RESEARCH ARTICLE

Using a framework to assess teaching effectiveness (FATE) to promote instructor development and growth

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Abstract

This chapter proposes the need to define the qualities of effective teaching in higher education and introduces a framework to assess teaching effectiveness (FATE) that can be adapted by other institutions for evaluating teaching, with the goal of promoting instructor development and growth.

DEVELOPING A TEACHING EVALUATION FRAMEWORK

A report from the Commission on the Future of Undergraduate Education suggests that the undergraduate college experience must be improved to meet the demands of the evolving society in the United States. The report suggests strategies for improvement should include ensuring that students have high-quality learning experiences and that institutions increase their overall completion rates and reduce inequities among student groups; both strategies are directly related to teaching (The Future of Undergraduate Education, The Future of America 2017). The success of institutional efforts to improve teaching depends on the systemic commitments and investments made related to the teaching skills of its faculty and establishing the structures and mechanisms needed to hold institutions and faculty accountable for their role in student learning (The Future of Undergraduate Education, The Future of America 2017). Improving the student outcomes of learning, persistence, and completion is a wicked problem in that there are several adjacent issues (faculty culture, institutional structures, societal inequality and oppression, and so on) that directly and indirectly impact student success (Bass, 2020; Wise et al., 2022). A key aspect of this problem is teaching, and teaching in itself is a complex issue that is rooted in the community and culture created by the content area, department, institution, policies and structures, as well as economic, social, and political influences (Alton-Lee, 2003; Ambrose et al., 2010; Bass, 2020; Baum and McPherson, 2019; Stoller, 2020).

A major hurdle in achieving improvements in teaching in higher education, which is directly tied to the culture, institutional structures, and policies, is the perception that institutions place greater value on research productivity compared to teaching effectiveness. In *Scholarship Reconsidered*, Boyer asserts, "For teaching to be considered equal to research, it must be vigorously assessed, using criteria that we recognize within the academy, not just in a single institution" (Boyer, 1990, 37). Furthermore, an institution should use

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"research-based guidelines for measuring teaching practices" (Stains et al., 2018, 1470). However, current teaching evaluation practices are inadequate, nebulous, and inaccurate in many higher education contexts and often rely only on student course evaluations and peer observations which provide an incomplete perspective and may or may not provide sufficient actionable feedback or incentivize teaching improvement (Berman, 2003; Fink, 2008; Myyry et al., 2020; National Academies of Sciences, 2020; Shadle et al., 2017; Stupinsky et al., 2018). Thus, there is a need for a more robust and objective approach to assessing teaching.

Defining effective teaching

The first step in developing an assessment plan is to identify and define what is to be evaluated (Arreola, 2000; Berman, 2003) and when it comes to teaching in higher education, this is a challenge in and of itself. Merriam-Webster defines learning as "knowledge or skill acquired by instruction or study" and the "modification of a behavioral tendency by experience" (Merriam-Webster, 2018). Teaching is defined as "to cause to know something," "to guide the studies of," and "to impart the knowledge of" (Merriam-Webster, 2018). Thus, teaching is helping others acquire knowledge or skill and/or modify their behavior. Therefore, teaching assessment might simply be demonstrating that students have acquired the necessary knowledge or skill and/or desired behavioral change. However, teaching and learning are not that simple, as students' prior preparation or knowledge and experiences, social interactions within and outside the classroom, environmental interactions, cognitive development, learning preferences, etc. all play a role; in fact, just 59% of the variance in student performance can be attributed to the teacher and class (Alton-Lee, 2003; Karplus & Thier, 1967; National Academies of Sciences, 2020; Tolman & Kremling, 2017). According to Bray, Chew, and Cerbin (2017), "the everyday reality of education: teaching and learning are complex and hard. They are complex and hard because we don't know the exact conditions in which student learning will occur. How people learn depends on multiple interacting factors that defy any one-size-fits-all solution" (1).

