



TRANSFORMING HIGHER EDUCATION -
MULTIDIMENSIONAL EVALUATION OF TEACHING

A Study of Institutional Change to Advance STEM Undergraduate Education

ADVISORY BOARD MEETING – YEAR 5

May 4, 2022

[Link to meeting agenda](#)

Project Senior Personnel



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Executive Summary of 2021-2022 Activities

The TEval Project was originally slated to run summer 2017 - summer 2022. While we have had great success, it is clear, we will seek a no-cost extension to run the project to conclude in summer of 2023. The NCE is pragmatically driven because of delays associated with the COVID pandemic, slower project / spending rates, and the opportunities that the coming year provides.

The goals of the TEval project remain: to study and advance efforts for campus-based, systemic transformation of teaching evaluation to take more scholarly and developmental approaches; to build and share tools and processes for quality teaching evaluation; to study and share the processes of institutional transformation; to build knowledge exchanges within and across our multiple campuses; and to contribute to and advance the (inter-)national dialogues around the transformation of teaching evaluation in higher education.

Updates from the TEval Institutions

University of Colorado (CU). The CU efforts have exceeded our initial goals in terms of numbers of departments engaged and administrative up-take of protocols for teaching evaluation. By June 1, we anticipate that roughly 50 academic units (all of the academic units in the College of Arts and Sciences, and the College of Engineering and Applied Sciences) will have identified and externalized improved approaches for teaching evaluation that center around the common Framework (rubric or Benchmarks), mapped data sources and data collection processes from three key communities (students, peers, and self-review) to this framework. The coming academic year will focus on finalizing all units engagement (there will be stragglers), focussing on implementation (some units, but few have implemented these changes), and creating sustainable support for this work (to support campus-wide scaling, and continuous improvement of the > ½ of campus that has embarked on this project). The major shift / finding this year was to solidify commitment at the college level to complement the department level activity. The major challenge for this year has been to solidify the very highest levels of support (provost-level), which acknowledge the importance of the project and endorse but have not yet funded or sought to expand / institutionalize this work.

University of Kansas (KU). Most departments/schools in the first three cohorts have continued to implement and scale their transformed approaches to teaching evaluation, although progress is variable. Five units (Linguistics, French and Italian, Public Affairs and Administration, Chemical and Petroleum Engineering, and Philosophy) have succeeded in integrating the TEval approach into summative evaluation of teaching (promotion and tenure and/or annual evaluation), often in combination with formative approaches, and have provided good models for other departments. Chemical and Petroleum Engineering will build on and evaluate their TEval/Benchmarks work through their \$100,000 AAU [Department Demonstration Award](#). A sixth unit, the School of Social Welfare, voted to adopt their adaptation of the rubric for evaluation and visioning but is still working on implementation. Three units (Pharmacy Practice, Physics and Astronomy, and Sociology), are using the framework in more limited ways (e.g., formative peer review, peer review for third-year reviews and contract renewals, and an evaluation and peer

mentoring system for GTAs) but are working towards expanded use. Three departments have struggled to achieve or sustain progress because of the loss of key team members and leadership transitions, compounded by the stresses of the pandemic. The KU TEval/Benchmarks leadership team is continuing to expand use of the framework through several interconnected strategies. We created a Department Chairs Working Group in late Fall 2021 through Spring 2022 to promote the TEval approach but also to learn more about needs and concerns among department administrators to inform refinements of Benchmarks-related resources (guides, protocols, tools). Sixteen chairs participated, six from current Benchmarks cohorts. Five additional departments represented in the Working Group will join a fourth TEval/Benchmarks cohort in late Spring 2022. Third, a recent change in the university's student survey of teaching also allowed us to increase awareness of and interest in the Benchmarks framework and resources at both the unit and individual level. The new survey replaced a 1-5 rating scale and global judgments with three-point scales that focus on the frequency of use of effective and inclusive teaching practices. Instructors and evaluators can no longer rely on prior heuristics and must instead identify expectations for actual teaching behaviors, creating a new entry-point into the TEval/Benchmarks approach, which centers on defining what effective teaching "looks like." TEval leaders at KU worked with university administrators to promote a wide range of tools created for Benchmarks for Teaching Effectiveness, the framework on which the KU TEval implementation is built. The KU team also developed new tools including guides for instructor and supervisors on how to integrate student feedback into teaching evaluation, and a Guide for Peer Review and Dialogue about Inclusive Teaching, which was used to scaffold peer triad dialogue and reflection in a program on inclusive and anti-racist pedagogy.

