

Running Head: THE FIELD OF INSTRUCTIONAL TECHNOLOGY

Performance Technology

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Assignment 4

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Abstract

Performance technology is an important factor when integrating technology. This paper will articulate the area of business education and how technology is integrated into a business classroom. It will also define performance and performance technology in a technology environment. In addition, this paper will discuss collaborative methods used in performance technology and instructional design. It will be concluded with a instructional product that focuses upon a specific collaborative method and performance technology.

Area of Expertise

“Business education is a rigorous discipline that challenges learners to develop their creative thinking skills and become independent learners” (.U.S. Department of Education, 2003, p.2). Business education falls under Career and Technology Education (CATE) in which students may choose from several different classes depending on individual school districts. Some of the classes that are offered include business communication, keyboarding, business computer information systems (BCIS) I and II, introduction to business, record keeping, business law, banking and finance, and business information and multimedia (BIMM). High school business education teachers helps students learn real world skills by connecting learning in the classroom with skills needed in the workplace, daily life, and college with hands-on innovative learning experiences for students. According to Wikipedia, business education “is the enterprise of education directed at the study and research of the field of business and is often or almost always oriented toward preparing students for the practice of an occupation in business or business-related fields” (Business education, 2007). The standards set by Texas State Board for Educator Certification (SBEC) states that business education teachers must understand and apply the following:

- Standard I- knowledge of accounting, personal finance, record keeping, economics, banking, and financial systems.
- Standard II- principles related to business management, operations, and ownership; business law and ethics; international business; and e-commerce.

- Standard III- principles and methods related to the operation of a broad range of business computer information systems.
- Standard IV- principles and methods related to work-based learning, career development, and the leadership opportunities available through related student organization activities.
- Standard V- knowledge of business communications and interpersonal, employment, and organizational skills in business environments.
- Standard VI- how to work with others in the school and community and with industry representatives to support the business education program.

As a high school business education teacher my area of expertise under the CATE umbrella is BCIS I and II which will satisfy a student's technology credit needed to graduate from high school. BCIS students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce and /or postsecondary education. Students apply technical skills to address business applications of emerging technologies. I work really hard to ensure that I tie each unit in BCIS to real world business situations. Majority of my students are kinesthetic learners that enjoy applying what they have learned to projects. In order, for business education to be an integral and equal partner within a school's educational community, business education teachers must proactively respond to industry needs and connect with changing student learning styles (U.S. Department of Education, 2003).

Technology Integration in Area of Expertise

Today we live in a technology-driven society where ideas and innovation outperform muscle and machine. We must build an educational system that meets the new demands of our time. "In an age of digital content and global

communications, technology can help us create schools where every child has the opportunity to succeed, while we work to close the achievement gap and address the economic and workforce needs of the future” (U.S. Department of Education, 2007).

In a BCIS classroom, technology is integrated in several ways. First, students in BCIS work with Microsoft Office software package where they apply skills learned in Microsoft Word, Excel, PowerPoint, and Access to complete real world projects. Next, students incorporate the use of the internet, a scanner, and a digital camera, and many other technology tools with the MS office package to create a fun and engaging environment in the classroom. I also teach my students how to use United Streaming to gather information, pictures and videos for projects. This year my district also implemented a great online learning system. It offers students another opportunity to be responsible for their own learning while integrating technology. “The Internet and multimedia can provide students and teachers with access to up-to-date, primary source material, and ways to collaborate with students, teachers, and experts around the world” (Hawkins, 1997). Students also work online for warm-ups to build a journal of SAT words of the day and research current events that deal with a specific topic discussed for the week. I also use Quia and Quiz Star where students take test and quizzes online. TrackStar is also incorporated into my BCIS classroom for students to use as an additional technology tool to enhance learning. Integrating technology into a business education classroom helps the students become tech savvy.

While reflecting on what a business education classroom looks like, in my opinion the constructivist approach aligns with the goals of business education. The educational implications for the constructivist approach are student lessons should connect to real world application; opportunities for unstructured exploration and self-discovery are present, and teachers use differentiated instruction to meet the individual needs of all students. In addition, the technology implications support collaboration and connection between abstract concepts and real world applications, multimedia group projects, and technology provides visual support (Roblyer, 2006). When technology tools are effectively integrated into curriculum, they can extend learning in powerful ways.

Performance

Business education teachers must assess the performance of their students. Performance is a “quantified result or the accomplishment, execution of something ordered or undertaken, including accomplishment of work” (Reiser, & Dempsey, 2007). Students in BCIS integrate the use of several technology tools to complete real world projects which are used as a form of assessment.

