Putting the Teaching Quality Framework Initiative Into Action:

A case-study comparison of three departments engaged in transforming teaching evaluation

Sarah E. Andrews, Jessica Keating, Joel Corbo, Mark Gammon, Daniel Reinholz, and Noah Finkelstein



ASCN Transforming Institutions Conference April 4, 2019

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Visit us at:

https://www.colorado.edu/teaching-quality-framework/ (TQF) http://teval.net/ (multi-institutional umbrella project TEval)



Why change current teaching evaluation practices?

Take 45 seconds to talk to your neighbor:

What is one reason to change practices?

OR

What is one thing you would change about current teaching evaluation practices?

Why change current teaching evaluation practices?

- Scholarly approach
- Improve reputation
- Help faculty navigate RT&P processes
- Help faculty become better teachers/support faculty in their growth
- Improve student outcomes
- Align values to evaluation

- Multiple voices (from students, from peers, from self-reflection)
- Add qual/de-emphasize quant
- Evidence-based, reliable measures
- De-emphasize SETs
- Eliminate or reduce bias
- Consistency/ability to compare growth over time

AAU Undergraduate STEM Education Initiative

FRAMEWORK

FOR SYSTEMIC CHANGE IN UNDERGRADUATE STEM TEACHING AND LEARNING

Journal of Faculty Development

Start Spreading the News: Use Multiple Sources of Evidence to Evaluate Teaching*

By Ronald A. Berk

Best Practices in the Evaluation of Teaching IDEA Paper #69 • June 2018



Stephen L. Benton, The IDEA Center • Suzanne Young, University of Wyoming

FACULTY FOCUS

AUGUST 20TH, 2012

Transforming Teaching through Supplementary Evaluations

Searching for Better Approaches:

Effective Evaluation of Teaching and Learning in STEM



Published by Research Corporation for Science Advancement

THE CHRONICLE OF HIGHER EDUCATION

Colleges Are Getting Smarter About Student Evaluations. Here's How.

Liberal Education

Higher Education **38:** 351–371, 1999. © 1999 Kluwer Academic Publishers.

Faculty evaluation: A prickly pair

MICHAEL MILLS & ADRIENNE E. HYLE

EVALUATING AND IMPROVING

UNDERGRADUATE TEACHING

IN SCIENCE, TECHNOLOGY, ENGINEERING. AND MATHEMATICS

InSight: A Journal of Scholarly Teaching

Now is a Good Time to Recognize Teaching as Serious **Intellectual Work**

Dan Bernstein, PhD

Rethinking the Student **Course Evaluation**

How a Customized Approach Can Improve Teaching and Learning

By: W. Lee Hansen

Promoting Scholarly Evaluation of Teaching: Addressing the Third Rail of Academia

by Noah Finkelstein and Jessica Keating

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NATIONAL ACADEMY OF SCIENCES



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Student Evaluations. F

Liberal Education

Rethinking the Course Evaluat

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TRANSFORMING HIGHER EDUCATION -MULTIDIMENSIONAL EVALUATION OF TEACHING ERING, AND MATHEMATICS

