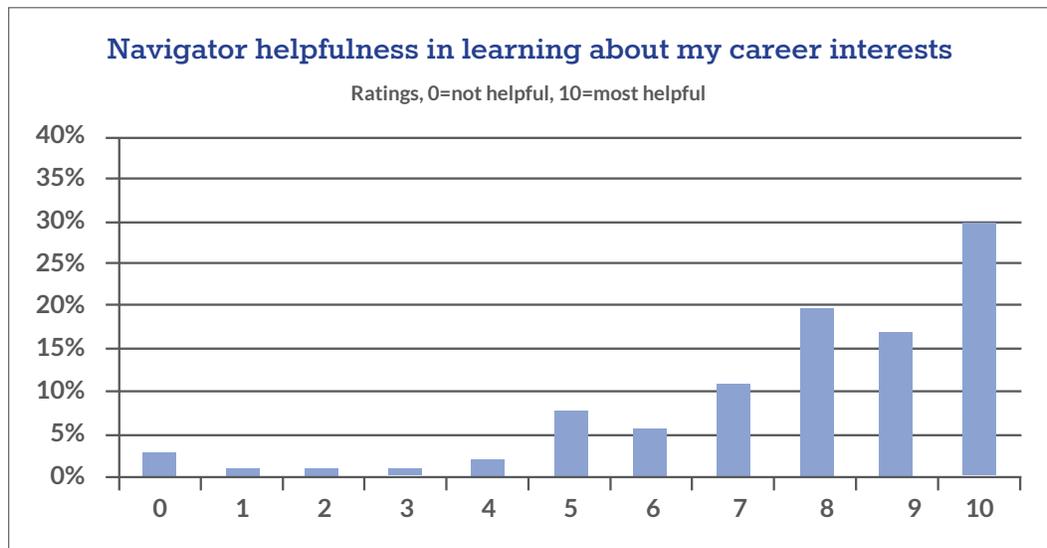
Young women (71%), as compared to young men (29%), were overrepresented in the sample. It is common that girls and women respond more frequently to surveys than boys and men. Most of the respondents graduated from high school in 2012 (68%); fewer graduated in 2011 (27%), and even fewer in 2010 (5%). This was expected and does not seem to weaken the study because the majority of respondents were recently graduated from high school, and thus graduates were in close temporal proximity to their experiences in school and with Navigator.

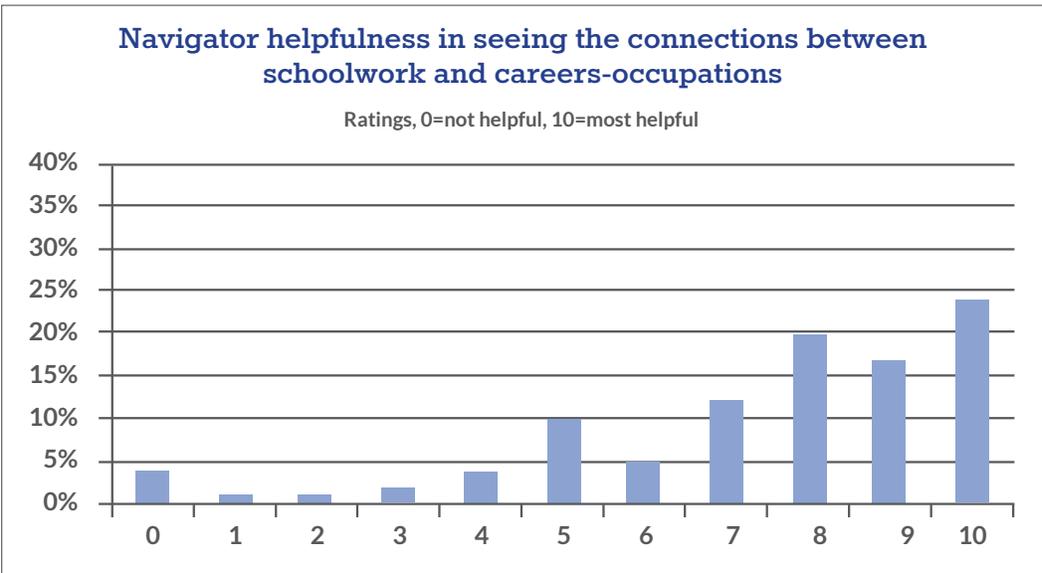
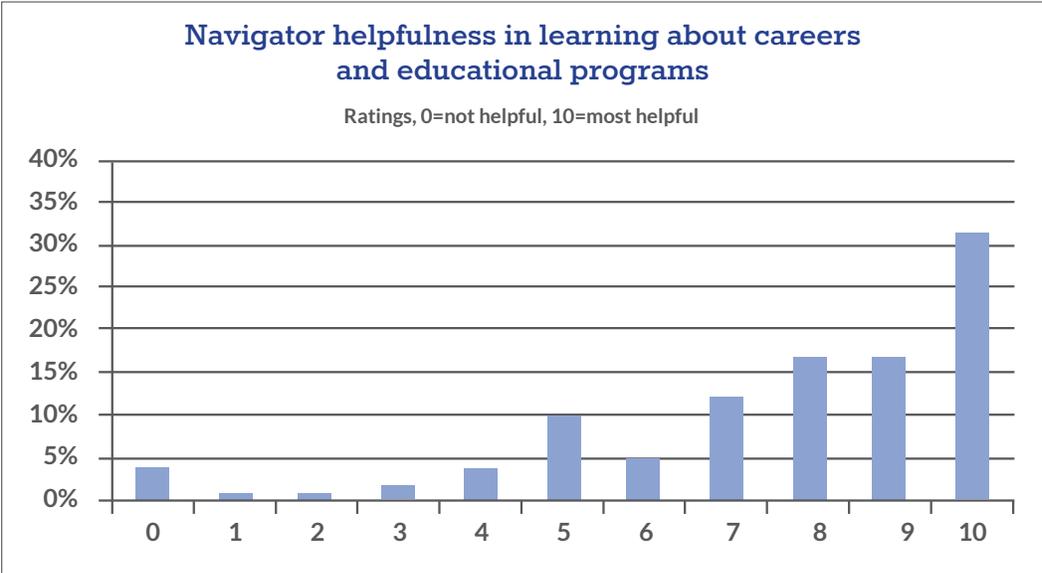
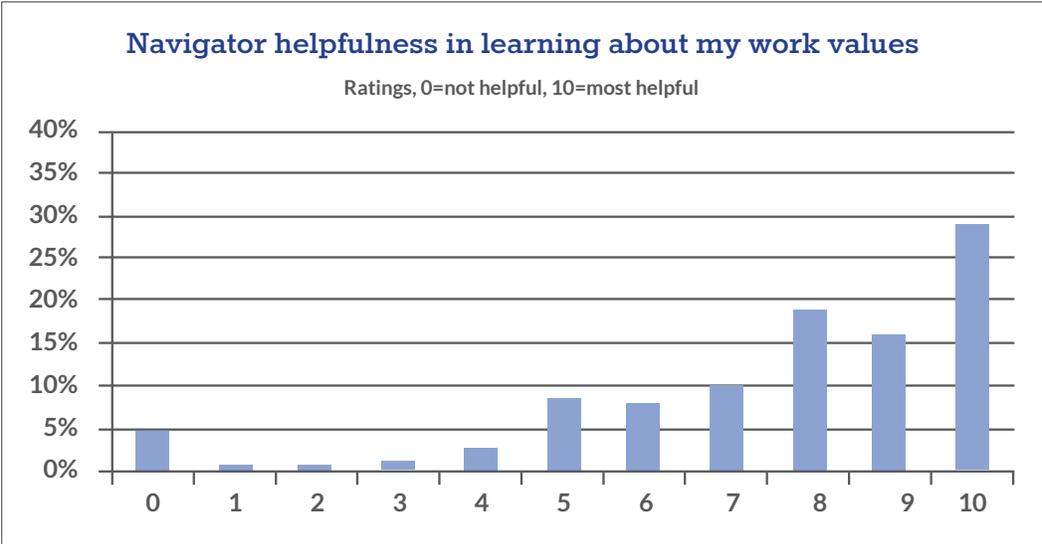
Twenty-eight percent of respondents were enrolled in a postsecondary program at the time of the survey, 8% had completed a postsecondary program of some kind, and the remaining 64% had not completed a program and were not enrolled. Note that many 2012 graduates had not yet had the opportunity to enroll at the time of the survey because they were newly graduated from high school (2012 graduates). Of those enrolled in a postsecondary program, 13% were in a certificate program, 27% in a associate's degree program, and 60% were in a bachelor's program. Of all the respondents, 79% expected to eventually earn at least a bachelor's degree.