So, simply demonstrating knowledge/skill acquisition or behavior change is not sufficient for defining "good teaching" and because learning is so complex, so is teaching (Benton & Young 2018; Fink, 2008; Gurney, 2007). There are many different facets of teaching: course planning, content and web development, course material construction, instructional activity design, information presentation, assessing and evaluating learning, and providing feedback and motivation (Arreola, 2000; Franklin, 2001; Seldin, 2000). Finally, a broad definition of teaching derived from multiple perspectives (Arreola, 2000; Berman, 2003; Boyer, 1990; Fink, 2003; McCabe & Layne, 2012) is needed at the institutional level so that all content areas and departments can see their teaching reflected in that definition. Thus, it is not surprising that effective teaching is often left undefined at institutions and in university policies.

There are three levels of professional knowledge that influence teaching, and thus the learning experience for students (Pallas et al., 2017). It is generally assumed that when someone is hired within a college or university department, they have the first level of professional knowledge—content knowledge (Pallas et al., 2017). The other two levels of professional knowledge are general pedagogical knowledge and content pedagogical knowledge (Pallas et al., 2017). General pedagogical knowledge represents the general teaching tools that are broadly applicable across disciplines while content pedagogical knowledge requires an appreciation of students' prior understanding, core concepts, threshold concepts, and how to help students think like subject-matter experts (Pallas et al., 2017). These two levels of professional knowledge are often missing because of

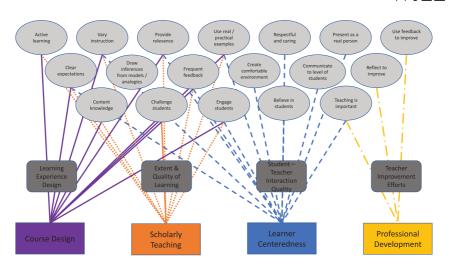


FIGURE 1 Teaching roles, attitudes, and actions; the four common elements of teaching; and the criteria for effective teaching.

the general lack of teaching preparation provided to many faculty and are not formally assessed in many systems (Robinson & Hope, 2013). This problem is highlighted in the Commission report referenced earlier, "Widespread inattention to teaching quality in the preparation, selection, and assessment of faculty is a major obstacle to improved undergraduate student learning" (*The Future of Undergraduate Education, The Future of America* 2017, 22).

Teacher preparation is more extensive for kindergarten through 12th grade (K-12) and frameworks for assessing teaching are common in K-12 public schools (Danielson, 2014); however, there are no widely used frameworks in post-secondary teaching (Fink, 2008; "New Mexico State University Teaching Academy" 2016; "Teaching Quality Framework Initiative" 2017). Thus, in 2017, due to a desire to assess teaching more robustly, accurately, and holistically, we engaged in developing a framework to define and assess effective teaching.

Figure 1 identifies 18 teaching roles, attitudes, and actions that were found in the literature (Arreola, 2000; Franklin, 2001; Seldin, 2000); these were then grouped into four common elements of teaching which include course design, learner-centeredness, scholarly teaching, and reflective practice (Arreola, 2000; Berman, 2003; Boyer, 1990; Fink, 2003; Danielson, 2014; McCabe & Layne, 2012). These four elements then became the basis of our definition of effective teaching: effective teaching is characterized by a focus on the learner and learning and includes the establishment of learning outcomes that align and guide course design; the utilization of a variety of evidence-based instructional practices and assessments; and engagement in continuous improvement through reflective practice and ongoing professional development on the part of the educator.

The framework for assessing teaching effectiveness (FATE)

The framework for assessing teaching effectiveness (Simonson et al., 2021) was developed from the definition above and the four elements of effective teaching by translating these into a rubric. The four elements of effective teaching each became a criterion for effective teaching in the rubric (Arreola, 2000; Berman, 2003; Boyer, 1990; Brancato, 2003; Cornelius-White, 2007; Danielson, 2014; Fink, 2003; McCabe & Layne, 2012; Mrig et al., 2014; Richlin,



2001). The rubric, summarized in Table 1, further defines each criterion and establishes a spectrum of achievement for each. The framework and rubric are intended to define and capture the complexity of effective teaching and be flexible enough to accommodate different teaching/pedagogical approaches, philosophies of teaching and learning, instructional modes, and environments. The four criteria are described in more detail in what follows.

