Objective

For today’s high school students, the dizzying amount of career choices present an overwhelming challenge to select the right one. This problem put one proactive public education agency on a mission to research and develop a solution that could help. The goal was to offer an engaging and comprehensive solution to help students explore options and choose a career using the most up-to-date information and resources. Once deciding on a career, the students would then be able to explore and identify the most well-matched university or trade school for them to consider. A grant awarded through the Commonwealth of Pennsylvania was used to obtain the resources needed to complete the project.

Approach

Identification and aggregation of key data

- **Career information**—To begin, our staff worked extensively with the Pennsylvania Department of Labor and Industry, the Bureau of Labor and Statistics, and the State Workforce Investment Board to identify and collect all types of information that students might need to assess and select a career, including skills, job tasks and activities, compensation, current job openings, forecasted job openings, and industry trends.

- **School information**—Similarly, our staff collected information from federal, state, and independent resources on secondary education to obtain information on the names and geographic locations of available learning institutions, their degree programs, tuition, school population, and more.

Design and development approach

- The solution must assess aptitudes and interests and offer students suitable and relevant career information and guidance.


- The solution must also filter career and secondary school data and information based on user-controlled preferences.
- Rich media interviews with related career professionals about the various aspects of the job provide insights beyond the data.
- Other rich media interviews, including information about each school, its programs, and the “student experience” present personal insight into the school.
- Career information must contain current and trending workforce information and statistics—all within a selected geographic range.
- Dynamic mapping of learning institutions provides students with a visual cue to locations in order to help with school selection.

Solution—Future Compass

Our solution resulted in an interactive, Web-based learning portal called Future Compass. After assessing a student’s interests, the portal takes students through a personalized exploration of career options, and ultimately provides a road map to achieving the career they aspire to.

Students start with an on-line assessment to find a career path—or several paths—that match their interests. Then they see which post-secondary schools mesh with their goals. The site uses video to add information, as well as virtual interviews.

Our working prototype, used by regional high school students, covers Pennsylvania post-secondary schools and contains over 1,100 careers and job types. When you, as a student, complete the assessment of your interests, the results are mapped to numerous jobs within one of the six career categories. The resulting list shows you a three-tiered list including careers that perfectly match your interests, careers that are a close match, and careers that don’t match at all.

Once you have the assessment results and choose a potential job, you can drill down to find more information. The Future Compass shows the average starting salary in the United States and in Pennsylvania, plus a projection of the number of job openings that may be available after you finish the required degree or training.

As yet another way to keep the student engaged, our development staff created many informational videos as well as several video interviews. Using an on-screen menu and video playback, the student can ask someone who works in the selected career questions and get a response. Boilerplate questions include, “What’s this job like?” and “How did you get to this career?” The portal is also able to tie into of the US Department of Labor’s Web site to display some job-related videos.

When you select a possible career path, you can also see which schools provide training in that career. In the prototype, the schools appear on a map of Pennsylvania, represented by pushpin icons for each school offering the selected program. You can filter results using on-screen sliders, so you can adjust for jobs that meet particular salary goals or find careers that require a bachelor’s or master’s degree. Filters can also narrow down school choices, like a small freshman class or a 90-minute drive from home. Finally, the student can have a virtual interview with a university or college counselor.
Students who have grown up with the Internet are more likely to use a tool that keeps them engaged while they complete their research and exploration. We’re excited to report that the Pennsylvania Department of Education is now exploring making Future Compass available as a statewide resource for all school systems.