

Integrating Career-Connected Learning and Academics in K-12

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Abstract

A professional development meeting held at a Pittsburgh area career and technical school in Fall 2019 gathered educational leaders from nine consortium school districts, in part, to study the knowledge, attitudes and behaviors of academic leaders toward integrating career-connected learning. Professional development was guided by improvement science inquiry, specifically a Plan, Do, Study, Act cycle. Results yielded increased collaboration and integration of career-connected learning between the districts and the career center. The participants included principals, assistant principals, directors of special populations, and school counselors.

Introduction

The level of integration of career-connected learning can vary greatly in each school and program. Investigating the implementation of post-secondary and career readiness offers insight into varied perspectives and methods from many stakeholders.

Skill shortages have impacted the largest industries in the United States, including financial services, food and beverage, health care, information technology, manufacturing, retail, and travel and tourism (McDonough, 2017). Although the skills gap is often explained as a broad problem, it is more specific to industries, companies and specific job functions. Many factors contribute to the skills gap. There is not a single set of skills every person is missing (McDonough, 2017). This gap has motivated educators to analyze the preparedness of high school graduates for post-secondary education and careers in the 21st century (Bentley University, 2014).

Integrating career-connected learning with academic content is being implemented to best prepare students to succeed in the global economy (Bentley University, 2014). One report, *Inflection Point* (Burning Glass Technologies & The Council for Adult and Experiential Learning, 2016) discusses the disconnect between academic learning and career-connected learning among career centers and schools in the Pittsburgh region. In western Pennsylvania, most career centers are considered half-day non-comprehensive schools. Students in non-comprehensive career centers attend their sending school for academic courses and then are bused to the career center for their career and technical programs. The disconnect is partly attributed to the framework of career and technical education in western Pennsylvania, in which

students attend the career center part-time and their sending school part-time. The disconnect between career and technical centers and sending schools further contributes to the lack of combined academic and technical skills needed for students to succeed in postsecondary and career opportunities. Although some schools are attempting to move toward integrating career-connected learning with academics, there remains a need to increase collaboration of career-connected learning between sending schools and career centers.

Professional development as a catalyst

A professional development meeting hosted by the career center included educational leaders from nine consortium school districts. An improvement science inquiry used a Plan, Do, Study, Act cycle (PDSA) through professional development to study the knowledge, attitudes and behavioral status of academic leaders toward integrating career connected learning (Langley, 2009). This approach targeted continuous improvement and opportunities to refine practice, using professional development as a process to implement small changes with the goal of making long-term improvement (Shakman, et. al, 2017).

An entry ticket survey helped develop a portion of the professional development meeting and began to establish more personalized relationships between career-center staff and contacts at the sending schools. Participants then completed an exit ticket survey at the conclusion of the meeting that identified new knowledge gained and plans as they returned to their schools. The entry and exit ticket surveys were aligned to guide later conversations to identify and further support changes of knowledge, attitudes and behaviors of the participants.

Professional development follow-up discussions

Discussions were conducted with participants three months after the professional development meeting to follow-up on actions they had listed on their exit ticket to better integrate career-connected learning and/or collaborate with the career center. Participants were asked if they had made progress or if they needed assistance to implement their action items.

There were nine participants interviewed via phone or in person. Seven of the nine school districts were represented by participants who completed the entry ticket, exit ticket survey and interview. The follow-up interviews allowed for personalized discussions about successes and challenges each participant met when moving forward with plans to integrate career-connected learning and increase collaboration with the career center. The interviews supported more personalized problem solving for specific situations. Additionally, the relationships between the sending schools and career center became stronger due to the increased communication and collaborative efforts to address barriers to meet shared goals.

The nine people interviewed acted on at least one of the action items they had listed on the exit ticket survey. Overall, there was substantial evidence of action taken after the professional development meeting in seven out of nine school districts, including academic teacher visits to the career center, collaborative professional development for career center teachers, professional development for academic teachers, parent teacher organization presentations and plans for collaboration and integration the following school year.

Findings across participants

A Plan, Do, Study, Act cycle was applied to establish the baseline and follow up actions to measure the knowledge, attitudes and behaviors of educational leaders in regards to career-connected learning. The result from the PDSA cycle helped to build greater capacity in the knowledge, attitudes, and behaviors of the participants about career-connected learning and collaboration between the sending school districts and career center. The surveys and interviews together revealed growth among the participants in knowledge, attitudes, and behavior and participants were then able to enhance understanding and actions of stakeholders in their schools and districts. Participants were more active in incorporating career-connected learning in their building or district because they had a deeper understanding of the relevance to student success. These leaders communicated effectively with others and myself in their schools/districts and successfully collaborated on number of projects and initiatives to integrate career-connected learning.

