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# EQUITABLE DELIVERY OF CAREER DEVELOPMENT THROUGH TECHNOLOGIES

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In recent years, there have been large investments in technology to transform learning; a multitude of tools exist today for students, parents and teachers to choose from. New technologies have been particularly useful in student career development as well (Escueta, Quan, Nickow, & Oreopoulos, 2017). These technologies have improved the learning environment and many students have benefited, but regardless, access and equity challenges persist.

This publication focuses on the topic of online and virtual student career development tools and explores effective use of these technologies to support each student's career goals and aspirations.

## Foundations

A good place to begin related to this topic is with ACTE's High Quality CTE Program of Study Framework (Imperatore & Hyslop, 2018) which includes some important points about how, and to whom, career development should be delivered.

The Access and Equity element within the Framework specifically addresses that "career guidance is offered to all potential and current program of study participants in a manner that is *free from bias, inclusive and non-discriminatory*." And the Student Career Development element reinforces that "each CTE student in the program of study has a *personalized*, multi-year education and career plan that reflects exploration of the student's interests, preferences and abilities; and informs course selection, planning for further education and a career, and involvement in extended learning." In addition, several other criteria within the Framework expand on the theme such as eliminating barriers to access and providing accurate and timely information to students and parents, for example.

These criteria underscore the need for CTE professionals to evaluate the accessibility of career development technology to all learners as a starting place, but also to consider how the content made available through the technology is equitable: Is the content free from bias? Does it support each student in the classroom through a structured and individualized career plan? Are individual student interests taken into consideration and addressed?

Another instrumental link to equity is ensuring school personnel are provided the professional development needed to understand and leverage the technology to support students. The data from an American School Counselor Association report cited “virtual school counseling” and “school counseling technology” as two of the top five professional development interests that school counselors prioritize. Yet this work is not easy; the same report “... reveals that the nation’s school counselors consider meeting student needs in a virtual environment to be their biggest challenge, followed by managing a large number of students and addressing achievement and opportunity gaps” (American School Counselor Association, 2021, p. 3).

Taking the time to research existing technologies and how their navigation properties are relevant to student career development, ensuring your program and technology are free from bias, individualizing the career development experience for students and providing the backbone of professional development for educators so that they can support every student are all important to a successful focus on equitable delivery of services.

### **Evolving Research on Technology-Based Career Advising Tools**

MDRC, a nonprofit, nonpartisan social science and education policy research institute, is currently evaluating the efficacy of two popular and widely used technology-based career advising tools. “The study seeks to understand whether and how these tools influence student thinking about career options, choice of relevant CTE coursework and work-based learning options, and decisions about CTE concentration in available pathways and programs of study.” This work is being funded by the *Institute for Education Sciences* and is part of the [CTE Research Network](#), of which ACTE is a co-leading organization.

## **Promising Practices**

Several years ago, Saint Paul Public Schools initiated a comprehensive strategic planning process focused on college and career readiness. The goal was to have every student in the district plan for their future, build on their aspirations, and to have adults “walk alongside them” to help them reach their goals. This was a different, and more inclusive, approach than the district’s prior activities and would require a technology with the features necessary to meet the expanded scope of work.

As the plan developed and the district thought about the specific technology needed, they reached out to students who expressed a desire to initiate the process of their career planning earlier and with the understanding “that we can be successful even if we don’t go to college.” Through outreach to other programs across the nation, Saint Paul Public Schools also identified it was important to hold space for student reflection.

The district’s plan now reaches down to the Pre-K level and the online portfolio they selected can house work samples the student participates in. It also includes self-reflective work in a way that is meaningful to the student and allows them to express who they are — not only through interest surveys or writing samples but through other options as well such as art or a recorded demonstration of skills.

Saint Paul Public Schools has issued iPads to every student, as well as providing internet hot spots to families during the COVID-19 pandemic when students were learning remotely. The technology they use includes accessibility features and Spanish translation for English Learners, a feature which has been particularly effective as the school district communicates with parent advisory councils through Spanish language screenshots.

Professional development for staff and students has been prioritized and has helped them to understand and effectively use the technology. Saint Paul Public Schools conducts data analysis to determine who is using the tool and *how* it is being used, and the district shares the information in smaller, digestible “nugget” form, with staff, who are able to put the information to use to further support students. Work-based learning coordinators and college access partners have also been provided professional development on the technology and the district is beginning more specific training for staff working on student IEPs.

Saint Paul Public Schools says that centralization of the college and career readiness plan and their technology throughout the district has ensured a more equitable environment where all schools and programs have equal access to programming and support. There are no issues of one school or program having access to a tool that others do not have, or having to worry about how to pay for the tool.

## Getting Started

While Saint Paul Public Schools is only one example of a large, diverse school district that is using career development technology, there are lessons that can be applied to a program of any size and scope. Following is a short list of recommendations to consider as you think about development and/or use of your own program's career development-related technology:

- **Initiate a holistic approach** — Technology should enhance your student career development efforts; it can provide huge benefits but only if it is considered as a tactical resource. Consider the reasons the technology is being used and how it will impact every student, such as through use of an individualized learning plan that links to career pathways.
- **Research options** — If you are planning to purchase a technology or use an already-developed product, it's best to first determine the goals and think about outcomes related to how you envision the product will support your plan and equitable access for all learners. Research several options, including pricing, and consider the type of tool that will best serve the students in your program.
- **Be sensitive to bias** — Review the technology and your own career development resources to make sure they are free from unintended bias. Professionals representing special populations might be suited to review content and tech tools, and consider student and parent input panels as resources are being explored and developed.
- **Integrate technology into instruction** — Technology should not be an add-on. Discuss how career development tools can be used effectively to integrate activities into the course. For example, if students are asked to develop a portfolio, how will courses reinforce this in the classroom and support students to encourage them to add assignments, certifications and other items?
- **Provide professional development/training** — Technology is only worthwhile if the individuals using it understand its purpose, as well as the applicability of the specific features of the product. Ensure that students receive technical training but also teachers, school counselors, administrators and anyone else who will access and utilize the technology. If you are purchasing a product from a vendor, ask if there are training modules, guides and supports (e.g. online help desk) for the use.
- **Collect, analyze and share data** — Make sure that your technology is able to collect useful data that can show how every student is accessing and utilizing the product, and develop a plan to share the analyses in a way that will support teachers, school counselors and other staff. Share appropriate student data with parents and guardians to help them understand how their student is progressing and where they need support.
- **Include accessibility issues** — Most technology vendors will include accessibility features and accommodations such as those required by deaf and blind students or English Language Learners, but make sure to think about your needs during the research phase, and if you are developing your own product seek support from experts on what to include. Also, check state and federal laws to make sure you are meeting requirements.

Education technology will continue to advance in terms of ease of use and affordability, and it is likely that student career development tools will become even more prevalent than they are today. It is important to think about all aspects of these tools as they relate to an equitable learning environment, and to identify how to leverage them for the benefit of every student.

## REFERENCES

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