AUTHENTICITY FRAMEWORK

STUDENT-CENTERED LEARNING

Empowering student choice in the classroom is a gateway to rich and complex learning. Still, it can be challenging for students and instructors alike to empower student voices effectively. Student-centered learning appears complex—it is personalized to students' unique needs, interests, and aspirations while also taking students' preferences into consideration. However, while the prospect may seem intimidating, many well-known instructional methods can be extended to make this possible. These types of student-centered, individualized instructional methods and shared ownership over the learning environment benefit both students and teachers.

Active Learning

Active learning in the classroom should consist of students actively engaged in the process of learning. As students construct their own knowledge through higher order thinking, active learning concurrently takes place. In its simplest form, this may look like a student doing classroom work (reading, creating, etc.). Active learning is also represented in many other complex practices, such as in collaborative and problem-based learning processes.

Collaborative learning is any instructional method in which students "work together in small groups toward a common goal" (Prince, 2004). Prince (2004) notes that collaborative learning involves active student interaction rather than solitary learning. Research suggests that collaborative work improves learning outcomes, with one review finding that "cooperation improved learning outcomes relative to individual work across the board," particularly enhancing students' academic achievement and attitudes as well as student retention (Johnson, Johnson, & Smith, 1998; Terenzini et. al, 2001).

Problem-based learning (PBL) is defined as a practice wherein an overarching problem is introduced at the beginning of the instruction cycle and provides context and motivation for the learning throughout (Prince, 2004). Studies suggest that, in fostering a deeper approach to learning, PBL leads students to develop positive attitudes and to retain knowledge longer than would be the case for traditional instruction (Prince, 2004). PBL naturally allows students to develop lifelong learning skills and problem-solving skills. Both collaborative and problem based learning typically are forms of active learning that involve self-directed learning from students (Prince, 2004).

Choices in the Learning Environment

When setting out to pursue student-centered learning, including collaborative and problem-based learning, understanding the strategies and tasks at hand and how to integrate students' own choices in their learning is key.

The central element of PBL, for instance, is the problem on which students focus. This problem should be open-ended and compatible with students' personal frames of reference (Rule, 2006). To this end, students must have an opportunity to define the questions they are interested in solving as well as how they might pursue a solution (Rule, 2006). This could consist of large-scale choices or relatively small ones; in either case, enabling students to make these choices both empowers students and enlightens their instructor as to what students prefer and what they value in their own learning (Moyer & Jones, 2004). Empowering students to decide how they process, interpret, and display their learning, results in a richer, more complex learning experience (Evans & Boucher, 2015).

One example of giving students choices in their own learning is through authentic literacy tasks. These projects focus on communication and experience rather than evaluation (Rule, 2006). In such cases, students are free to choose their own project and intended audience (Rule, 2006). Students who contend with choices like these, which may involve real-world issues or deep, conceptual knowledge, have the opportunity to practice evaluating and interpreting their own observations (Evans & Boucher, 2015). This serves to increase skills like problem-solving and model building (Evans & Boucher, 2015).

It might seem risky to allow students so many choices in the classroom. Some instructors may see it as tempting—necessary, even—to nudge students down a certain path. However, according to Deci et al. (1982), instructors who attempt to control the direction of the class—including behavior like "nudging" or giving criticism—ultimately decrease students' capacity for independent thought in the classroom and increase their dependence on direct instruction. Conversely, students who are granted more autonomy gain the ability to "immerse themselves in novel tasks" more quickly (Deci et al., 1982). In this way, shared ownership over the learning environment benefits both students and teachers (Deci et al., 1982).

A Classroom Environment to Support Authentic Learning

In contrast to the traditional adult-centered and standardized classroom, a classroom that utilizes student-centered learning is personalized to each student's needs, interests, and aspirations, and it invites student input to this end (Kaput, 2018). Although no agreed-upon definition or program currently exists for student-centered learning, there are certain recommended teaching strategies intended to help instructors meet the needs of all learning styles and guide students toward deeper intellectual development (Felder & Brent, 2005). Chiefly recommended by Felder and Brent (2005) is assigning a variety of learning tasks, as this ensures that all learning styles are addressed. These tasks should include problems that variously sense students' strengths, encourage reflection, and require teamwork (Felder & Brent, 2005). This may involve small group discussions, cooperative learning tasks, independent research projects, hands-on learning, technology-integrated learning, and community-connected projects like surveys or volunteer service (Newman et al., 1996).

However, Newman, Marks, and Gamoran (1996) note the importance making sure that students gain an in-depth understanding in performing such tasks—for example, a student may choose to interview members of the community, but may do so with teacher-prespecified questions and emerge with a superficial understanding of the topic at hand (Newman et al., 1996). Students who can take responsibility for their own learning stand a better chance to avoid this through critical thinking and connecting new learning to prior knowledge (Felder & Brent, 2005).

Keep in mind that the goals of student-centered learning are met not only within individual activities, but also in the way the activities formed into a comprehensive education (McCurdy, et al. 2001). It is important to "chunk" and alternate learning activities versus practice activities, as switching frequently between these keeps students involved and on-task as well as creating a more connected, holistic experience (McCurdy et al., 2001).

Sources:

Johnson, D. W., Johnson, R. T., & Smith, K. A. (1998). Cooperative learning returns to college what evidence is there that it works?. Change: the magazine of higher learning, 30(4), 26-35.

Kaput, K. (2018). Evidence for Student-Centered Learning. https://files.eric.ed.gov/fulltext/ED581111.pdf

Newmann, F., King, M., & Carmichael, D. (2007). Authentic assessment and instruction: Common standards for rigor and relevance in teaching academic subjects. Des Moines: Iowa Department of Education. https://www.centerforaiw.com/wp-content/uploads/2016/05/authentic-instruction-assessment-bluebook.pdf

Newman, F., Marks, H., & Gamoran, A. (1996). Authentic Pedagogy and Student Performance. American Journal of Education, 104(4), 281.

Prince, Michael. (2004). Does Active Learning Work? A Review of the Research. Journal of Engineering Education. 93. 223–231. https://drive.google.com/file/d/1b56iKS_mBKyjXeI6XfTGFs4M2cN_b-EU/view?usp=sharing

Rule, A. (2006). Editorial: The components of authentic learning. Journal of authentic learning, 3(1), 1–10. https://www.semanticscholar.org/paper/Editorial%3A-The-Components-of-Authentic-Learning-Rule/2b9df9598ccebff403c12ada372bb6079c542648

Terenzini, P. T., Cabrera, A. F., Colbeck, C. L., Parente, J. M., & Bjorklund, S. A. (2001). Collaborative learning vs. lecture/discussion: Students' reported learning gains. Journal of Engineering Education, 90(1), 123-130.