University of Massachusetts Amherst (UMass). At UMass each of the nine engaged departments have been making continued progress. Because our participating departments have representation across four colleges (Computer Information and Computer Science, Natural Science, Public Health and Health Sciences, and Humanities and Fine Arts), the project has benefited from a meaningful cross-pollination of experiences and perspectives. This year four departments (ECo, Art, Physics, and Nutrition) have new department chairs and these leadership transitions have allowed us to observe, support, and learn from the ways in which core TEval elements have been successfully applied and championed within various department cultures. We have supported new chairs during these transitions (e.g. on-boarding meetings, facilitation, and organized conversation with previous chair and engaged faculty), as current departmental efforts were sustained, and to assist new chairs with envisioning further ways to integrate TEval to support holistic teaching evaluation. We continued monthly cohort meetings to provide guidance, tools, and application within departments (ranging from how to capture diversity, equity, and inclusion in teaching evaluation to compiling and evaluating instructor materials). We also held focused working meetings with individual departments, and meetings with the Deans of the four colleges, in which the nine departments reside, to share progress and keep them informed. Dean Serio of the College of Natural Sciences (CNS) is interested in supporting the expansion of the TEval process across the college. CNS has 3 departments engaged in TEval, with whom we have worked closely, to provide departmental examples that will be added to a "How to Guide" for non-TEval departments within CNS. The primary outcome for this year has been increased engagement, momentum lost during the pandemic has begun to rebound. The majority (7/9) departments have

Products. The TEval PIs have collaborated on several products this year, including a recent invited advice guide for the Chronicle of Higher Education on peer review of teaching, and both a poster and a workshop in the upcoming AAAS IUSE Summit. The poster centers on the approaches and accomplishments of TEval in the transformation of teaching evaluation, whereas the workshop focuses more broadly on systems approaches to change.

Lessons Learned from the Case Study Research

Even when nurtured with care, expanding, scaling, and sustaining good ideas can be challenging. Our project has sought to learn strategies for advancing change from initial idea to institutionally embedded, sustainable practice—specifically in terms of developing and implementing effective strategies for more comprehensive and useful evaluation of teaching. The University of Colorado Boulder, the University of Kansas, and the University of Massachusetts Amherst have taken a systems approach to developing and implementing innovative approaches to teaching evaluation, in service to the broader goal of improving the quality of undergraduate STEM education. Through our efforts to chronicle and examine what is occurring at each institution, and to engage in cross-campus comparisons of the approaches used to advance more effective teaching evaluation, we are learning overall about strategies for scaling change initiatives, and specifically, about strategies for fostering change in teaching evaluation.

Based on our study of what has occurred at the three “test-site” institutions, we have identified a number of strategies that facilitate change in teaching evaluation:

- Institutional cultural contexts matter. That is, specific strategies to effect change are most effective when aligned with institutional culture. Organizational features to consider when developing strategies for changing teaching evaluation include the level of support from institutional leaders at various organizational levels; the extent of resistance to the organizational change goal; traditions of faculty involvement in effecting change; the extent of centralization versus decentralization in decision-making processes; and the presence of faculty-based unionized bargaining units.
- The support of leaders at various levels of the institution is needed. Approaches to changing teaching evaluation are enhanced when there is involvement of leaders at various organizational levels. That is, effective plans include working from: the bottom-up (i.e., having a group of faculty members within a department who are committed to improving teaching evaluation); the middle-out (i.e., securing support from department chairs and leaders of teaching centers); and the top-down (i.e., gaining support from senior institutional leaders).
- An effective change strategy recognizes that approaches to teaching evaluation play out at multiple levels of the institution. The individual faculty member, the department, the college, and the institutional level. Therefore, a strategic and comprehensive change plan considers ways to address each of those levels. Examples of strategies that can be combined to take a systemic approach include: identifying and using “champions,” who are respected at various levels of the institution; enlisting the expertise of respected institutional leaders, such as directors of

teaching and learning centers, to provide guidance and resources; and encouraging and supporting department-level leaders who have the commitment to regularly and systematically advance the project work.