Sight: A Journal of Scholarly Teaching

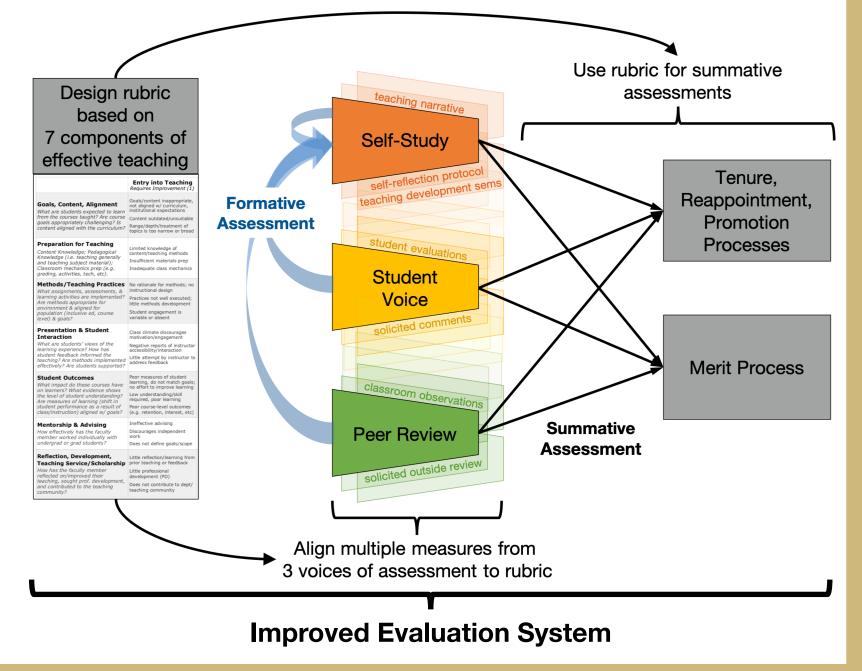
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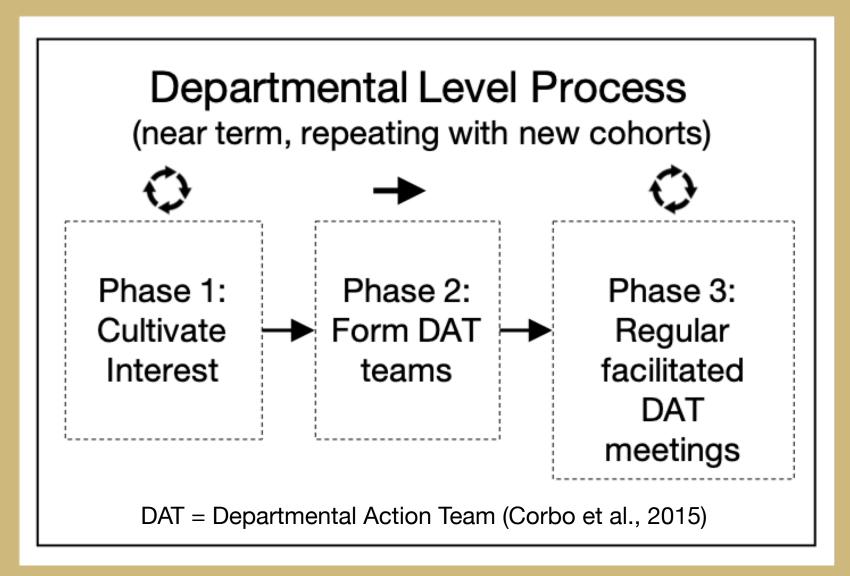
by Noah Finkelstein and Jessica Keating

