

Research-Based Learner-Centered Approaches for Student Engagement and Long-Term Success: What Every Herbal Educator Should Know

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The majority of successful herbalists are involved in some teaching activities. Although most do not teach at a national level, many participate in educational efforts locally. As the demand for herbal medicine and information grows, education in this area continues to evolve attracting new students. Similar to other professions, most practicing herbalists have never received formal training in education; therefore their teaching styles are the result of their own educational journey, primarily influenced by their mentors. As more research is published in the areas of motivation, learning, development and retention, it is becoming clear that approaches based on learner-centered teaching are essential to produce proficient practitioners and life-long learners. Therefore, this is a good time for us as educators to review and evaluate whether our herbal educational efforts incorporate elements necessary to create successful teaching experiences and environments.

Research foundation for learner-centered teaching

The educational literature related to learner-centered teaching is grounded in several major existing theories including attribution/self-efficacy theory, radical and critical pedagogy, feminist pedagogy, constructivism and transformative learning.(Weimer, 2013) Attribution theory and self-efficacy explore how and what learners attribute their achievements and disappointments to, while self-efficacy evaluates learners' beliefs as they are related to their ability to learn. (Bandura, 1997; Covington, 1992; Heider, 1958; Weiner, 1986) Radical and critical pedagogy proposes that education can become a tool for change and knowledge can empower learners.(Stage, Muller, Kinzie, & Simmons, 1998) Feminist pedagogy evaluates the typical power structure and authority in a classroom encouraging teachers to facilitate discussions rather than directly deliver content; it also encourages students to cooperate rather than compete.(Weimer, 2013) Constructivism theory advocates that learners actively construct their own knowledge instead of passively absorbing it from teachers and books.(Fosnot, 2013; Stage et al., 1998) Some of the examples of constructivist approaches include problem-based learning, process-oriented guided inquiry and peer-led team learning. Transformative learning is a branch of constructivism theory that encourages learners to reflect critically and construct their own personal meaning of the content changing their views, perspectives and future behaviors. (Cranton, 1994)

Additional concepts that shape the field of learner-centered teaching include deep versus surface learning (Marton & Säljö, 1976; Ramsden, 1988), faculty orientation to teaching (Greson, 1988; Kember & Gow, 1994) and self-regulated learning (Boud, 2012; Candy, 1991; Zimmerman, 2002). Deep learning is connected to transformative learning described above, helping students develop skills, attitudes, knowledge and understanding that carries over into

their professional lives. Faculty orientation concept compares two teaching styles: teacher-centered and learner-centered. In the teacher-centered classroom the content is delivered in a typical lecture format, while the learner-centered classroom encourages the educator to primarily facilitate student discussions. Literature suggests that the teacher-centered style correlates with surface learning, while learner-centered style is associated with deep learning.(Weimer, 2013) Finally, the concept of self-regulated learning encourages students to explore areas of self-awareness and self-motivation thus increasing their potential to becoming life-long learners after completion of their training.

Learner-centered teaching, a concept based on the theories described above, includes five main guiding principles: the role of teacher, balance of power, function of content, responsibility for learning, as well as purposes and processes of evaluation.(Weimer, 2013)

The role of teacher. In a typical teacher-centered classroom, the focus is on instructor. The educator feels their mission is accomplished if they have successfully delivered information in a memorable and interesting way. In a majority of cases, however, the information delivered is unlikely to be absorbed by the learner. Literature reviewing student feedback finds that in a majority of courses faculty spend most time talking thus keeping students minimally engaged.(Fischer & Grant, 1983) In a learner-centered classroom, however, the emphasis is on the learner where educators are compared to coaches, midwives or guides, helping the student to succeed but not doing the work for them. Students' active engagement in the learning process by asking questions, processing and analyzing the content and forming hypotheses is the key to learning and mastery. Despite the advantages of a learner-centered classroom, typical constraints to its implementation include the teacher's time investment and teaching style preference, diminished feeling of importance, as well as students' resistance, experience and comfort level.

Balance of power. In today's classroom, students typically begin their educational journey with a sense of indecisiveness, anxiety and dependence on the teacher's advice and instruction. Shifting the balance of power to students positively affects how they perceive themselves as learners over time. Additionally, providing students with greater autonomy appears to correlate with an increase in their motivation and desire to learn.(Pintrich, 2003; Weimer, 2013) In a learner-centered classroom, power may be shared by allowing students to provide input on elements such as course policies, classroom activities/assignments, course content and evaluation techniques. When making the decision to share power, however, educators need to consider the degree to which it can be prudently shared which may be dependent on appropriate timing in the course and students' maturity level.