## Results and Discussion

### Graduates' Overall Ratings of Navigator

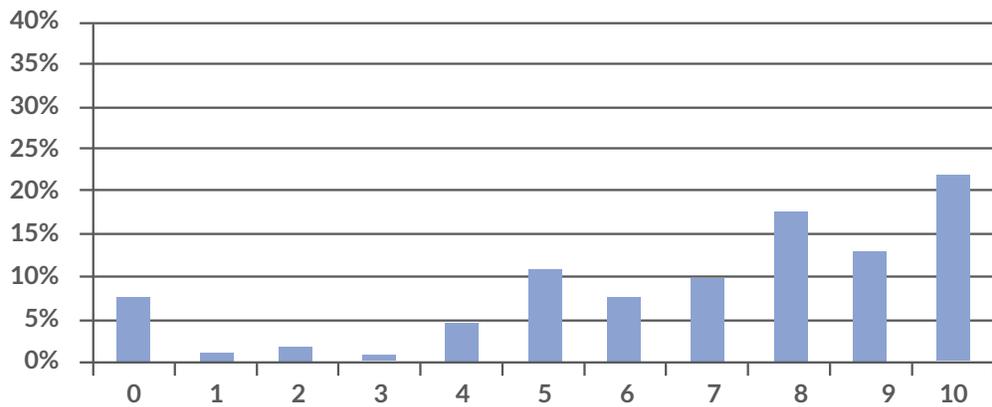
Aggregated findings. Recent high school graduates were asked to rate Navigator's helpfulness on 15 items in the areas of self-awareness, knowledge of educational and occupational opportunities, goal setting and planning, motivation for school and career, and hope for the future. Items were derived from the goals of Navigator, empirical research, and the ASCA (2004) National Standards for EC-12 students. Students were asked to respond to Navigator's helpfulness in general (Navigator assessments, products, and materials), and not related to only a specific Navigator component. Their responses on the 11-point scale are indicated in the following figures.