Course design

Course design focuses on alignment between course learning outcomes, assessment, and learning activities. This includes the quality of the course learning outcomes themselves and the ways the outcomes drive the course design process. The criterion also aims to evaluate the extent to which summative assessments measure student achievement of the course learning outcomes and require students to demonstrate learning. Finally, the criterion addresses the degree to which the learning activities used in the course are aligned with the course (semester-long) and class (daily) learning outcomes as well as the summative assessments.

Scholarly teaching

Scholarly teaching is the implementation of a variety of evidence-based instructional practices and assessments to best support student learning and their development as learners. This criterion includes the extent and ways situational factors have been considered across all aspects of course design. It also evaluates the degree to which evidence-based instructional practices form the foundation of one's approach to teaching, as well as the frequency and variety of these practices. Finally, the criterion includes the extent to which summative assessments adhere to good practices and the use of formative assessments to guide one's teaching.

Learner-centered

Learner-centeredness is the design of a course and the use of course materials that focus on learning and the learner. This criterion considers what takes place during a single class session and over the whole semester with an emphasis on the ways that students engage with the course content (variety of learning activities), one another, and the instructor. The criterion also examines how the instructor intentionally creates a particular learning climate during and outside of class time for face-to-face and remote courses or within the online space for online courses, for example, through how they communicate with, interact with, and support students. The criterion also examines the inclusivity of course materials, for example, intentionally creating a class climate that promotes a sense of belonging and which values diverse contributions, and respects individual differences. Finally, the degree to which students are achieving the course learning outcomes is included.

Reflective practice

Reflective practice drives continuous improvement of teaching via the consideration of feedback from a variety of sources (students, peers, Center for Teaching and Learning, department, self) and seeking a variety of approaches to professional growth. The

TABLE 1 FATE rubric—Criteria for exemplary achievement.

CRITERION 1: Course design: Designs course materials in alignment with course learning outcomes

Exemplary teachers will design their courses around appropriate course learning outcomes, design a variety
of summative and formative assessments, which effectively measure student achievement of those
outcomes, and create course activities that support students in reaching the course learning outcomes.

1.1. Course learning outcomes guide the course design process	 course learning outcomes are present for all courses course learning outcomes all meet the CALMS criteria (Clear, Attainable, Learning- focused, Measurable/ observable, and Specific) course learning outcomes encourage discipline-specific ways of thinking narrative explains how course learning outcomes are intentionally integrated into course design
1.2. Alignment of summative assessments with course learning outcomes	 multiple examples of summative assessments which align well with course learning outcomes are included the alignment between summative assessments and course learning outcomes is explicitly made for students
1.3 Alignment of learning activities with course learning outcomes	 examples of learning activities are included learning activities are aligned with course and/or class learning outcomes and the connection is explicitly communicated to students learning activities are aligned with summative assessments (i.e., appear to support students in being prepared to complete these assessments) intentionally scaffolds student learning
CRITERION 2: Scholarly teac	hing: Implements evidence-based practices
Exemplary teachers will impl	lement a variety of evidence-based instructional practices in their daily teaching
and assessments to best su	pport student learning and students' development as learners. Note: The
instructor does not need to	cite the literature regarding EBIPs, but can refer to EBIPs from this list; use of
additional EBIPs is also en	couraged.
2.1 Situational factors guide course design	 ☐ all situational factors have been considered across multiple courses Demonstrates multiple ways in which situational factors are considered in: ☐ course materials ☐ assessments ☐ learning activities
2.2 Use of evidence-based instructional practices (EBIPs)	 ☐ regularly uses <u>EBIP</u>s in course delivery and learning activities every semester and in multiple courses ☐ uses a variety of EBIPs strategically chosen for a given course context ☐ provides a sound rationale for their use of particular EBIPs
2.3 Summative assessments follow good practices	 ☐ multiple examples of summative assessments from different courses are included and examples collectively demonstrate the following: ☐ are authentic/forward-looking ☐ integrate principles of UDL (e.g., in varied formats, offer students choices) ☐ follow the transparent assignment framework (define purpose, task, criteria)
2.4 Formative assessment is used to guide instruction	 ☐ formative assessment is carried out regularly in all courses ☐ a variety of formative assessments are used to monitor student learning (e.g., going beyond minute paper + muddiest point) ☐ formative assessments support students in monitoring their learning ☐ formative assessments guide instruction

