CIRTL Network Learning Outcomes

Three tiers of expertise inform our programming

CIRTL Learning Outcomes

Often we are asked, "If I met a STEM faculty member, how would I know if they had taken part in CIRTL at some point in their development." In the broadest sense, the CIRTL participant would see teaching as a dynamic and ongoing process aimed at understanding and improving student learning. Indeed, there would be little difference in the way the CIRTL participant talks about teaching and learning compared to the way he or she talks about disciplinary research.

The CIRTL Learning Outcomes outline a more formal and rigorous response to this query and delineate levels of experience and engagement with CIRTL, the CIRTL core ideas and with teaching and learning.

Learning Outcome Levels

We envision three types of CIRTL program outcomes: CIRTL Associate, CIRTL Practitioner, and CIRTL Scholar. These three CIRTL outcomes recognize first the role of the CIRTL core ideas in effective teaching and learning, then scholarly teaching that builds on the CIRTL core ideas to demonstrably improve learning and make the results public, and finally scholarship that advances teaching and learning under peer review. CIRTL program outcomes conceived in this way permit anyone to enter the CIRTL Network learning community from a wide variety of disciplines, needs, and past experiences, and to achieve success as a teacher at a wide variety of engagement.

CIRTL Associate

Graduates-through-faculty who are CIRTL Associates have the knowledge and skills to be effective teachers, where they are able to implement research-based "best" practices in different learning environments to achieve defined learning goals. CIRTL Associates recognize the diversity of their students and seek to meet the needs of diverse learners. CIRTL Associates are developing familiarity with a new area of knowledge that is outside of their STEM disciplines. Specific outcomes might include:

- Participants can identify realistic, well-defined and achievable learning goals.
- Participants can design effective and inclusive instructional materials, courses, learning environments, and curricula that align learning activities with learning goals and assessments.
- Participants have been exposed to the literature associated with teaching, learning and assessment.
- Participants can describe the Teaching-as-Research process and how it can be used to enhance student learning.
- Participants can describe the impact of learning communities on student learning.
- Participants participate in professionally-focused groups associated with teaching and learning.
- Participants recognize the diversity in their classrooms and the need to address that diversity in teaching plans.

CIRTL Practitioner

A CIRTL Practitioner has a level of knowledge and skills that allows them to be scholarly teachers, who use Teaching-as-Research to improve their practice. Scholarly teaching builds on what others have learned in an ongoing way, seeks evidence of learning, and uses evidence to improve practice. Scholarly teaching is an intellectual activity designed to bring about documented improvements in student learning and share them publicly (e.g., within a learning community). As such, scholarly teaching reflects a type of action research often focused on improved teaching practice. Specific outcomes might include:

- Participants at this level are reading the literature associated with teaching, learning, and assessment and are able to critique it effectively with peers.
- Participants at this level have started designing and implementing Teaching-as-Research projects for the classroom. From these projects they can recognize if student learning has occurred, but may not know why.
- Participants can demonstrate how their disciplinary research can inform their teaching.
- Participants are developing integrated learning communities with their students.
- Participants participate and contribute in local professional learning communities associated with teaching and learning (i.e., they are contributing to the goals of the group, based on their experiences). Through their participation, they also provide leadership within their disciplines.
- Participants are intentionally determining the diverse backgrounds among their students and designing teaching plans in response to those findings.
- Participants are engaging the diversity of their students in ways that enhance the learning of all.

CIRTL Scholar

Graduates-through-faculty who achieve CIRTL Scholar expertise have the knowledge and skills to add to our knowledge-base of teaching and learning through the sharing of the results of Teaching-as-Research projects with peers. CIRTL Scholars go beyond scholarly teaching and are driven by a desire to understand how students learn effectively and how teaching influences this process. Becoming a CIRTL Scholar requires in-depth understanding of the literature, critical reflection, and sharing findings with a local, regional, or national group of peers.

To achieve this level, graduates-through-faculty have been exposed to the core ideas of CIRTL, recognize the importance of implementing practices associated with each core idea for being an effective and improving teacher, and have designed, implemented (in the classroom), and have defended Teaching-as-Research project designs and results to peers (in education or discipline). These graduates-through-faculty have presented and/or published the results of Teaching-as-Research efforts to local, regional, national, or international audiences of their peers. This level represents a high level of engagement with CIRTL's core ideas through their application and defense of work. The CIRTL Scholar represents a high level of scholarly achievement, especially for graduates-through-faculty otherwise engaged in STEM careers, and so it is not expected that many seek this level of expertise.