The educational leaders who participated in the professional development meeting had the opportunity to list three actions they would be willing to take. Through follow-up discussions, I was able to offer assistance with their plans. Additional opportunities and strategies developed during these discussions that included, community presentations, school board presentations, academic and career center teacher professional development, and collaborative presentations to parents and the community to support career-connected learning. This continuous improvement model has utilized a process with small changes that lead to long-term improvement (Shakman et al., 2017). This model has been evident through the actions the participants have taken to integrate career-connected learning in their schools and districts. We were able to collaboratively take the following actions:

- Teacher visits to the career center
- Collaborative presentations to parents
- Professional development session presented by the career center assistant director/principal to district teachers
- Presentation from the assistant director/principal to a school's parent teacher organization. From this, future presentations were recommended by the PTO to administration
- Student tours of the career center for all ninth-grade students as well as fifth grade students from two districts
- Presentation scheduled for the school board by the career center assistant director/principal
- More STEAM related events in the elementary schools
- Meeting with career counselor from one district and the career center assistant director/principal to discuss future collaborative efforts
- Professional development from one district to the career center teachers about their educational model and approaches to integration
- Sharing of ideas and resources with educational leaders across participants from the professional development meeting

- Collaborative grant proposal with two sending schools and an outside district to institute collaborative career-connected learning and project-based learning amongst the three schools and business/industry partners

Professional growth

This improvement science project has helped me as a career and technical education administrator build very positive relationships among educational leaders, counselors, and academic teachers. I have gained more knowledge about the hard work classroom educators have put forth to provide students the most relevant education, including career-connected learning, through a Plan, Do, Study, Act cycle (Langley, 2009). I have increased my awareness of the actions districts are taking to integrate career-connected learning and equally, I have had many opportunities to educate people in our consortium schools about career and technical education and how the career center integrates academics and career-connected learning. The professional development and subsequent follow-up aided in building greater capacity in the knowledge, attitudes, and behaviors about career-connected learning between our districts and career center and most importantly, helped to create personal and responsive relationships.

While every district has its own specific barriers, there were common barriers that became evident through the surveys and discussions. Competition across curricula, time and resources, federal and state mandates, negative attitudes and stigma toward career and technical education remain as common obstacles. Often it was difficult to find time to meet with individuals from nine different districts to discuss and plan for career-connected learning. It is still a slow-moving process to plan more intricate collaborative projects. The schools and districts all have different resources that they can utilize for career-connected learning. Finances are a significant barrier for some schools/districts. Some districts serve affluent socioeconomic communities and others do not. Mandates are another barrier that create challenges for educational leaders. Schools and districts have many state mandates they must meet in addition to career readiness. Navigating through test preparation and state standards leaves little time to implement authentic career-connected learning opportunities for students.

Conclusion

The professional development meeting held at the career center early in the school year was the beginning of improving career-connected learning and collaboration between nine school districts and a career center. The PDSA cycle utilized throughout the process allowed for continued discussions that helped to build meaningful relationships. The discussions and development of relationships were key in increasing stakeholders' knowledge, attitudes and behaviors of career-connected learning. The results of these discussions led to actions that provided students with increased career-connected learning opportunities within the districts and career center. The continued improvement is evident through initiatives, projects and future discussions already scheduled for the following school year that will continue to integrate career-connected learning with academic curricula and increase collaboration between the districts and career center.

References

Bentley University. (2014). *The Prepared Uproject: An in-depth look at millennial preparedness for today's workforce.* <http://www.bentley.edu/prepared/millennials-inthe-workplace>

- Burning Glass Technologies & The Council for Adult and Experiential Learning with the Allegheny Conference on Community Development (2016). *Inflection point: Supply, demand and the future of work in the Pittsburgh region*. <https://www.alleghenyconference.org/wp-content/uploads/2016/08/InflectionPoint.pdf>
- Langley, G. J. (2009). *The improvement guide: A practical approach to enhancing organizational performance*. (pp. 24,25)
- McDonough, T. (2017). Closing the skills gap: Key learnings for employers and job seekers. *Employment Relations Today*, 43(4), 49-54.
- Shakman, K., Bailey, J., & Breslow, N. (2017). A primer for continuous improvement in schools and districts. https://www.edc.org/sites/default/files/uploads/primer_for_continuous_improvement.pdf