· When faculty interact as they strive to implement change, they support and encourage each other. An effective strategy is to create opportunities for discussion and exchange of ideas, resources, and concerns among the leaders of units involved in changing teaching evaluation. Cross-unit interaction and collaboration provides encouragement, support, and resources.

Next steps for research. The next steps in the research will focus on three key questions. Responses will be based on continuing interviews with Project PIs, leaders and participants in the departments involved, and institutional leaders interested in teaching reform. Continuing effort to refine and expand the case studies of teaching evaluation reform at each of the three institutions, and to do cross-comparisons, will also be helpful. The three key questions of focus are:

- **To what extent and how have the department-level efforts to change teaching evaluation become embedded and sustainable?** Sub-questions include: To what extent are the teaching reform efforts (experiments) we have been studying becoming integrated into department life? What form does such embedded change take? What facilitates movement toward embedded change? What are the barriers? What can reasonably be accomplished in what time periods?
- **In what ways have the experiments within the departments at the three institutions had institutional impact (including scalability and adoption/adaptation beyond the original departments)?** Sub-questions include: What is the nature of institutional impact? What has facilitated, and what has impeded, impact and scalability at the institution level?
- **As Project Leaders, what does the team think has been learned** that is useful to share with other institutions interested in improving teaching evaluation?

External evaluation

Evaluation activities for the 2021-2022 year continue to build upon the prior year's evaluation planning work, and these activities were carried out by the external evaluator (Mark Graham) and an evaluation staff member (Julia Gill) from STEM Program Evaluation & Research Lab (STEM-PERL) at Yale University. During Year 5 of this award, each TEval project site had available their visual, pathway map — which they created in Year 1-2 to depict their planned campus-based initiative activities and expected short-, medium-, and long-term outcomes. This included their project implementation plans for measurement and assessment that were project-wide as well as institution-specific. Sample activities from these maps include: onboarding and ongoing coordination with department teams, interaction with administration and other institutional units, and facilitation of cross-talk meetings across campus units. Due to a level of uniqueness in each institution's approach, there was variation in how campus-specific outcomes were identified, represented, and implemented. Now, in the later stages of this project, the current external evaluation plan is the following: a) revisit each of the three institutions' pathway models – as a benchmark or baseline – as well as written program descriptions (e.g., reports); and, then, b) identify i) the core

pathways of progress, ii) the supports and barriers to progress, and iii) any new or novel areas that emerged since the original pathway model was created.

Next Steps in TEval Work

Our vision of the next steps of this project (both over the last year of our current funding and in TEval2.0, should we secure funding) is to scale our work to transform teaching evaluation in three ways: scaling and deepening the work within the TEval campuses; expanding our network to include a broader set of institutions; and developing and disseminating resources and materials to promote and support the shift to higher quality teaching evaluation at scale.

Campus and TEval-wide work

The next steps of this project will include TEval campus and cross-TEval-campus based work. Our goals will be to: (i) scale and sustain work on each campus -- increasing the number of units engaged in transforming teaching evaluation and creating a mechanism for sustaining and continuously improving efforts on each campus; (ii) continue and scale collaborative work across campuses -- through knowledge exchanges or connecting associated / like-minded academic units; (iii) write about and continue to study lessons learned and practice-proven models for change within and across TEval campuses; and (iv) explore new models for each of the above (e.g. external peer review where one physics department from CU may be enlisted to conduct reviews at KU).

Expanding the Network

TEval has played a leadership role in a growing national dialogue around the need to transform the evaluation of teaching in higher education. This outcome was unanticipated when we developed the original proposal for the TEval project but emerged early in the project when it was clear that interest in this topic was rapidly accelerating across the nation and TEval had resources and examples to share. Our vision for our next phase of work (TEval. 2.0) involves intentionally building on the national conversation and activity by expanding the network of institutions that are a part of the TEval community. The goals of such an expansion include: (i) scaling change across a larger and more diverse group of institutions, through mentoring, consulting and/or community-building and cross-institution exchange of ideas, examples, and resources; (ii) continuing to shape and bring attention to the national dialogue and movement, building on the TEval evaluation model itself, lessons learned from our institution-level approaches to change, and a model of how to move collections of institutions; (iii) creating a larger and more robust and diverse pool of campus implementations from which to harvest lessons learned (e.g., usability testing, how approaches vary depend on institutional context) and research findings (e.g., testing the reliability, validity and fairness/ability to reduce bias of approaches and tools); and (iv) strengthen the work on our own campuses through increased visibility, legitimacy, and opportunities for social support and idea exchange.