(Continues)



3.4 Students achieve learning outcomes

TABLE 1 (Continued)

CRITERION 3: Learner-centered: Uses an inclusive, learner-centered approach

than the instructor, and implement inclusive teaching practices which reach all learners and provide students with opportunities for success. 3.1 Student engagement in students engage with content through active learning for more than 50% of a learning activities class period on average students engage with one another consistently (daily/weekly depending on course meeting frequency) throughout a course learning activities are varied throughout class sessions and over the semester to engage students in different ways ☐ learning activities encourage discipline-specific ways of thinking intentionally creates a class climate that promotes a sense of belonging 3.2 Learning climate established by instructor intentionally creates a class climate that values diverse contributions & respects individual differences in the classroom builds a positive rapport with students (face-to-face or online) designs course to intentionally enhance student motivation 3.3 Learning climate established by instructor chooses course materials (texts, readings, images) that are inclusive ommunicates effectively outside of the classroom provides timely feedback provides learning support for students outside of the classroom

Exemplary teachers will design courses and course materials that focus on learning and the learner, rather

Criterion 4: Reflective teaching: Practices reflective teaching to drive continuous improvement of teaching Exemplary teachers will be reflective practitioners who use feedback from a variety of sources (students, peers, Center for Teaching and Learning, department, self) to seek a variety of approaches to continuously improve as teachers.

better on aligned summative assessments)

outcomes over multiple courses

noutinely monitors the degree to which students achieve course learning

>90% of students are achieving course learning outcomes (passing grades or

4.1. Professional development	 engages in professional development opportunities related to teaching and learning more than 4× per year (on average) engages in more "intensive" professional development opportunities (e.g., book circle, faculty learning community, a community of practice, etc.)
4.2 Reflection and continuous improvement	 (over the course of each year): ☐ uses multiple sources of feedback about one's teaching ☐ reflects on the evidence and feedback objectively, considering strengths and weaknesses ☐ makes intentional changes to one's teaching based on the feedback and reflection

This table includes only the criterion for exemplary achievement. The full rubric includes four levels of achievement (missing/does not do, demonstrating, proficient and exemplary) with the criterion for each level.

frequency with which one engages in professional development around teaching and learning as well as the types of professional development the instructor engages in are considered. In addition, it includes the ways information is gathered about their teaching from different sources, how one reflects on that teaching with an eye toward improving learning, and the changes they make in response to those observations and reflections.

As evident from these four criteria, multiple sources of evidence are needed to assess teaching and a combination of quantitative and qualitative data that document student learning, the student experience, and the teacher's humanity should be used (North, 1999). The works of Boyer, Arreola, and Berman indicate that there are different types of evaluative data to be considered when assessing teaching (see Table 2) (Arreola, 2000; Berman, 2003;

TABLE 2 Evaluative data and who can provide it for the assessment of teaching (Arreola, 2000; Berman, 2003; Boyer, 1990).

Teaching-related data	Students	Peers	Department review	External review	Self
Content expertise		X	X	X	X
Course design		?	X	X	X
Content and course materials design	?	X	?	X	X
Instructional activity design	X	X	?	X	X
Information presentation	X	X	?	X	X
Student learning	?	?	?	X	X
Assessing learning	?	;	?	?	?
Providing feedback and motivation	X				X
Student/Teacher interactions	X	;	?		X
Course management			X	X	X
Faculty development			X	X	X

X indicates that with a properly designed tool and or training, these persons can provide the indicated data. The question mark indicates that these persons might be able to provide the indicated data based on the context and their level of expertise.

Boyer, 1990). In addition, an appropriate formative and summative evaluation system for these data should be: (Arreola, 2000; Berman, 2003; Boyer, 1990)

- encouraging of periodic self-evaluation,
- · explicit and public,
- · flexible.
- supported by the highest level of administration,
- linked to formative evaluation,
- linked to planned change strategies.
- · reliable,
- · time and cost-effective, and
- · valid and comprehensive.