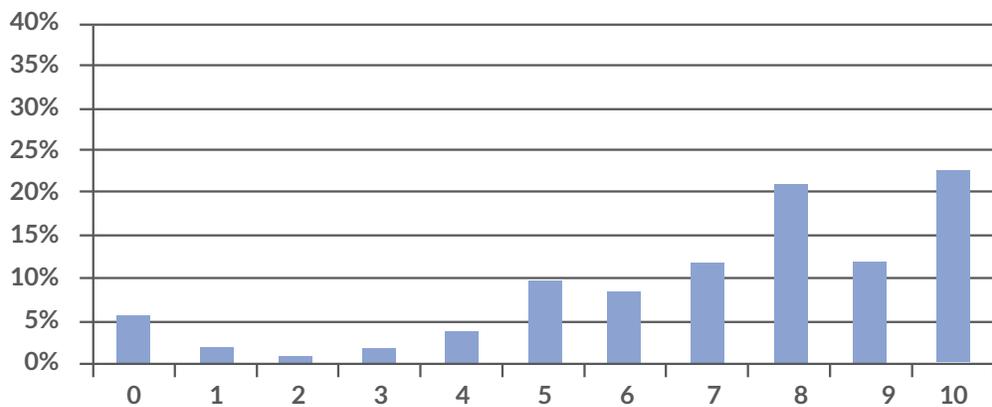
### Navigator helpfulness in choosing high school courses or programs

Ratings, 0=not helpful, 10=most helpful



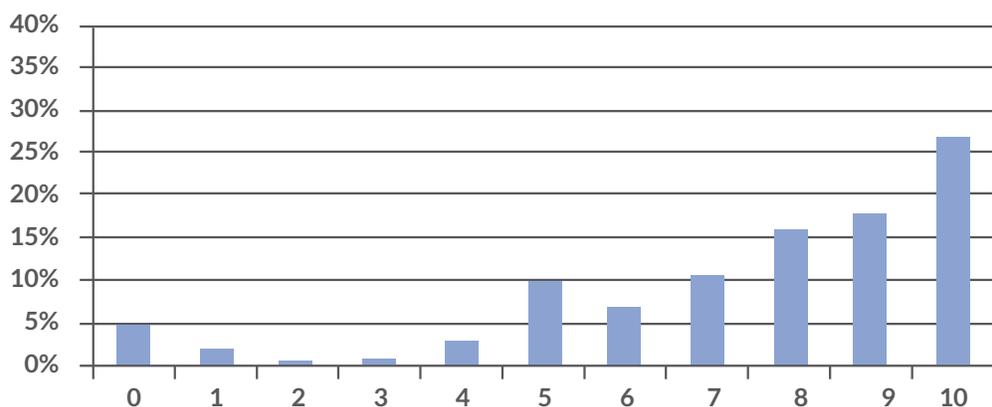
### Navigator helpfulness in choosing my postsecondary program or college major

Ratings, 0=not helpful, 10=most helpful



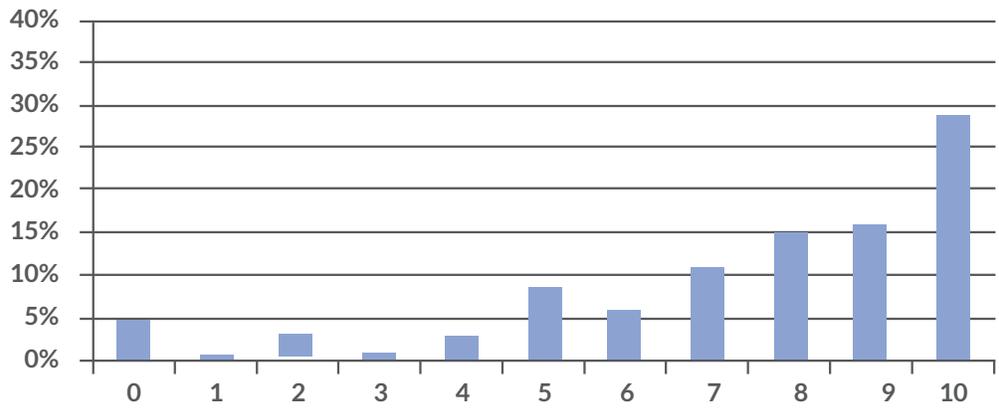
### Navigator helpfulness in setting educational goals

Ratings, 0=not helpful, 10=most helpful



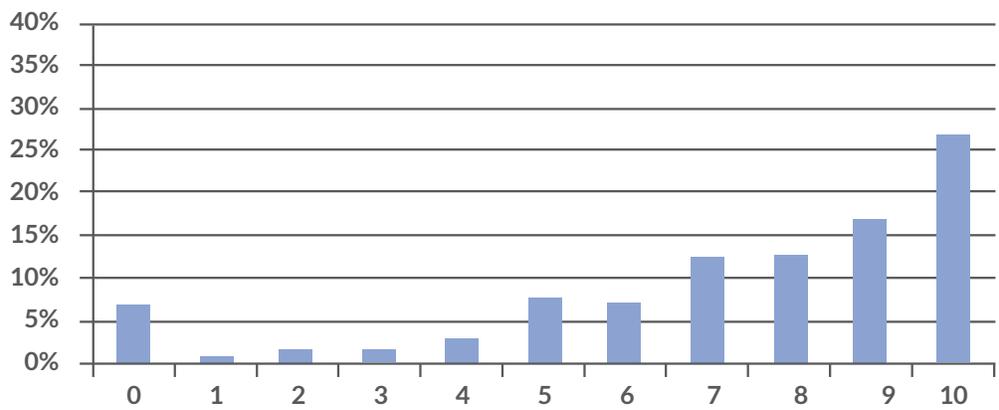
### Navigator helpfulness in making educational and career plans