According to Driscoll 2005, “a new skill must be performed dependably before most teachers will agree that it has been well learned. Therefore after learners have had opportunities to demonstrate and refine their knowledge, it may be formally assessed” (p.377).

Students who complete BCIS are expected to perform well in the workforce, military, and/or college where they will be able to apply the skills learned in the classroom. Throughout the learning process teachers need to

provide students with feedback to provide them with information about performance and this will give the learner the opportunity to modify performance and what is stored in memory to continuously improve academics. (Learning Theories Knowledgebase, 2007) In the classroom, teachers must ensure that a variety of instructional methods with technology integration are used to engage every student and make learning meaningful so students will perform and be successful in their academics. With that in mind, my working definition of performance is the ability of the learner to independently apply what they have learned to a real life situation.

Performance Technology

Human Performance Technology (HPT) “can be viewed as a field of endeavor that serves to bring about changes to a system, and in such a way that the system is improved in terms of the achievements it values” (No Author, 2007). “Performance technologists often find that training, when it is required at all is often only a part of a total solution to an organizational problem.” (Reiser & Dempsey, 2007, p102). HPT uses many interventions that are drawn from other disciplines including, behavioral psychology, instructional systems design, organizational development, and human resources management. It stresses an analysis of present and desired levels of performance, identifies the causes for the performance gap, offers a wide range of interventions with which to improve performance, guides the change management process, and evaluates the results. (Battaglia, 2007) Human performance technology focuses on outcomes and without technology in a technology driven society there would be a limit to

the results of performance. With that in mind, my working definition of performance technology is using several tools and interventions to evaluate a current system and implement a system that serves to bring change to improve current performance.

Performance Technology and ID Process

Performance technology has a major impact on instructional design. Reiser and Dempsey (2007), states “instructional design (ID) is a systematic process that is employed to develop education and training programs in a consistent and reliable fashion” (p.11). Instructional design is a learner-centered approach to instruction so that learning is effective and meaningful. Instructional designers must design instruction that is engaging to promote successful learner performance. In the recent years, instructional design practices have broadened so that many concepts associated with the performance technology movement are now regularly employed by those individuals who call themselves instructional designers (Reiser & Dempsey, 2007).

Instructional designers’ use several collaborative methods to promote performance improvement. Problem based learning is one collaborative method used in performance technology and instructional design. “Problem-based learning (PBL) is a pedagogical strategy of "active learning" often used in higher education, but it can be adapted for use in K-12 education” (Problem-based learning, 2007). The defining characteristics of PBL are learning is driven by challenging and open-ended problems, students working in small collaborative groups, and teachers take on the role as "facilitators" of learning. The idea

behind Problem-Based Learning (PBL) as a teaching method is to engage students actively in meaningful learning (Harper-Marinick & Levine, 2007). A typical sequence looks like the following:

- First, present the students with an authentic problem
- Then have the students (individually or in teams) search for relevant information and methods for solving the problem
- Finally, have the students or teams develop, assess, and present a solution

In contrast, another collaborative method used in performance technology and instructional design is role playing. Role playing involves students interacting with each other and is useful to students because it emphasizes the "real-world" applications. It will allow students to hypothetically learn in the situation and then transfer the skills to real life situations. "Role-playing exercises can be hard work for the instructor, both in preparation and in execution, but the work tends to pay off in terms of student motivation and accomplishment" (Teed, 2007). For students to benefit from role playing, the teacher must following the steps below.

- Define Objectives
- Choose context and Roles
- Introduce the Exercise
- Student Preparation and Research
- The Role Play
- Conclude Discussion
- Assessment

As a business education teacher I implement role playing in my classroom with interviewing skills and professional dress. Students' role play what a bad interview looks like verses what a good interview looks like. Students really learn from this role playing activity and it has been very effective in helping students' successful secure jobs.

Instructional Product & Performance Technology

In closing, to keep learners engage in a lesson while teaching a new concept, I would create a student video as an instructional product. The collaborative method I would use is role playing. The video would consist of students' role playing using good techniques in interviewing and using bad techniques in interviewing. The video would be used as an additional method to teach students good interviewing skills. I would choose this method because the students are participating in their own learning and they are learning from their peers as well. Through this instructional method students would use performance technology by focusing on the outcome of improving their individual interviewing skills.

Conclusion

As performance technology and instructional design continue to advance, there will be more improved and innovative techniques that will allow the field of instructional technology to flourish. As educators and trainers we must remain abreast with the current and changing trends and issues performance technology. I look forward to learning more about performance technology as

well as applying what I have learned to my future career in training and staff development.

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