The continuous transformation of career and technical education (CTE) practitioners' roles that has resulted from reforms, technological advances, and new certification requirements has necessitated the creation of learner-centered professional development (PD) programs. Numerous schools nationwide have succeeded in developing high-quality, learner-centered PD programs, many of which involve electronic technology and the Internet. Worksite experiences, including internships, externships, and industry tours, have proved highly beneficial in linking PD to the workplace and community. The following are among nine guidelines that have been formulated to assist individuals interested in developing strong learner-centered PD programs: (1) the content of PD should focus on what students are to learn and how to address the different problems students may have in learning that material; (2) PD should be driven by analysis of the differences between goals and standards for student learning and student performance; (3) PD should help teachers identify what they need to learn and the appropriate learning process; (4) PD should be primarily school based and integral to school operations; (5) PD should provide learning opportunities that relate to individual needs but that are organized around collaborative problem solving; (6) PD should be continuous and ongoing, involving follow-up support for further learning; (7) PD should incorporate evaluation; (8) PD should provide opportunities to develop a theoretical understanding of the knowledge and skills to be learned; and (9) PD should be integrated with a comprehensive change process addressing impediments to and facilitators of learning. (Contains 16 references.) (MN)
Professional Development in Career and Technical Education
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Professional Development in Career and Technical Education

Professional development (PD) is a term that makes many an educator or administrator cringe. Often, PD means an extra inservice meeting after school, or more time learning new ideas or techniques that may not be all that readily transferable to one's work. As a result, PD may be seen as useless and time-consuming. However, career and technical education (CTE) practitioners' roles are being transformed by reforms such as academic-vocational integration and school-to-careers, new ways of teaching and learning, technology, and certification requirements (Brown 2000; Finch 1999). Only through ongoing education and development can one become a more effective professional. However, one must remember what the primary focus of PD should be—ultimately improving student learning. This In Brief gives an overview of recent trends in professional development and some implications for designing learner-centered PD programs for CTE.

Why Is Professional Development a Challenge?

In many cases, time is the critical factor. Although PD programs often provide educators with useful and meaningful ideas, their incorporation into daily use is often impeded by lack of time for teachers to routinely learn together, reflect on their teaching practices in a collaborative fashion, test new ideas together, and support each other (Murphy 1997). A number of education reformers have recommended that at least 20% of a teacher's total work time be devoted to "professional study and collaborative work" (Cook and Fine 2000). The key is regularity. Discrete and isolated inservice days are no longer the answer. PD must become a part of an educator's daily routine and practice. Is that a reasonable assertion? Or even a possibility? Teachers may feel that 20% of each day given to professional growth may detract from what they are able to accomplish in the classroom, especially given the stringent requirements in many states for proficiency testing and teacher accountability. Cook and Fine provide a number of examples of schools around the country that have integrated PD consistently:

- At Sarah Cobb Elementary School in Georgia, students are released 2 hours early 1 day each week. The school exceeds the number of state-mandated instructional minutes the other 4 days of the week, allowing teachers to work collaboratively for part of the fifth day.
- In Holtville, CA, the high school begins classes 30 minutes later every Wednesday. However, teachers arrive 30 minutes earlier that day, giving them 1 hour of PD time.
- In Round Rock, TX, Deepwood Elementary School has limited faculty meetings to 1 day per month. The other 3 days (one each week) that were formerly used for meetings are now used for PD activities.
- A number of schools are also working to find time each day to release teachers from their classroom duties to attend group PD sessions. Other schools have incorporated student teachers and even substitutes to take over teacher duties for short periods of time while the teacher participates in PD groups.

See Murphy (1997) or Cook and Fine (2000) for further examples.

Technology and Professional Development

As the Internet has pervaded life, a variety of approaches to professional development involve the use of electronic technology. Linkages with other teachers are an important PD strategy for sharing practice knowledge (Brown 2000), and technology can facilitate these linkages. Anderson and Kanuka (1997) report how teachers participated in a 3-week seminar for professional development that was conducted entirely online. A similar study by Grubb and Hines (1999) discusses the vital importance of training faculty as distance learners. The only major obstacles were learning of software programs and time to participate in discussions. These obstacles should not circumvent the greater good of using the approach. For example, Schrum (2000) lists the following direct advantages of an online PD model:

