

Teaching and Learning Centers at Very High Activity Research Universities (R1)

Centers for Teaching and learning (CTLs) at R1 institutions focus on initiatives for faculty development that support excellence and innovation in teaching with emphasis on the intersection of teaching and research. In the 21st century, there is an increased focus on disciplinary-based services while maintaining a campus-wide presence which supports the institutional initiatives that bring all faculty together in a united effort to impact student learning outcomes. Some centers are co-existing on campuses with STEM teaching centers, Engineering Educational units, and units in medical schools that support teaching.

CTLs are faculty-focused--on educational development specifically--so these units need to be mindful of the iterative process of change in teacher behavior in the instructional environment; observed, facilitated gains in student outcomes; and accompanying change in the beliefs instructors have in regard to the teaching portion of their job (Guskey, 2002).

CTLs at research universities typically focus on developing and supporting teaching excellence that positively influences student outcomes. The staff provide individual instructors, departments, and colleges with training and resources they need to implement new methods. For example: active learning models, problem-based learning, team-based learning, experiential learning, flipped classrooms, "scale-up", "flat and flexible" classrooms, and various hybrid course designs may all be supported in CTLs.

The two charts below are informed by research on the directions and impact of educational development, i.e. faculty development, at teaching and learning centers at research universities. The primary modes of design and delivery of services are focused on institutional and disciplinary needs, while work with faculty is founded on the use of these principal means:

1. Research and reflection on teaching (instructor's continuous improvement and scholarship of teaching)
2. Research inquiry into the effectiveness of teaching on student learning outcomes and, indirectly, retention (through large-scale educational research).

The situation at R1s continues to be fluid. According to Stensaker et al. "there has been a transformation of the role of academic development over recent years (Gibbs 2013; Knapper 2016). For example, in many European and Asian institutions, academic development has become more strongly linked to institutional strategic efforts and ambitions, is more involved in activities that are related to the structural and organizational context of teaching and learning." While Stensaker et. al. have a European focus, it is arguable that the same shift is occurring here in the United States, a slow shift that was accelerated by the efforts during the pandemic while faculty addressed abrupt shifts in teaching modalities and while demand may have dropped somewhat, CTLs are partners in efforts to address ongoing challenges.

In Figure 1 and Table 1 below, the effort is to present some of the frames and contexts for R1 CTLs, Figure 1 presents some typical foci and Table 1, with a list of focal approaches that can be adopted, represent the context and the many choices for CTLs. As a starting point, consider the results of combinations of choices along with other factors in positioning CTLs.

Centers at research universities share these key points in their mission and direction:

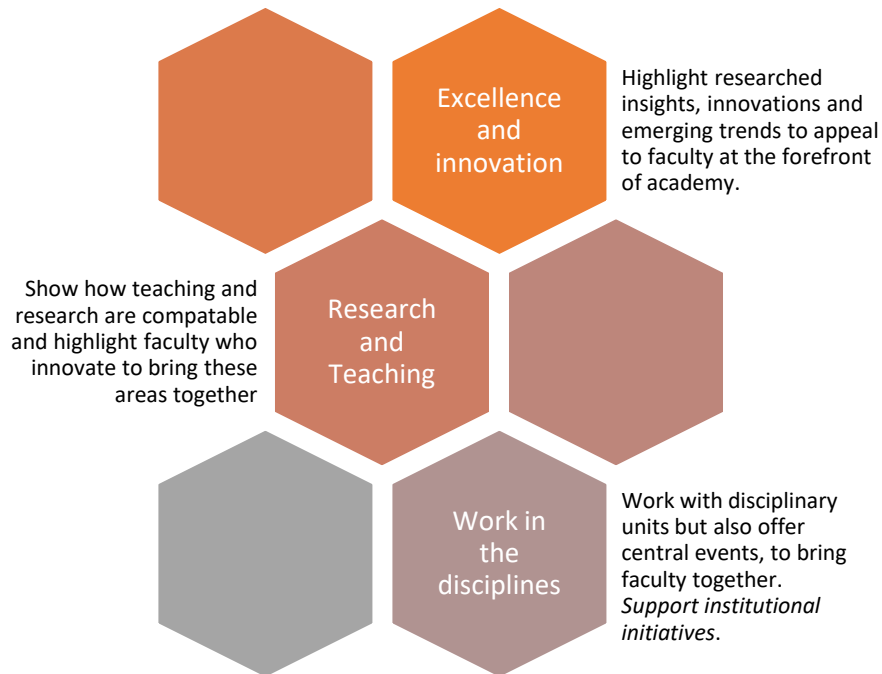


Figure 1: R1 Centers for Teaching and Learning

The following are common traits for centers at this type of university:

- **Emphasize teaching excellence** where the CTL mission is about innovation, not remediation, as more motivating to research faculty and more in line with institutional priorities.
- **Highlight programs that focus on research insights, innovative approaches, and emerging issues.**
- **Support cohorts or individual faculty**, with special attention to circumstances such as international faculty development, faculty with shifts in responsibility such as types of classes (i.e. from small to large lecture) and faculty new to teaching.
- **Approach research and teaching as complementary** not in competition but in a productive relationship; with focus on how faculty members use imaginative ways to make their two areas of responsibility is mutually reinforcing.
- **Direct CTL work toward departments and programs** (discipline-based work) to customize services e.g. retreats, workshops, research. Provide resources specific for their fields.
- **Offer some central programs** that bring faculty together, create a "critical mass" of expertise.
- **Support diversity and inclusivity initiatives broadly** (multicultural student identity, preparation levels, learning preferences).
- **Present CTL staff as informed by research and representing different disciplines** to create faculty buy-in. Align with faculty fellows, champions, opinion leaders/prominent researchers.
- **Develop visibility**, reflecting on university leadership as invested in teaching; CTL leaders are present at functions and recommend the center. S
- **Support institutional initiatives** i.e. new initiatives; be advocates and proactive (Sorcinelli, 2002).
- **Demonstrate good use of resources** and use of evaluation for programs, with continuous improvement. Staff holds some IT knowledge yet are able to focus with faculty on pedagogy and course goals.