Ratings, 0=not helpful, 10=most helpful



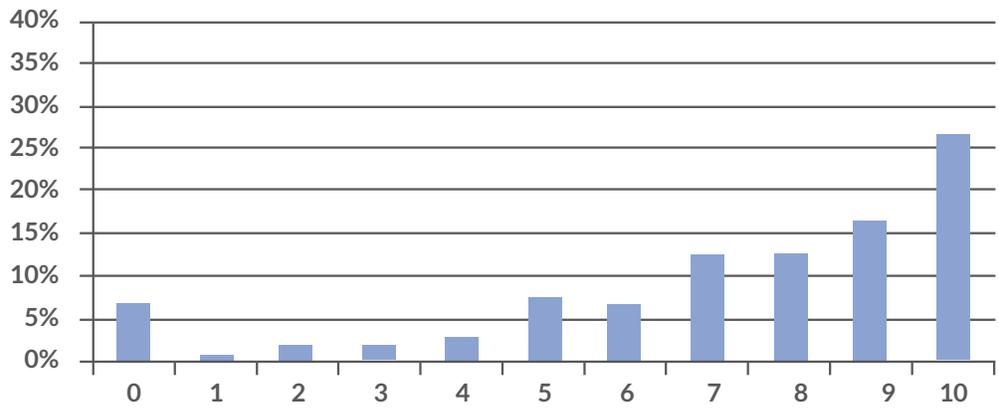
### Navigator helpfulness in motivating me to stay in school

Ratings, 0=not helpful, 10=most helpful



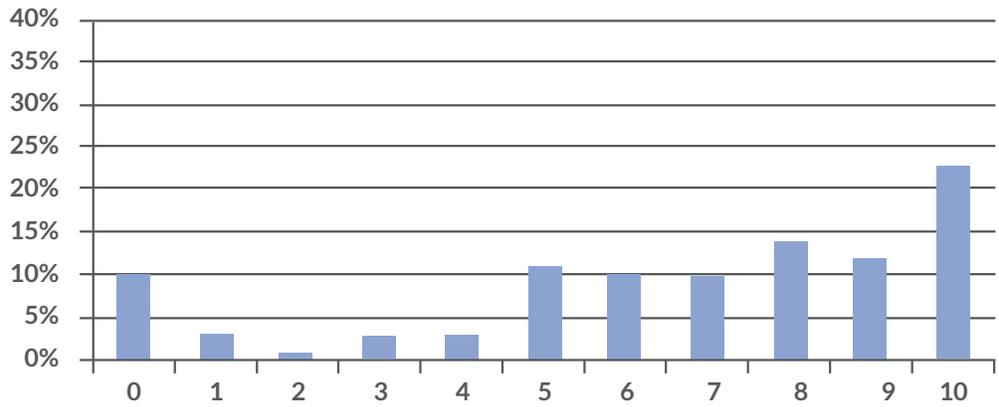
### Navigator helpfulness in motivating me to be successful in high school

Ratings, 0=not helpful, 10=most helpful



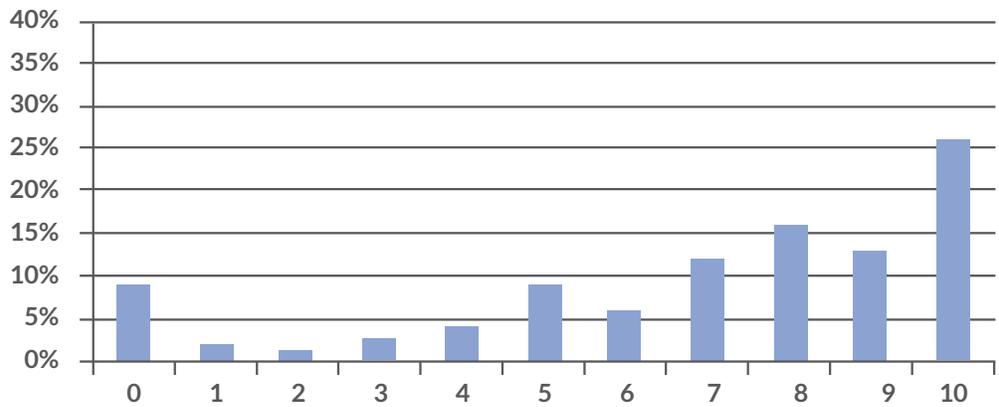
### Navigator helpfulness in improving my school and class attendance

Ratings, 0=not helpful, 10=most helpful



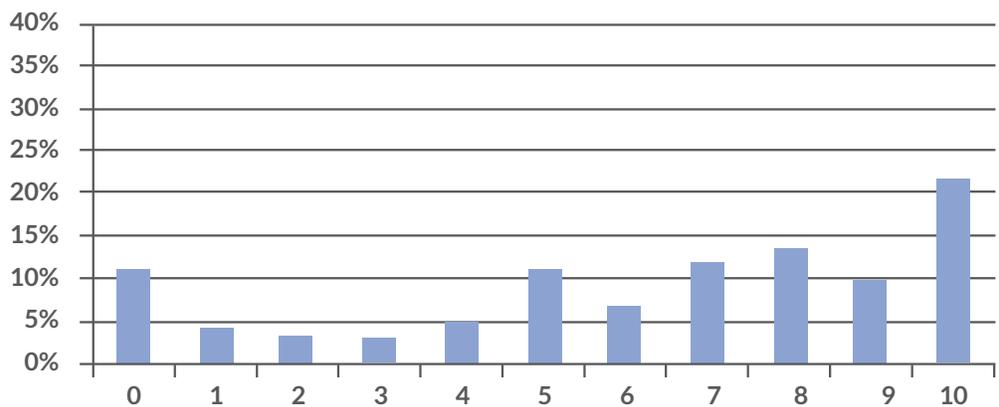
### Navigator helpfulness in getting me more focused on academics in high school

