Student-Centered Learning

By Barbara Nanney

Student-centered learning is a broad teaching approach that encompasses replacing lectures with active learning, integrating self-paced learning programs and/or cooperative group situations, ultimately holding the student responsible for his own advances in education. Student-centered learning environments have a heightened advantage over the traditional teacher-centered, subject-centered environment in that they provide complimentary activities, interactive in nature, enabling individuals to address their own learning interests and needs and move forward into increasingly complex levels of content to further their understanding and appreciate subject matter. The student-centered learning environment has the student need satisfaction as its primary focus whereas the subject-centered environment has the transmission of a body of knowledge as the primary focus (Clasen & Bowman, 1974, p. 9). Student-centered learning, when used properly, can change the face of education into a life-long learning process in which the student seeks solutions to problems without complete dependency upon an instructor. The student learns to reason on his own to find a foundation for venturing out with successful experiences under his belt.

The learning environment concept has been around for some time. Its roots can be traced back to "early apprenticeship, Socratic, and similar movements that have sought to immerse individuals in authentic learning experiences, where the meaning of knowledge and skills are realistically embedded" (Land & Hannafin, 1996, p. 396). As immigrants flooded the United States, educators sought methods of education for the masses and the creation of a universal, or national system. The factories and mass production lines of the early 20th century needed workers with only basic skills. The needs of industry have changed to a different type of worker, one who is a continuous learner, a problem-solver, self-directed thus requiring little supervision (Warmkessel & McCade, 1997, p. 81). To meet the needs of industry and its workers, education must be more accommodating. The educational system should change with the times as well as with the learner.

Land & Hannafin (1996) state that learning environments are rooted in psychological, pedagogical, technological, cultural, and pragmatic foundations (p. 396). The psychological foundations of learning environments are based on how we think and learn as individuals. The methods, activities, and structures of the learning environment are the focus of pedagogical influences. Pedagogical and psychological foundations together give the basis for methods and strategies used and the ways in which the content is organized. Student-centered learning environments pull from the problem-based contexts and exploration of pedagogical foundations. Technological foundations can show how available technology can be optimized to create environments where learning is the desired outcome. Cultural foundations play an important role in society because they affect the design of learning systems. As a culture places an increasing importance on technology, it is reflected in the schools as computers become more prevalent and educational software is more available. Pragmatic foundations show the practical limitations --- for example, hardware/software availability, financial concerns that limit the infusion of innovations, and run-time requirements (Land & Hannafin, 1996, p. 397). The integration of all five foundations of learning environments is essential in the design of an

effective learning system. The more integrated the learning environments, the better the chance for a success in any setting for which the design is directed. For effective student-centered learning, the five foundations should be fully integrated.

As teachers, we often have difficulty placing the student at the helm. In the nontraditional classroom, Felder & Brent (1996) say that "turning things over to the students for periods of time does not signify that you are losing control" (p. 44). The instructor facilitates the learner individually or in cooperative groups by posing problems, setting time limits, providing varying amounts of guidance, asking leading questions, choosing students to respond, or giving positive responses. The instructor also decides when the focus of discussion needs to be changed or the discussion ended.

Students can experience some or all of the steps psychologists associate with trauma and grief when forced to take major responsibility for their own learning (Felder & Brent, 1996, p. 43) especially when they have been traditional students in a traditional classroom for the majority of their formal education. With cooperative groups, some students will react negatively, resisting the change and the individual responsibility involved, griping about others not pulling their weight, and wasting time explaining to the slower learners in the group. The instructor who "perseveres, patiently and confidently, will reap the rewards in having students who learn more deeply and have better attitudes towards their subjects and themselves (Felder & Brent, 1996, p. 46). Cooperative groups do provide exploration of open-ended problems requiring critical and often creative thinking. Groups also provide the opportunity for teamwork and social interaction. Directed environments focus on the basics as identified by the teacher and which are taught externally through practice and explicit activities.

With the advent of technology, the learning environment became even more powerful. The goal of an open-ended learning environment is "to immerse learners in rich experiences, using various tools, resources, and activities with which to augment or extend thinking" (Hannafin, Hill, & Land, 1997, p. 97). Student-centered learning and instructional technology seem to fit together well as one approach to enhanced learning. The computer-enhanced environment supports the learning of self-regulation skills, active learning, and individual construction of knowledge so that individuals assume a greater responsibility for their own learning.

The World Wide Web provides a rapid access to information, but learning is self-directed. Computer-based microworlds give the learner a link between abstract concepts and understanding based on experience, providing artificial environments for exploration. The computer-enhanced environment also combats rote memory and disassociation of knowledge. Instead, the learner understands through the refinement of experience and exploration. As in any learning environment, the student needs a facilitator who identifies and provides access to resources, creates problem contexts, refines and extends those contexts, and provides a human resource. The learners make, or are guided to make, effective choices through student-centered learning. Over time, technology leads the learner to understand and surpass the benchmarks previously achieved. The learner can "make sense" out of what they know, develop insight into the "why" behind experiences, create a deeper understanding of thorough exploration, and establish an anchor on which further information can be added. Approaching the learning process as a developer of critical thinking and problem solving skills through the idea of student-centered learning would enable the student to experience success as a self-directed, life-long learner --- the type of worker that today’s job market requires.

References

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