Thus, faculty document their teaching practice by including multiple sources of teaching-related evidence that illustrate teaching effort and effectiveness, including student work, course materials, the rationale for instructional choices, summaries of midsemester evaluations, and so on (Seldin, 2000). These materials can be collected in a teaching portfolio and/or tenure and promotion dossier (Berman, 2003; Boyer, 1990). Teaching portfolios are not new; rather, it is the framework and accompanying rubric for evaluation of the portfolio that moves assessment forward. Past perceptions of portfolios may have been that they were a nice way to document teaching but unconnected to the evaluation process (Seldin, 2000). This framework and rubric rectify that issue.

IMPLEMENTATION OF THE FRAMEWORK FOR ASSESSING TEACHING EFFECTIVENESS

After developing the framework and rubric, we conducted a 3-year study of the implementation of FATE and the conditions that support or impede its application. The rubric was revised, and the following content is based on our insights and lessons learned.

Feedback about the framework, rubric, and the process of building and evaluating portfolios was collected from faculty members who have either built a teaching portfolio or who have evaluated those portfolios. They indicate that the strengths of the framework are that it provides clarity around institutional teaching expectations and enables a more equitable evaluation process compared to other processes. In addition, the framework provides a structure for compiling information about teaching efforts while capturing a comprehensive snapshot of teaching that illuminates the multiple elements related to teaching effectiveness. Faculty also felt that the framework helped them shift their thinking about documenting their teaching efforts including the amount/level of documentation, as well as what and how to document. The process also drives reflection and the formation of a continuous improvement plan. Finally, it provides a common language and shared understanding about teaching among faculty.

When creating a portfolio for evaluation, the presentation of evidence and the accompanying narrative are critical to guiding the evaluation process and helping the evaluator see what the teacher and students do, the teacher's intentions, what factors shape their courses, what happens in the courses, and what the student experience is. The teacher's voice, the student's perspective, and input from those with disciplinary expertise and teaching expertise are critical. Thus, building a comprehensive teaching portfolio with a variety of evidence and perspectives is crucial to the robust assessment of teaching effectiveness.

Building and using the teaching portfolio

Building a FATE-aligned teaching portfolio can be a daunting task; it is not meant to be undertaken for a single evaluation period. Instead, instructors would benefit from building their portfolio incrementally, perhaps by (1) doing one criterion per year, (2) doing one row in each criterion per year, or (3) starting with evidence from a single class. The portfolio can then grow systematically year by year. Doing this allows individual instructors to monitor their teaching in different ways using the FATE framework. For example, an instructor could use the framework and rubric as a guide to identify areas that they are unfamiliar with or areas where they already know they are struggling and then build their skills in those areas. They might also identify areas where they use the teaching practices described but do not have sufficient evidence to document their practices. In these cases, a concerted effort could be made to collect more evidence for a particular criterion. Additionally, an instructor could build a portfolio to demonstrate their teaching practice and *then* complete a self-assessment with the rubric to identify strengths and areas for improvement. In all cases, the instructor might then choose to engage in targeted professional development and/or skill building with the rubric guiding their efforts.

Once the rubric has been used formatively to identify an instructor's current teaching practices, the instructor, on their own or in collaboration with a department chair or tenure review committee, can establish an improvement plan. The plan might identify any combination of the following:

- criteria within the framework where the instructor has room to improve their teaching practice,
- a plan to learn more about the teaching practices described by the framework and rubric,
- specific changes that could be made to the course(s) taught by the instructor so that the practices in the rubric are more present in those courses,

- specific changes that could be made to the portfolio narrative itself to describe the practices the instructor already uses, and/or
- criteria for which additional evidence is needed in support of the portfolio narrative.

The action plan should be documented and the subsequent actions that are taken noted so that the instructor can include that reflection as part of criterion 4.2 (Reflection and Continuous Improvement).