	Entry into Teaching Requires Improvement (1)	Basic Skill Competent (2)	Professional Professional (3)	Advanced Advanced (4)
Goals, Content, Alignment What are students expected to learn from the courses taught? Are course goals appropriately challenging? Is content aligned with the curriculum?	Goals/content inappropriate, not aligned w/ curriculum, institutional expectations Content outdated/unsuitable Range/depth/treatment of topics is too narrow or broad	Most goals/content are articulated & appropriate for topic, students, curriculum Standard, intellectually-sound materials & content Range/depth/treatment of topics generally appropriate	Goals/content/materials have high quality elements; are current, appropriate, aligned Range/depth appropriate, integrated across topics Some innovation/connection to current research	Goals/content connect to curricular, programmatic, dept goals Content integrates across topics/courses, is innovative, challenging, connects to current research
Preparation for Teaching Content Knowledge; Pedagogical Knowledge (i.e. teaching generally and teaching subject material); Classroom mechanics prep (e.g. grading, activities, tech, etc).	Limited knowledge of content/teaching methods Insufficient materials prep Inadequate class mechanics	Standard understanding of content/teaching practices "Standard" materials prep Adequate class mechanics	Knows subject deeply, incl. current/related research Evidence-based teaching practices/methods/materials Excellent syllabus/materials	Very knowledgeable about classroom teaching practices Activities for common challenges Advanced class mechanics
Methods/Teaching Practices What assignments, assessments, & learning activities are implemented? Are methods appropriate for environment & aligned for population (inclusive ed, course level) & goals?	No rationale for methods; no instructional design Practices not well executed; little methods development Student engagement is variable or absent	Conventional teaching practices for course/discipline Standard course practice/ execution Consistent engagement Some inconsistency in quality	Innovative or evidence-based teaching methods Opportunities for practice/feedback on skills/concepts Consistent/high engagement Implementation is consistent	Consistently uses innovative/ evidence-based methods Students frequently practice skills, define some activities Consistent high engagement High-quality implementation
Presentation & Student Interaction What are students' views of the learning experience? How has student feedback informed the teaching? Are methods implemented effectively? Are students supported?	Class climate discourages motivation/engagement Negative reports of instructor accessibility/interaction Little attempt by instructor to address feedback	Climate supports civility/ motivation/engagement Students report satisfactory accessibility/interaction Responsive to some feedback	Consistently positive accessibility/interaction Students perceive learning important skills or knowledge Instructor gathers feedback, articulates lessons learned	Class climate encourages motivation and engagement, is respectful and cooperative Instructor gathers feedback, responsive short-/long-term
Student Outcomes What impact do these courses have on learners? What evidence shows the level of student understanding? Are measures of learning (shift in student performance as a result of class/instruction) aligned w/ goals?	Poor measures of student learning, do not match goals; no effort to improve learning Low understanding/skill required, poor learning Poor course-level outcomes (e.g. retention, interest, etc)	Standard attention to student achievement Clear assessment standards; sporadic attempts to improve Typical level of skill achieved	Clear efforts to support learning in all students Quality evaluations of learning, efforts to improve Some excellent course-level outcomes for students	Exceptional efforts to support learning in all students Learning evaluations connect to dept/program goals Exceptional outcomes, supports broad success
Mentorship & Advising How effectively has the faculty member worked individually with undergrad or grad students?	Ineffective advising Discourages independent work Does not define goals/scope	Minimal evidence of effective advising and mentoring Occasionally supports students' independent work	Consistent evidence of effective advising Supports independent work Input from advisees on goals	Exceptional commitment to advising and mentoring Goals are mutually-defined, collaborative w/ students
Reflection, Development, Teaching Service/Scholarship How has the faculty member reflected on/improved their teaching, sought prof. development, and contributed to the teaching community?	Little reflection/learning from prior teaching or feedback Little professional development (PD) Does not contribute to dept/ teaching community	Some reflection, learning from teaching/feedback/PD Informally shares teaching materials/methods Some involvement in dept teaching-related committees	Regularly improves based on prior teaching/feedback/PD Reflection on teaching informed by more than FCQs Mentors others, contributes to community re: teaching	Continuously improves based on prior teaching/feedback Reflection on teaching informed by multiple sources Recognized leadership role in improving teaching