The recent development of the guiding document, *A Center for Teaching and Learning Matrix*, created by the American Council on Education and the POD: Professional and Organizational Development Network (2017), can assist CTLS in reaching exemplary status at R1s.

CTLS can choose from the following educational development focal clusters and associated elements of thinking and design:

<i>Skills focus</i>	<p>Acquisition or enhancement of observable teaching skills and techniques Emphasis on observable skills and techniques (e.g., presentation skills) Largely generic, not discipline based. Focus of intervention is to support change in specific behaviors identified through course ratings, class observations, or self-reports. Assessment of impact is based on change in student perception (e.g., course ratings) or observable skills (e.g., class observation). Draws on relevant literature (e.g., individual consultations based on student ratings).</p>
<i>Method focus</i>	<p>Focus of intervention is to support change in specific behaviors Emphasis on learning about a particular teaching method and how to use it (e.g., problem-based learning). The elements that make up the method have integrity and coherence. Design of training models the method being taught. Assessment of impact based on how well the method is demonstrated during training (e.g., trueness to approach, consistency) and how widely adopted afterward (once training is finished). Draws on theoretical, ideological, or empirical literature relevant to the particular method.</p>
<i>Reflection focus</i>	<p>Change in individual teacher’s conceptions of teaching and learning Assumption is that reflections lead to conceptual change and that this in turn leads to change in teaching practice Design of activity is to prompt and support individual reflection. Includes a collegial element to aid individual reflection Assessment of impact based on individual change in conceptions about teaching and learning and sometimes the link from changed conceptions to new teaching practices. Draws on relevant literature (e.g., teaching conceptions, reflection).</p>
<i>Institutional focus</i>	<p>Coordinated institutional plan to support teaching improvement Top-down approach with the assumption that the initiative is useful and beneficial for all. Strategic planning involved. A focus on human resource development. Assessment of impact focuses on diffusion and uptake of the initiative. Draws on relevant literature (e.g., organizational change)</p>
<i>Disciplinary focus</i>	<p>Examine disciplinary understanding to develop pedagogical knowledge Assumption is that teaching is different (at least in part) in different disciplines because the structure of knowledge is different.</p>

	<p>Assumption is that academics identify best with their own disciplinary culture, knowledge, and practices and, therefore, disciplinary understanding is the foundation on which to build pedagogical knowledge.</p> <p>Activities are focused on scholarly discussion among colleagues.</p> <p>Assessment of impact is informal (e.g., participation in discussions, reflection portfolios, and ongoing teaching projects).</p> <p>Draws on relevant literature (e.g., discipline-based understanding).</p>
<p>Action research or inquiry focus</p>	<p>Individuals or groups of faculty pursue topics of interest</p> <p>Work is peer-based.</p> <p>Focus of the inquiry is chosen by the individual or group Involves mentoring among group members Inquiry process initiated by faculty, instructional developers, or both in collaboration.</p> <p>Assessment of impact is informal (e.g., reflection on course materials, action plans, dissemination of findings and materials produced by individual or group).</p> <p>Draws on relevant literature (e.g., communities of practice, scholarship of teaching and learning).</p>

Table 1: Six Modes of Faculty [Educational] Development (Stensaker, 2017)

Select Literature:

Amundsen, C., & Wilson, M. (2012). Are We Asking the Right Questions?: A Conceptual Review of the Educational Development Literature in Higher Education. *Review of Educational Research*, 82(90), 90–126. doi:10.3102/0034654312438409.

Brydges, S., Chilukuri, L., Cook, G., Feeley, M., Herbst, M., Tour, E., & Einde, L. Van Den. (2013). Building a Faculty Learning Community at a Research. *Currents in Teaching and Learning*, 5(1 & 2), 17–35. Retrieved from http://www.worcester.edu/Currents/Archives/Volume_5_Numbers_1_and_2/CURRENTSV5N1-2BrydgesetalP17-1.pdf

Cruz, L. (2018). The Idea of Educational Development: An Historical Perspective. *To Improve the Academy*, 37(1), 159–171. <https://doi.org/10.1002/tia2.20069>.

Gillespie, W. H., Robertson, K. H., & Bergquist, D. (2010). *Guide to Faculty Development: Practical Advice, Examples, and Resources* (2nd ed.). Hoboken, NJ: Jossey-Bass.

Guskey, T. R. (2002). Teachers and Teaching : Theory and Practice Teacher Change Professional Development and Teacher Change, 8(3), 381–391.

Schumann, D. W., Peters, J., & Olsen, T. (2013). Cocreating Value in Teaching and Learning Centers. *New Directions for Teaching and Learning*, (133). <https://doi.org/10.1002/tl.20043>

Stensaker, B., Bilbow, G. T., Breslow, L., & Vaart, R. van der. (2017). *Strengthening Teaching and Learning in Research Universities: Strategies and Initiatives for Institutional Change*. Springer.

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OTEL: Office of Teaching Effectiveness and Innovation