Review of teaching for formative and summative assessment

It is intended that FATE be used formatively as part of the annual evaluation process and/or pre-tenure review of an instructor to see where their teaching-related strengths lie and to identify areas for improvement. In this case, the instructor develops a teaching portfolio to highlight their teaching practice in line with the framework and a department chair or review committee uses the rubric to evaluate the portfolio. Because this is not part of an official promotion decision, the feedback is meant to guide the future development of the instructor's teaching practice and to highlight areas where they might focus their attention.

The formative assessment process should be ongoing, perhaps happening every year or every other year. At each time interval, a reflection on the changes that have been made as a result of the continuous improvement plan can be included as part of the portfolio narrative. A new continuous improvement plan is then developed for the upcoming assessment period.

For each teaching portfolio evaluation, it is recommended that there are at least two evaluators (more are better) independently scoring the rubric; at least one evaluator should have content knowledge or expertise in a similar discipline and another with expertise in teaching and learning. A panel format is used to come to a consensus on the portfolio. Evaluators first independently review the portfolios and complete the rubric and include comments explaining the rationale for their ratings. Reviewers then meet and discuss the rubric criteria by criteria and explain the rationale for the scoring. They come to a consensus and include pertinent comments for feedback.

The framework and rubric can also be used summatively as part of a tenure and/or promotion decision. In this case, the candidate creates a portfolio, and that portfolio is evaluated by a department chair or review committee using the rubric; best practices for each of these steps are described above based on lessons learned in our work. One key feature of the framework is that there is no predefined expectation of the level at which instructors should be performing. Instead, departments can establish their expectations for instructors. Examples of the expectations that might be set are (1) an instructor is at least proficient in every row, (2) an instructor is at least proficient in some defined number of rows, (3) an instructor has a defined number of rows where they are exemplary, or (4) in cases where the rubric has previously been used for formative assessment, that the instructor has improved in specified ways based on past performance.

Institutional support for teaching assessment

Changing the way teaching is evaluated may require teachers to teach more intentionally and to deliberately collect evidence of their teaching and student achievement throughout the course design and implementation processes. Thus, institutions should provide compensation and professional development opportunities for faculty to learn about and be supported in implementing specific practices and to reward both effective and improved teaching. At our institution, there is already a well-established *Center for Teaching and*

Learning with robust program offerings. To support the FATE framework, workshop and professional development offerings are sorted by their alignment with FATE and recommendations for additional offerings are made when gaps are identified, or a clear need arises from those developing portfolios.

In addition to possibly needing to learn about the teaching practices described in FATE, faculty may also need support when building a teaching portfolio that provides multiple sources of evidence and writing a narrative that explains what the evidence is demonstrating. Just like in teaching, it is not fair nor appropriate to expect teachers to successfully complete an assignment without appropriately scaffolding the process. Thus, several resources are provided to support that process as faculty build their portfolios. For example, workshops and/or training sessions have been developed for and aligned with FATE, such as a workshop designed to introduce faculty to the tool and to foster dialogue and understanding about the framework and another to help faculty build their portfolios. We have also used a more intensive support process via a *Faculty Learning Community*. Additionally, professional development offerings through the institution's Center for Teaching and Learning related to the components outlined in the framework were leveraged and promoted to help faculty learn about and adopt specific practices.

Additional resources are also available to faculty including a companion document for the rubric, a *Tips and Tricks* document, and a classroom observation protocol aligned with FATE. The rubric companion document clarifies what each row is designed to assess, defines teaching-specific terms, identifies possible sources of evidence for each criterion, and provides additional resources for taking a deeper dive into the criteria. *Tips and Tricks* helps to guide the compilation and presentation of teaching-related evidence and describes steps and suggestions for writing a teaching narrative, the types of evidence to include from specific sources, various formats, and tools for creating a portfolio, as well as example portfolios. The classroom observation protocol was developed to serve as a source of evidence to be used in the portfolio and focuses on Class Structure and Organization, Instructional Strategies, Class Content, Facilitation Skills, Asking and Answering Questions, Class Climate, and Presentation Skills. For each category, there are 2–8 items that map directly to the FATE criteria. Observers score each section as "demonstrated competently," "demonstrated with room for improvement," "not observed," or N/A. Guidelines for pre- and post-observation conferencing are also included in the protocol.