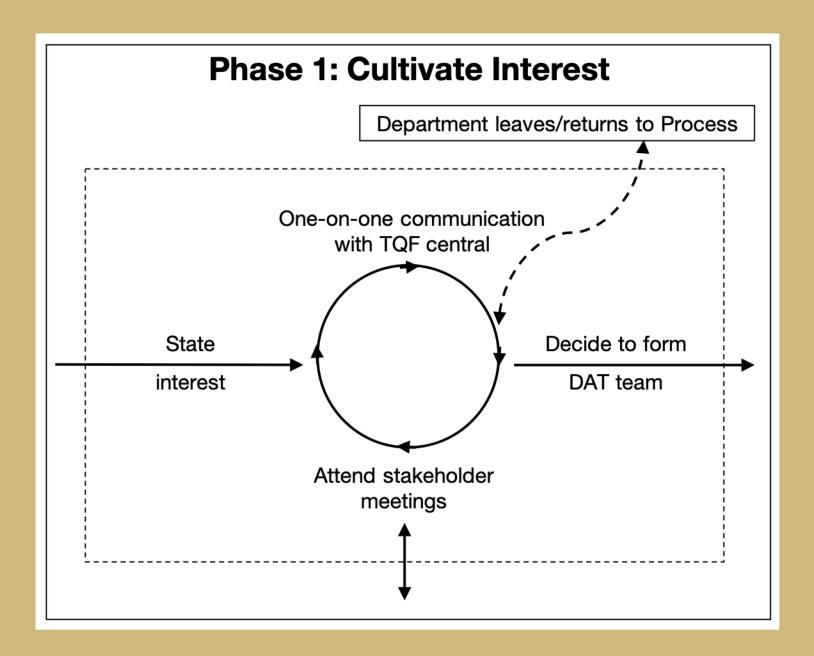


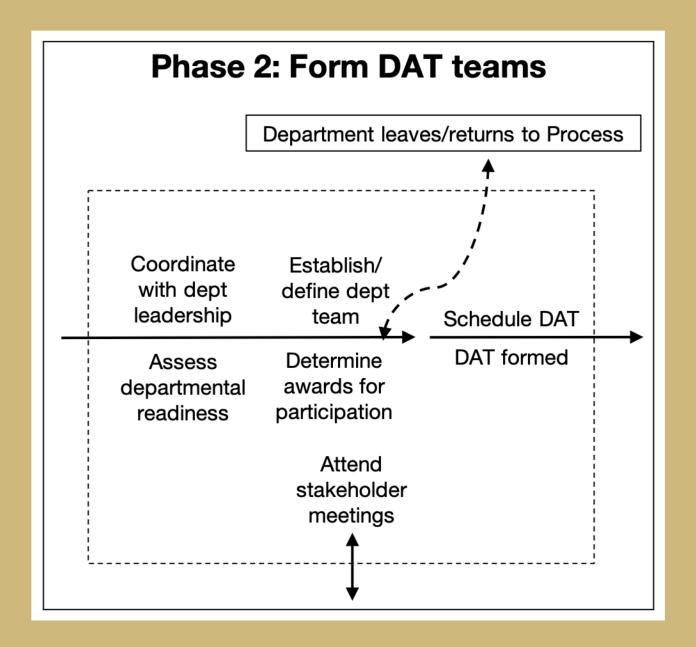
A case study example: The Juniper* Dept

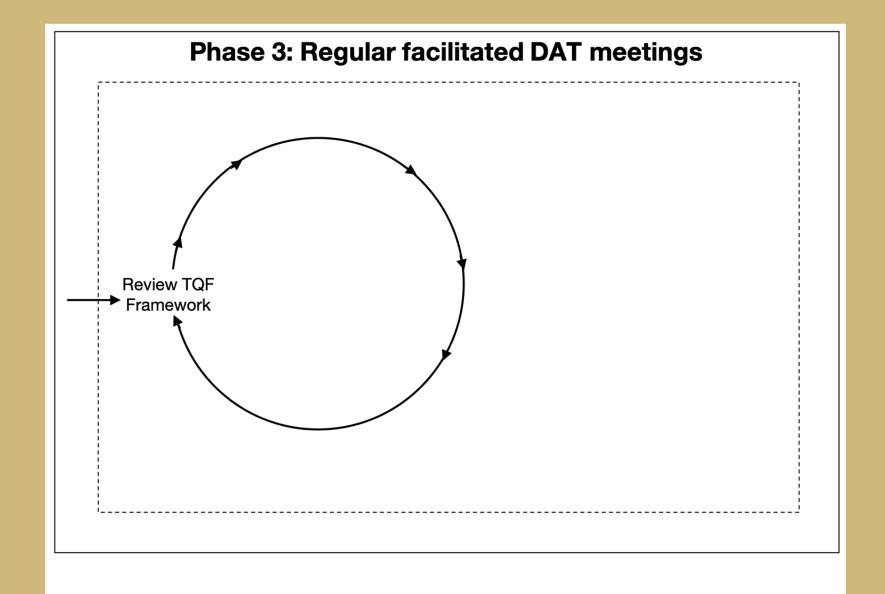
- Dept readiness
- Flexible process
- Early successes
- Iterative process