Expanding the network may also facilitate another form of scaling that we are considering: scaling across instructional roles. In particular, we are interested in broadening this project to address teaching evaluation in ways

that are inclusive of all educators and instructional roles, rather than just the traditional, tenure-line research faculty, or even the teaching professors / instructional line faculty. We seek to consider systems that would be useful for the vast array of contingent faculty, graduate instructors of record, and all those invested in and engaged in teaching. We seek to continue to advance and support the national and international movements on teaching evaluation and how to link these conversations of teaching evaluation to the broader discussion on faculty work and evaluation. This TEval coalition is in a great position to contribute to and even scale these dialogues by bridging: on-the-ground work with academic departments to campus-wide work, to cross-campus- collaborations, to the national scale discussions.

As we plan this expansion, we will need to determine how to best grow and include new external partners to keep the integrity of the project including continuing to support the efforts on our own campuses. In addition to defining the nature of new partnerships (how would we work together, and what would we ask them to commit to), we will also need to identify the characteristics of new partners (e.g., what level of readiness?) and mechanisms for recruiting/inviting and onboarding new partners (e.g., an open meeting to create and define the network).

Developing and Disseminating Resources

During the final year of the grant, we plan to prepare a book of case studies accompanied by lessons learned about effecting transformational change in teaching evaluation. The book will begin with a section explaining the TEval approach, including discussion of the rubric designed to foster examination of multiple aspects of teaching via the use of multiple sources of data.

The second section (and the heart of the book) will focus on the department as the core unit of change. We will highlight several departments from each of the three participating institutions, asking authors from the institutions to follow a template to guide their writing so that chapters offer a parallel approach to discussing key topics. Such topics will include: the motivation for department-level work around changing teaching evaluation; the goals related to teaching evaluation in each department's plans; the strategies and approaches used for changing teaching evaluation; approaches to teaching evaluation using peer review, student evaluations, and self-reflection; changes in annual review as well as in high-stakes reviews such as tenure decisions; barriers encountered and strategies found effective.

A third section will focus on beyond-the-department mechanisms of change within the universities. This section will include college-level and institution-level processes to encourage change in teaching evaluation, as well as consideration of barriers and effective strategies for addressing barriers at the college and institutional levels. This section will treat each of the three core institutions involved in TEval as a case with particular cultural, structural, and political dimensions that together create unique contexts in which teaching evaluation occurs. The descriptions and analyses will enable readers to determine which institutional contexts most mirror their own..

A fourth section will include reflections on how a network of professional learning and support evolved among the three universities and how this network contributed to the emergence of a national network supporting change in teaching evaluation. This section will show how cross-institutional connections can foster institution-level change as well as ignite cross-national interest.

Finally, the book will conclude with cross-case analysis and reflections to highlight lessons learned about effective change processes to improve teaching evaluation. This section will provide lessons and suggestions appropriate for other institutions interested in advancing their own efforts to strengthen teaching evaluation.

Mechanisms and Timeline for TEval.2.0

Given these goals for next steps of the project and community, we see a variety of staged approaches to continue these vibrant efforts.

Short term-present to early summer: A workshop or community building proposal. We could imagine a gathering in fall 2021 of all parties interested in transforming teaching evaluation. This would be a multi-day public gathering in order to: continue community dialogs /discussions, build on the success of prior gatherings (e.g. NASEM Jan 21, or TEval Nov 2021), define what next steps are needed, and identify who is interested and who might partner on next steps.

Medium term- Fall 2022- Spring 2024 (with NSF Supplement, coordinated by CU, KU, MSU, for January 2023- Spring 2024). Building on the last year of this project, during our NCE year, we would be able to conduct work outlined in the proposal but not yet fully enacted. These areas of work include: preparing various write-ups (possibly a book) on teaching evaluation transformations, continuing the network building within and beyond campuses, and seeding a broader future efforts / national community.

Longer term: July 2023: Submit large scale IUSE to conduct TEval2.0. The subject of this grant will be determined by input from the advisory board, and will include the broader community (in writing, collaborating, participating, enacting). The subject of this work could be to scale the network, to link disparate communities, to create repositories, to conduct research studies on the scaling and/or inventories.