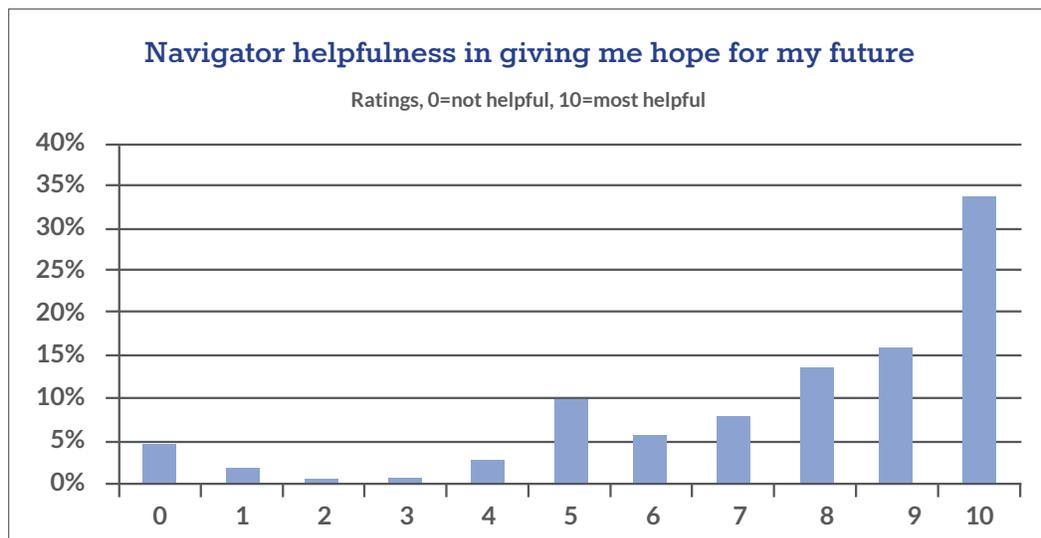
Ratings, 0=not helpful, 10=most helpful



### Navigator helpfulness in getting me more involved in extracurricular activities

Ratings, 0=not helpful, 10=most helpful





The 15 figures indicate that a large majority of recent graduates perceive Kuder Navigator as highly helpful (rating of 7 or higher) on all of the 15 criteria (items). With regard to self-awareness (Items 1, 2, and 3), 77% of recent graduates rated Navigator as highly helpful in learning about their career interests; 76% rated Navigator as highly helpful in learning their skills; and 74% rated it highly helpful in learning work values. These three items are directly related to the purposes of Navigator assessments of interests, skills, and work values.

With regard to learning about educational and career opportunities (Items 4, 5, and 7), 78% rated Navigator as highly helpful in learning about various careers and educational programs; 73% rated it highly helpful in seeing connection between school and careers; and 68% rated Navigator highly helpful in choosing postsecondary programs. These three items are directly related to the purposes of Navigator products and materials, and somewhat to the assessments. Item 4 (learning about careers and educational programs) reflected the highest Navigator rating on any of the 15 items.

In the area of goal-setting and planning (Items 6, 8, and 9), 63% of recent graduates saw Navigator as highly helpful in choosing high school courses and programs; 72% rated Navigator as highly helpful in both setting educational goals and in making educational and career plans. These three items are directly related to the goals of the Navigator career planning system.

With regard to motivation for education and career (Items 10, 11, 12, 13, and 14), 67% and 69%, respectively, rated Navigator as highly helpful in motivating them to stay in school and be successful in high school. For improving school and class attendance, Navigator was rated as highly helpful by 59%; and 67% rated it as highly helpful in getting them more focused on high school academics. In the area of extracurricular involvement, 57% rated Navigator as highly helpful. These five items are more indirectly related to Navigator assessments, products, and materials; whereas they are more directly related to important high school variables identified in the empirical literature (e.g., see Adelman, 2006; Trusty 2004). The variables reflected in these five items are salient to students' postsecondary educational success (see Brown & Trusty, 2005), and it is encouraging that students found these benefits from Navigator.

The findings in the area of hope for the future are particularly encouraging. That is, 72% of recent graduates rated Navigator as highly helpful in giving them hope for the future (Item 15). When recent high school graduates have hope for educational and career success, they are more likely to engage in behaviors leading to successful outcomes, and they are more likely to be resilient to challenges they undoubtedly will face (see Niles et al., 2010). Note that this item on hope received the most frequent rating of 10 (34%) on any of the 15 items.