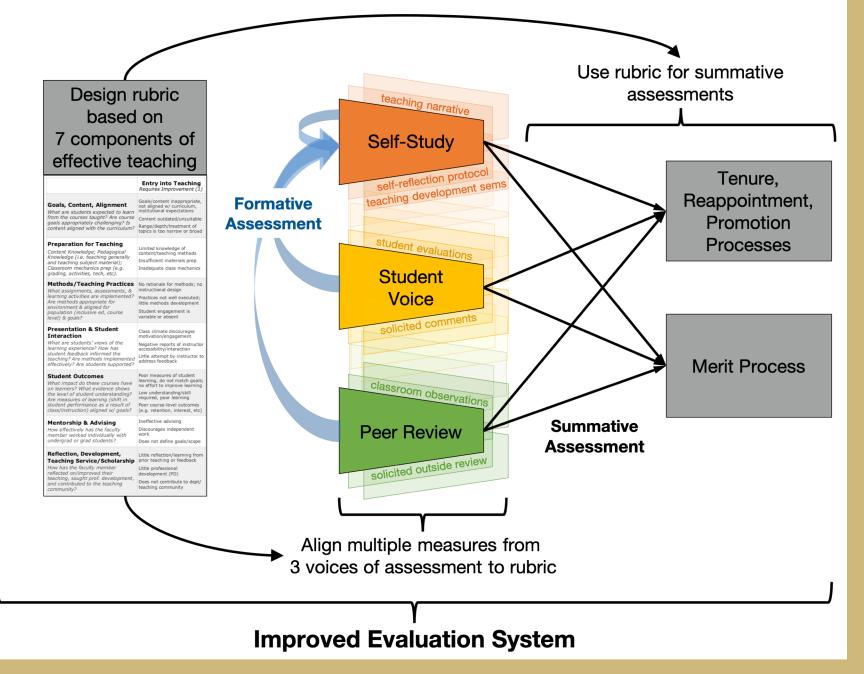


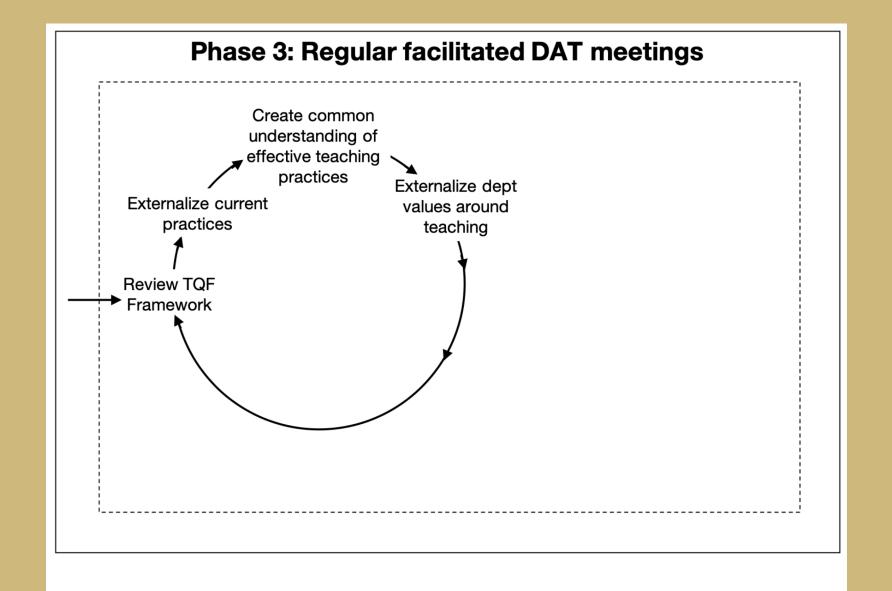
^{*} All dept names are fictitious







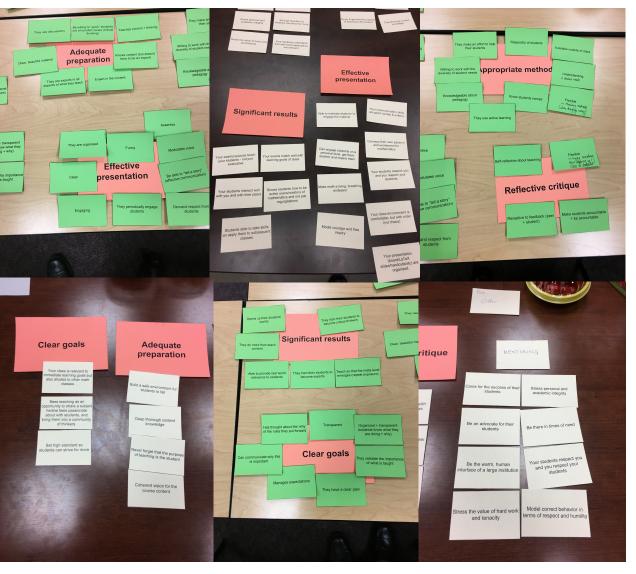




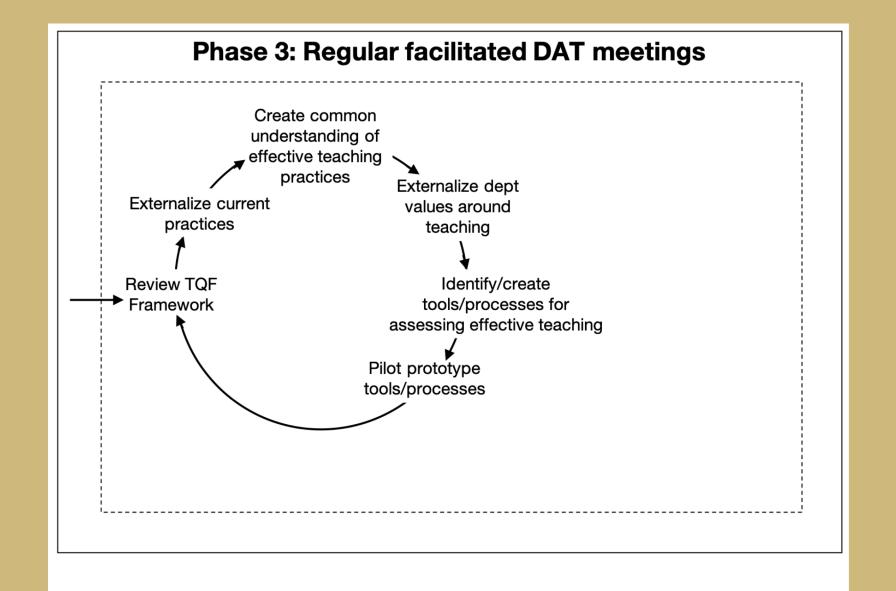