- Instantaneous and delayed communication options
- Access to and from isolated communities
- Multiple and collaborative participation among widely dispersed individuals
- Ultimate convenience of where and when one chooses to be involved
- Interaction and collaboration among individuals from diverse cultures and academic backgrounds
- Ability to focus on ideas, without knowledge of race, gender, age, or other prejudicial factors

Electronic forms of PD can save teachers and administrators many hours. Working in a distance learning type of setting, teachers can use technology to advantage. Should many of these "meetings" be held in person, the personal and the district costs would greatly outweigh those incurred in providing connections via electronic means. As CTE teachers become distance learners, they improve their own technology skills as well as learn new ways to use technology as a teaching tool (Gillespie 1998). Brown (2000) recommends that teachers look for PD programs that integrate technology with other subjects and identify practitioners who can model technology use in teaching.

Worksite Experiences

"The need to link professional development to the workplace and community is a recurring theme" (Brown 2000, p. 1). Teachers who provide work-based learning for their students have a number of options for experiencing it themselves. PD strategies include the following:

- Internships, which enable teachers to participate in work activities to gain insights into workplace skill needs and identify real-life applications to bring to the classroom (Brown 2000).
- Externships, short-term experiences in which teachers observe how academic subjects are used on the job and identify potential sites for student work experiences (Brown 2000; Finch 1999)
- Industry tours—coordinated visits to a number of worksites with follow-up discussions to reflect on the implications for the CTE classroom (Brown 2000; Miller and Byers 1998)
Professional development clearly involves time and effort, requiring decision making and planning on a number of levels, from the district to the teacher. PD also involves the use of technology to expand current practices and upgrade skills, as well as opportunities for teachers to gain first-hand knowledge of the workplace in order to create authentic learning experiences for their students. Keeping these critical features in mind, the following guidelines are intended to develop strong learner-centered PD programs (Hawley and Valli 2000):

1. The content of professional development should focus on what students are to learn and how to address the different problems students may have in learning that material. Teachers can develop better teaching skills only if they are connected with what their students’ learning strengths and difficulties are.

2. Professional development should be driven by analyses of the differences between goals and standards for student learning and student performance. It is only through analyzing these differences that educators can have a clear picture of what is it they need to learn.

3. Professional development should involve teachers in the identification of what they need to learn and the development of the learning process to be used. What better way to motivate educators to get involved in PD than by making them an essential part of the process?

4. Professional development should be primarily school based and integral to school operations. By focusing on in-house problems and issues first, PD can be used as a team-building tool to enhance problem-solving skills and collegiality among faculty.

5. Professional development should provide learning opportunities that relate to individual needs but are organized around collaborative problem solving. Not only does collaboration lead to the clarification of learning needs, but it also allows for the sharing of knowledge and expertise among potentially diverse individuals.

6. Professional development should be continuous and ongoing, involving follow-up support for further learning, including support from sources external to the school. Change and learning require time, ongoing collaboration, multiple levels of support, and an influx of ideas from inside and outside the school environment.

7. Professional development should incorporate evaluation on outcomes and processes that involved in the lessons learned through professional development. Accountability of programs is important, both in terms of their usefulness to teachers, but also how they affect student outcomes in the classroom.

8. Professional development should provide opportunities to engage in developing a theoretical understanding of the knowledge and skills to be learned. Teachers should be exposed to and updated on current research in the field. New theoretical constructs should not come as a surprise when they are introduced as part of a PD activity.

9. Professional development should be integrated with a comprehensive change process that addresses impediments to, and facilitators of, learning. Professional development should not be separated cases of isolated events. PD should be included in a much larger school or district reform plan that addresses change on multiple levels.

Current research and practice show the benefits of using technology and web-based approaches to professional development and provide examples of ways to update teacher knowledge of the workplace. However, all professional development must be centered on the improvement of education for the learner. The nine points outlined here should aid administrators and districts in developing programs suited to their PD needs. Sound technological advances in PD can further faculty development in CTE, but this must start with initial assessment of student learning needs and implementation of PD programs that would most effectively prepare teachers to address those needs. See Kisner et al. 1998 for a model of developing needs assessments for professional development purposes.

References


Brown, B. L. Vocational Teacher Professional Development. Practice Application Brief no. 11. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, the Ohio State University, 2000. <ericacve.org/fulltext.asp>


Additional Resources

Journal of Staff Development (online): http://www.nsdc.org/library/jsd/jsd.htm


TAPPED IN™: an international community of educators: http://www.tappedin.org/

TeachNet: http://www.teachnet.org/docs/index.htm

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