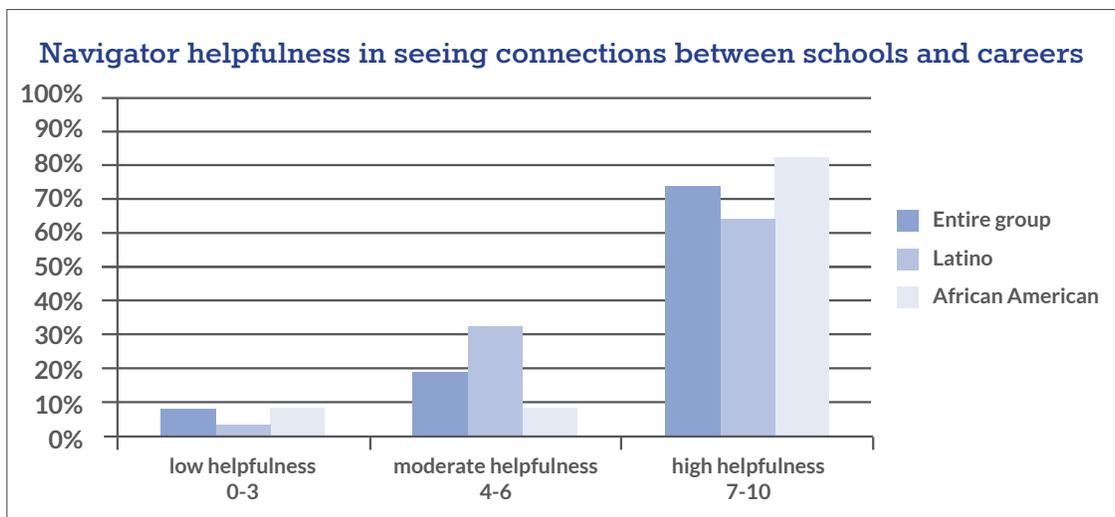
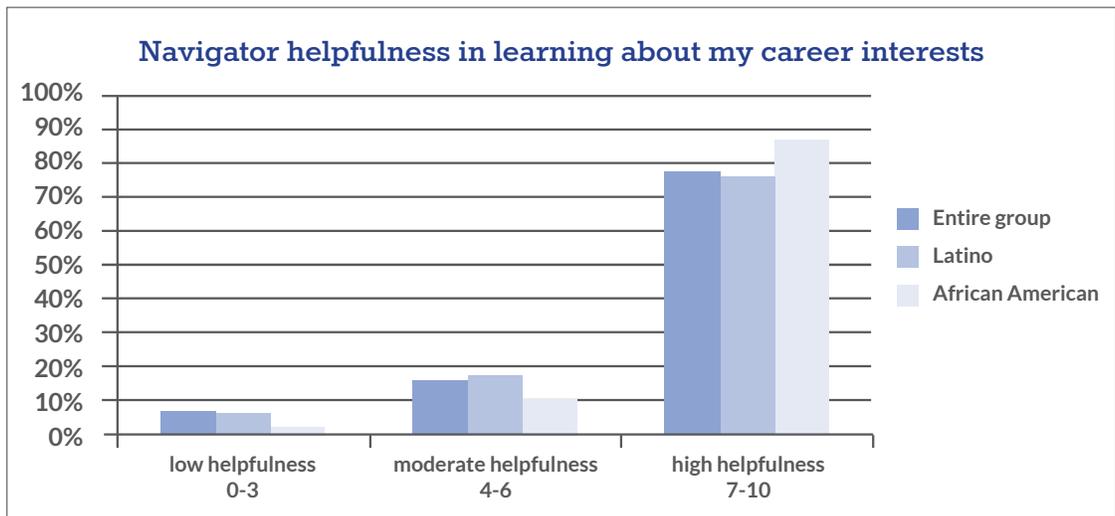
In summarizing findings on the 15 items, a clear majority of recent high school graduates rated Navigator as highly helpful (rating of 7 or higher) on each of the 15 criteria (items). The highest rated criteria were learning about careers and educational programs, learning my career interests, learning my skills, learning my values, and giving me hope for the future. Respondents' provided comparative lower ratings