Brainstorming Activity: Ideal Teacher

Content-level of Classyoom Skills Classroom tone Classroom Methods

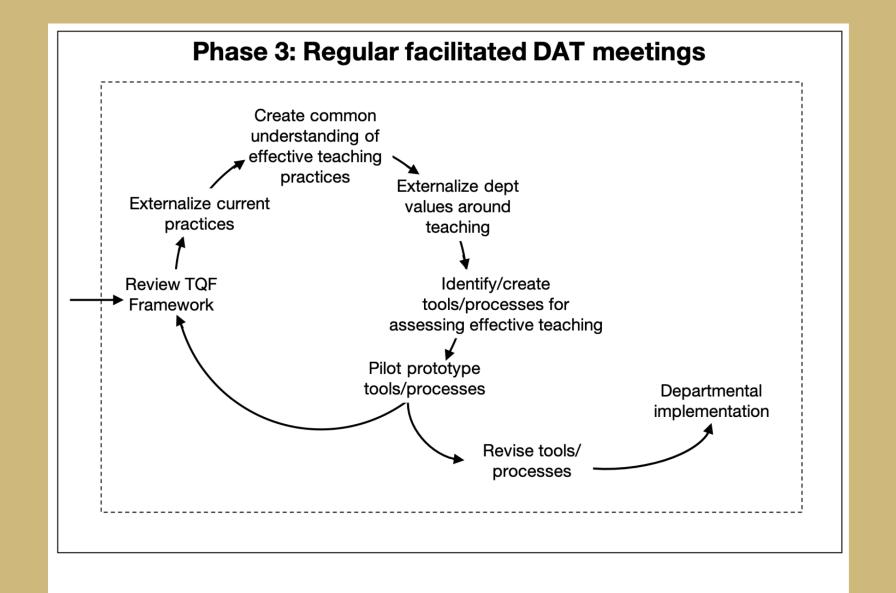
Card Sorting Activity: Literature-based components of effective teaching