Another critical component for the successful implementation of the framework is support for the evaluation process. To support faculty evaluating teaching portfolios, a workshop series was developed to introduce evaluators to the framework and rubric and to foster dialogue and understanding among evaluators. Next, evaluators completed a series of calibration meetings where three sample portfolios were scored using the rubric; subsequent discussion and consensus building took place to ensure a reasonable degree of consistency between raters. In addition, an evaluators' manual has been developed for the framework and rubric. This guidebook goes beyond the portfolio builders' resources to provide a greater depth of detail about each of the criteria and through which lens a reviewer might consider the evidence. This onboarding process is intended to enhance understanding and reduce subjectivity in applying the framework to assess teaching.

IMPLICATIONS FOR ADVANCING COLLEGE-LEVEL TEACHING

Institutions need to do more to advance college-level teaching. As in our classrooms, the drive should be to create a norm of a holistic and flexible approach to assessing teaching that is both transparent and consistent across the university and multiple institutions. The framework defining effective teaching and the evaluative criteria for that framework

provide a common language and shared understanding about teaching and enhance clarity around institutional teaching expectations. This enables a more equitable evaluation process. (Arreola, 2000; Berman, 2003) A framework and the associated evaluative criteria aid instructors by providing a structure for compiling information about their teaching and helping them create a comprehensive picture of teaching that illuminates the multiple elements related to teaching effectiveness. The process can guide reflection and the development of a continuous improvement plan. The goal is to improve summative assessment of teaching by emphasizing ongoing formative assessment, engagement in a process of continuous improvement, and reflection. This will lead to improved teaching practices and increases in student success as measured through classroom engagement, course grades, persistence, retention, and graduation. It will also lead to improved faculty satisfaction and retention through clear and transparent teaching expectations and equitable assessment practices.

SUMMARY OF NATIONWIDE EFFORTS

The issue of assessing teaching in higher education is gaining more attention; there are several institutions undertaking efforts like what is described here ("Framework for inclusive teaching excellence" 2023; "Benchmarks for teaching effectiveness" 2023; "Quality teaching framework" 2023; "Teaching Quality Framework Initiative" 2017). All involved recognize the complexity and multifaceted approach required. A survey of some of the resources available on the internet finds that many of the developed frameworks consider essentially the same criteria and present them in similar and dissimilar ways. At Boise State University, we have developed the Framework for Assessing Teaching Effectiveness (FATE) as described here and this has played a significant role in the revision of the policy for the use of student evaluations of teaching and the current deeper, robust, and more encompassing policy for assessing teaching effectiveness currently in review in the Faculty Senate. It is important for institutions to communicate clear expectations about the process and to establish policies to support these practices. There are many other institutions making progress in this area and this is only a small sampling.

In addition, there are national collaborations to address effective teaching assessment. The National Academies has convened workshops to encourage changes in the way teaching is assessed in higher education. The Accelerating System Change in STEM Higher Education has also conducted workshops and meetings with the American Association of Colleges and Universities to address teaching assessment and institutional change. The Association of Public and Land-grant Universities has undertaken efforts to assess teaching and reform STEM education. The National Science Foundation has funded a study of the change process via the "Transforming the Evaluation of Teaching: A Study of Institutional Change" (TEval) project integrating multiple institutions.

Thus, the need to change teaching assessment is recognized and many are attempting to address it and overcome institutional inertia to improve teaching and, consequently, learning. Because of this, many centers and individuals are willing and able to help move teaching assessment forward.

VISION FOR COLLEGE-LEVEL TEACHING

With the improved assessment of teaching and the movement that we have seen at Boise State University and other institutions, we envision a university education system in which inclusive, learner-centered teaching is appropriately assessed, recognized, and rewarded. We anticipate that evidence-based, learner-centered instruction will be valued and that inclusive practices that optimize both the student and teacher experience will be the norm. In addition, an accurate and reasonable assessment of teaching effectiveness will be utilized, resulting in reflective professional growth that will be encouraged and supported. With this ongoing, we will grow and improve as teachers and students will learn more effectively and make greater contributions to their futures.

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