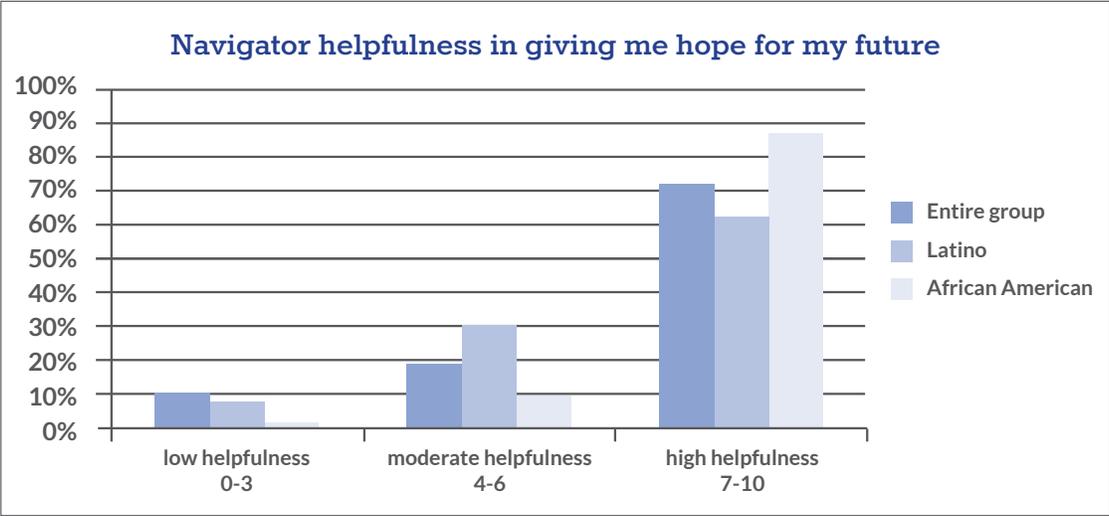
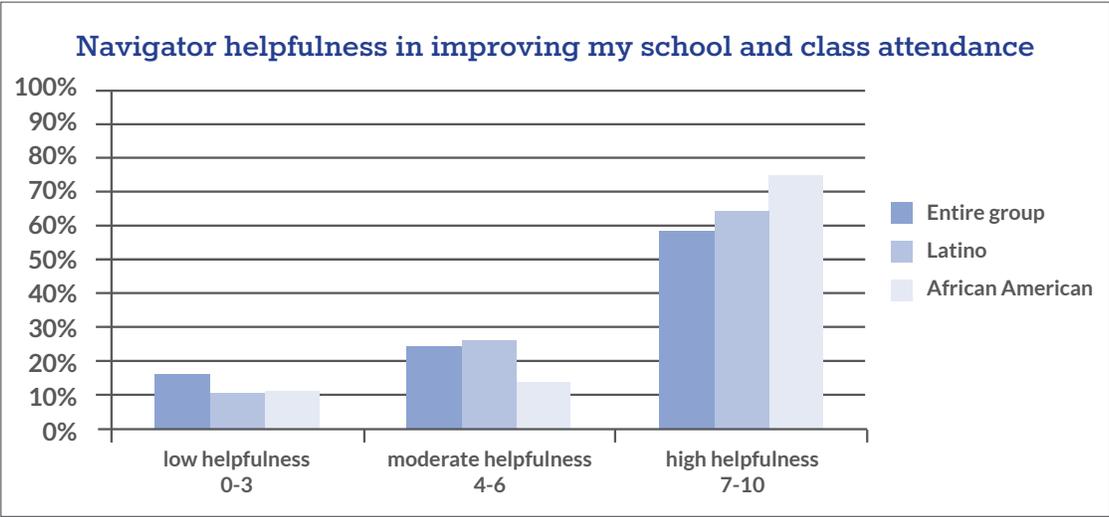
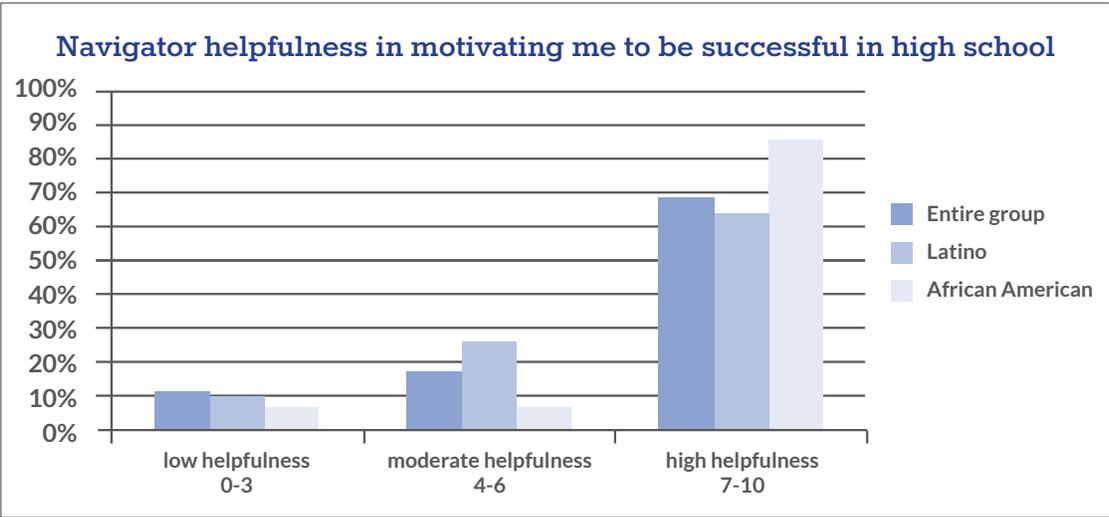
for Navigator’s helpfulness in choosing high school courses, choosing college majors, school and class attendance, and participating in extracurricular activities. However, a clear majority of respondents rated Navigator as highly helpful (rating of 7 or higher) in these areas.

A small percentage of respondents (6% on average across the 15 criteria) rated Navigator as “not helpful at all”—a 0 rating. This is understandable because some graduates may be very clear in their career goals and awareness, and some are likely high achievers in school. This small percentage of respondents may have otherwise not been open to learning and gaining awareness of self and careers through Navigator.

Findings indicate that most students perceive Navigator as highly helpful in being more engaged in their self-awareness, career planning, and career development; being more engaged with school and academics; being more engaged in their educational planning and goal-setting; and being more engaged in extracurricular activities. Additionally, Navigator was perceived as highly helpful in generating hope for the future.

**Disaggregated findings.** With regard to gender, young women and young men rated the helpfulness of Navigator similarly on the 15 criteria. With regard to race-ethnicity, sample sizes were large enough for only two, non-White racial-ethnic groups, namely, Latinos and African Americans. The ratings of Latino graduates were similar to ratings for the entire group. For African American recent graduates, however, ratings on almost all criteria were significantly higher than those for the entire sample. Selected findings disaggregated by gender are presented in the series of figures that follow:





Note that in the preceding figures, the blue bars are for the entire group, including Latinos and African Americans. The higher helpfulness ratings of Navigator by African American graduates was consistent across all the 15 items. This finding was somewhat expected because students who are, on average, of lower socioeconomic status may depend more on school-based resources (e.g., Navigator) than personal

resources (e.g., extended family, see Trusty & Watts, 1996). These higher ratings, however, would also be expected for the Latino group of recent graduates; but this was not the case.

### Graduates' Ratings of Separate Navigator Components

The following table presents ratings of separate Navigator components. Respondents were instructed to rate only those components they had used.