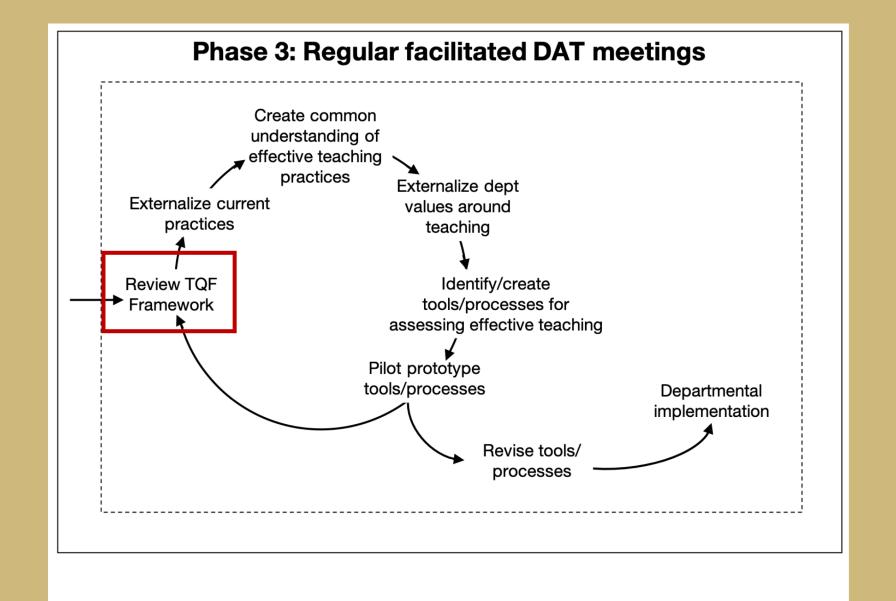


Visit us at https://www.colorado.edu/teaching-quality-framework/ (TQF project) and https://teval.net/ (multi-institutional umbrella project TEval)