The function of content. As herbal educators we have expertise in our field, and excitement about the content comes naturally. As a result we gravitate toward broad content coverage in our courses which is often associated with course rigor and educator reputation. Literature states that covering a large amount of content, however, does not equal and promote long-lasting learning.(Carvalho, 2009; Wiggins & McTighe, 2005) When evaluating what

content to include, the educator should consider what knowledge the student needs for a successful future practice. Literature suggests that concentrating on fewer topics and delivering them at a deeper level is more effective than glossing over a large amount of content, the majority of which will be forgotten within a short period of time. (Carvalho, 2009; Weimer, 2013) Although students are exposed to less content, their active engagement with content at a deeper level and development of targeted learning skills will produce a more meaningful experience, help to develop mastery and enhance long-term retention. (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010)

Responsibility for learning. When considering obstacles to effective learning, it is necessary to remember that students come from different backgrounds. Some may lack foundational knowledge needed, while others have busy schedules with work and family obligations. As educators, we often create rules (external motivators) that we believe are helpful in keeping students on track therefore promoting learning (i.e., assignment deadlines, make-up dates). Research suggests, however, that students view these highly structured, rule-based environments more negatively than faculty. (Fraser, Treagust, & Dennis, 1986) To internally motivate learners, educators need to create positive relationships with their students, develop assignments clearly connected to future practice, and provide timely response to completed work. (Ambrose et al., 2010; Hilsen, 1988) Despite students' many limitations, only they can take responsibility for learning, but educators can guide them in several ways. Teachers can apply logical consequences to learner's actions (e.g., lack of preparation, late arrivals), exercise consistency between words and actions (e.g., adhere to their own syllabus), demand high but attainable standards, convey care towards students and express their own enthusiasm and commitment to learning.

Purposes and processes of evaluation. Most institutions of learning in this country use grades as a way of evaluating students' progress. Although grades are tightly connected to assessment techniques such as exams, they do not measure all types of learning. (Momsen, Long, Wyse, & Ebert-May, 2010) Exams typically test recall of facts, but rarely evaluate students' ability to think and function at a higher level. As a result, exams that test recall should not be the only way to assess students' learning. In a learner-centered classroom the assessment and evaluation process is taken deeper. Assessments should include application activities (e.g., cases) similar to those previously assigned as homework and practiced in class. In addition to summative assessments (e.g., exams), educators should incorporate a wide variety of formative assessments or periodic check-ins that allow them to see if the students are on the right path. (Ambrose et al., 2010) A number of herbal programs are already more accepting of learner-centered evaluation strategies by minimizing the role of exams and incorporating case-based activities. When these activities are designed well, targeting development of skills and offering unique experiences, educators assist students in becoming more self-aware as learners.

Taking the developmental approach

Student prior knowledge can affect their learning, as a result faculty should try to evaluate and activate prior knowledge, evaluate the extent of accurate knowledge and remediate any inaccuracies.(Ambrose et al., 2010) When developing a learner-centered classroom, faculty need to determine the goals of the course/program, and design activities to foster and develop skills and knowledge to meet these goals. This can be done in one of two ways: in a progressive approach where each new assignment builds on skills acquired through previously completed work or in a targeted approach where all activities of the course/program aim at a development of a specific set of skills.(Weimer, 2013) The ultimate goal for the educator is to foster the development of the self-directed learner. Faculty can help students to evaluate each assignment, assess their strengths and weaknesses, plan how to tackle the assignment, monitor and review their progress, self-correcting if necessary, and understand themselves as a learner.(Ambrose et al., 2010) In addition to student development, faculty new to the learner-centered classroom will also experience a significant degree of pedagogical development. To make the transition successful, faculty need to start with activities they are comfortable with and are likely to work well. It is also wise to begin slowly utilizing what is already there, mindfully changing select elements that fit best into the learner-centered mindset, thus combining new and familiar experiences for the students.(Albers, 2009; Noel, 2004)

Responding to student/faculty resistance

Developing a learner-centered classroom may come with some student resistance.(Felder & Brent, 1996) The main reasons for resistance include increased workload for the teacher and the student, the threatening nature of some approaches (especially for those students who do well in a conventional teacher-centered environment), a sense of loss since major decisions are made by students and not purely dictated by faculty, and finally, lack of intellectual readiness on the part of some students. (Kloss, 1994; Weimer, 2013) The way to address student resistance is through frequent communication of pedagogical reasons for utilizing learner-centered approaches, providing positive encouragement to students, getting their feedback regarding learning, and not giving in despite the resistance. Colleagues may also resist providing many justifications for keeping teacher-centered classrooms, therefore it is wise to develop communities of learner-centered educators to share experiences for support and encouragement.

Herbal education attracts students that are passionate about this field. Many feel they have a calling, some have previous experience and most have a clear professional goal in mind. A typical herbal learner is motivated and understands the relevance of the content in their courses. As a result, the learner-centered classroom is a perfect environment for the development of life-learner skills. Herbal educators and practitioners are recognized content experts, but should continue exploring the research-based field of teaching and learning to empower their students in their journey of becoming successful practitioners.

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