**Percentages of Respondents who Rated Separate Navigator Components as Low, Moderate, and High in Levels of Helpfulness**

	Low Helpfulness (0 to 3)	Moderate Helpfulness (4 to 6)	High Helpfulness (7 to 10)
Kuder Interest Assessment (KCS)	10%	19%	71%
Kuder Skills Assessment (KSA)	11%	18%	71%
Supers Work Values Assessment	16%	24%	60%
Person Matches	17%	24%	59%
Occupational Search and Information	11%	19%	70%
Education Plan	14%	21%	65%
Resume	16%	17%	67%
Cover Letter	18%	23%	59%
Job Seeking Information	16%	20%	64%
E-Portfolio	20%	23%	57%

A majority of recent graduates rated each component of Navigator as highly helpful (rating of 7 or higher). There were comparatively lower ratings for the E-Portfolio, Cover Letter, Person Matches, and the Super Work Values Assessment. Comparatively higher ratings were for the Interest Assessment, Skills Assessment, and the Occupational Search and Information.

### Additional Findings

Graduates who expected to attain higher levels of postsecondary education also participated in extracurricular activities in high school more ( $r = .27$ ). Graduates who indicated higher levels of career and educational support from their parents also participated in extracurricular activities more frequently ( $r = .23$ ), and cut school ( $r = -.21$ ) and cut classes ( $r = -.18$ ) less frequently. Graduates who took more intensive math courses in high school also had higher educational expectations ( $r = .28$ ) and engaged in extracurricular activities slightly more often ( $r = .18$ ). These findings are consistent with the research on school engagement (e.g., Trusty, 2004). That is, when students (a) are behaviorally engaged by attending school and classes regularly, (b) are academically engaged in intensive coursework, (c) are socially engaged through extracurricular activities, and (d) have parents who are engaged, students tend to hold high educational expectations and experience more educational success.

Recent high school graduates who were users of Kuder Navigator were surveyed soon after high school graduation. The 334 respondents were from 35 U.S. states and 4 U.S. territories, and the sample reflected the U.S. racial-ethnic makeup. More young women than men, however, responded to the survey.

Recent graduates' responses on the survey showed that they perceived Kuder Navigator as highly helpful in multiple areas of their career planning and career development, including their self-awareness, knowledge of educational and occupational opportunities, goal setting and planning, motivation for education and career, and their hope for the future. For example, 77% of graduates rated Navigator as highly helpful in learning their career interests; 78% rated Navigator as highly helpful in learning about careers and educational programs; and 72% rated it as highly helpful in giving them hope for the future. On all 15 items on which graduates provided overall ratings of Navigator, a large majority rated it as highly helpful.

Recent graduates also rated separate Navigator components (e.g., interest assessment, E-Portfolio). For each of the 10 components, a majority of graduates rated them as highly helpful. Highest helpfulness ratings were for the interest assessment, the skills assessment, and for occupational search and information.

The transition from high school to postsecondary education or work is an important one. Graduation is a time when educational and career planning activities in middle and high school come to fruition. It is encouraging that recent high school graduates perceived Navigator and its components as highly helpful in their educational and career development.

## References

- Adelman, C.** (1999). *Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment*. <http://www.ed.gov/pubs/Toolbox/Title.html>. U.S. Department of Education, Office of Educational Research and Improvement.
- Adelman, C.** (2006). *The toolbox revisited: Paths to degree completion from high school through college*. <http://www2.ed.gov/rschstat/research/pubs/toolboxrevisit/index.html>. U.S. Department of Education.
- American School Counselor Association (ASCA)** (2004). *ASCA National Standards for Students*. Alexandria, VA: American School Counselor Association. [http://static.pdesas.org/content/documents/ASCA\\_National\\_Standards\\_for\\_Students.pdf](http://static.pdesas.org/content/documents/ASCA_National_Standards_for_Students.pdf)
- American School Counselor Association (ASCA)** (2012). *The ASCA National Model: A Framework for School Counseling Programs* (3rd ed.). Alexandria, VA: American School Counselor Association.
- Brown, D., & Trusty, J.** (2005). *Designing and leading comprehensive school counseling programs: Promoting student competence and meeting student needs*. Belmont, CA: Thomson Brooks/Cole.
- Kuder** (2012). Kuder Navigator. <http://kudernavigator.com/>
- Niles, S. G., Amundson, N. E., & Neault, R.** (2010). *Career flow: A hope-centered model of career development*. Columbus, OH: Pearson.
- Trusty, J.** (2002). Effects of high-school course-taking and other variables on choice of science and mathematics college majors. *Journal of Counseling & Development*, 80, 464-474.
- Trusty, J.** (2004). *Effects of students' middle-school and high-school experiences on completion of the bachelor's degree*. (Research Monograph no. 1) Center for School Counseling Outcome Research, University of Massachusetts-Amherst. <http://www.umass.edu/schoolcounseling/uploads/ResearchMonograph1.pdf>
- Trusty, J., & Hutchinson, C. A.** (2004). *The effects of students' middle-school and high-school experiences on completion of the bachelor's degree: How can school counselors make a difference?* (Research Brief no. 2.1) Center for School Counseling Outcome Research, University of Massachusetts-Amherst. <http://www.umass.edu/schoolcounseling/uploads/ResearchBrief2.1.pdf>
- Trusty, J., & Niles, S. G.** (2003). High-school math courses and completion of the bachelor's degree. *Professional School Counseling*, 7, 99-107.
- Trusty, J., & Niles, S. G.** (2004). Realized potential or lost talent: High-school variables and bachelor's degree completion. *Career Development Quarterly*, 53, 2-15.
- Trusty, J., Niles, S. G., & Carney, J. V.** (2005). Education-career planning and middle school counselors. *Professional School Counseling*, 9, 136-143.
- Trusty, J., & Watts, R. E.** (1996). Parents' perceptions of career information resources. *Career Development Quarterly*, 44, 242-249.