Peer Course Evaluation Peer Evaluation of Cours Overview/purpose Purpose The [x] Department has o Section This document provides b utilize the voices of facult [DEPT] CLASSROOM evaluation form whereby such as for Reappointme attached to peer observa When writing your p MERIT Self-reflective teaching statement consistency in the sched Guide for reflec Classroom Interview I A1) Lea relevant). To provide effective practices; b) to Background Reflect on your teaching during the past calendar year. The PEC will use your statement as part of the to foster a departmental acc to [X]. Unstructured peer classro evaluation process. Your reflection should address some or all of the following quiding questions. You implements strategies th Option A) Print out the (e.g)inconsistency and do not do not have to answer all of the questions. and incorporating those at the end of the class When preparing reason, the scholarly litera AAAS, 2012)1, Review of syllabus Instructo in the classroom obserand tenure, we r practices for their field an Please limit your response to no more than 2 single spaced pages. · Did the syllal teaching can be more effe **Evaluation types** incorporating the concrete information, and There are two types of ev Option B) Dedicate 15scholarship1, this 1) How did your courses go? Please comment on achievement of course goals, level of student of five instructors and fac Technical aspects/c a) Please ensure observation(s), a post-ob engagement, student learning outcomes. You may want to address aspects of your courses and/or (TQF) Initiative, have deve observation consisting of Resources. I beginning. Initiative and are based or Goals for stude teaching that proved to be particularly effective and/or ineffective, as well as how you assessed University of Texas at Aus educationally What kno efficacy. You may focus on one course or several courses. b) Briefly explain Evidenc Selection of observers Organized. discipline The department chair, dir How the protocols will b time. c) Form students These standardized tools Are cours 2) What (if any) changes did you introduce in your classes and why? (August and December) t and Tenure Review, contr Accuracy. In What are below, and prioritizing the d) Pose your cho practices over time, and o thorough (e.s What are 2a) What adjustments did you make in response to prior course feedback (FCQs, peer faculty to conduct evalua that the structured form v Active Learn observation, FTEP observation, Qualtrics, surveys)? consulted as part of this e) Have each gro For reappointment, promo study and some will be c for the size ar Preparation for protocols completed by t f) Have each gro department chair will have What pre 2b) What steps have you taken to enhance/further develop your knowledge about effective protocols when writing th where everyor topics in What the instructor teaching practices, methods, and/or materials? You may wish to consider factors such as self-reflection for annual Procedure How do reading in scholarship of teaching and learning literature; attending FTEP, ASSETT, or COLTT Content. Th g) If time you ma All first-time obs In what sessions; engaging in discussion with colleagues; etc. How have these opportunities initiated helping stude important take Table 1. Alignment of [DEPT and become fam Summar How do reflection about your teaching and changes in your teaching? Motivation. h) Record respon How do : 2. Once you have b the material, Component of effective cla provided [inse What ch 2c) If you made changes that were not related to 2a or 2b, what changes did you introduce in • **Depth.** The your classes and why? commitn 3. Full peer course Goals Content and Align deep knowled Classroom Interview C What are students expected What eff a. Pre-obse Select 2 or 3 of the follo Reasoning. challenging? Is content align a commi 3) What steps have you taken to evaluate the quality of student understanding in a formative as well as decision in consultation increase their Preparation for Teaching prior kno summative fashion? Formative assessments are low-stakes opportunities to monitor student learning the instructor's or to you A2) Org Did the instructor demonstra Informal As How do \ and are typically not graded or only assigned points based on completion. Summative assessments are the instructor well-prepared understanding materials, tech use, etc.)? What aspects high-stakes measures used to evaluate student learning and are therefore graded for technolog inst you learn? correctness/quality (e.g., guizzes, exams, projects). Methods and Teaching Pra What the students Methods and te Evidenc What assignments, assessm 2) What aspects Engagement aligned with the learning env What tea 4) Describe the teaching accomplishment(s) from the past year that you value the most. departmental, course, and st you learn? Participation How do t participate fu How would yo 5) What other teaching contributions, challenges, or concerns would you like to share? Presentation and Student I Why are Are methods from above imi students learn environn interaction)? Additional consider What ass 4) What could sti Student outcomes Observations What impact do these cours understanding? Are measur Suggestions 5) How has [inse class/instruction) aligned with Comments or engaged durir 1 Developed from the American Association for th Rosario Carillo, and D 6) The instructor from foundational sch [Insert references cited] Brinko, K.T. 1993. The practi instructor wou Maeroff, 1997), and v Summa the National Science this goal? 1. Items were adapted fro https://utop.uteach.utex





Mapping data sources and voices to the TQF framework rubric

Teaching Quality Framework (TQF) - Aligning Data Sources to TQF Assessment Rubric

				Sources	s of evidence you could	collect
		Professional (3)	Voice Rank	Self	Peer	Student
	Goals, Content, and Alignment	Goals/content are well-articulated, high quality, up-to-date, and appropriate	1 1 2	Self-reflection	Classroom observation	Student interviews/ CLIP
a a	What are students expected to learn from the courses taught? Are course goals	Course materials/content are aligned with course goal, include high-quality elements	1 2	Teaching statement Course portfolio	Review of syllabus/ course materials	FCQs
Teaching	appropriately challenging? Is content aligned with the	Range/depth of course topics is appropriate, integrate other topics/courses	1 1 3	Course portiono	Review of portfolio	Student letters
ı for T	curriculum?	Some examples of innovation, connection to current issues, developments in field	1 1 3		Review of learning objectives	
ratio	Preparation for Teaching Content/ Background Knowledge; Pedagogical Knowledge (i.e. teaching generally and teaching subject material); Classroom mechanics	Knows subject on deep level, including current research, interaction with other topics	1 NA	Self-reflection	Classroom observation	Student interviews/ CLIP
Prepa		Teaching practices/methods or materials are evidence-based, shown to enable learning	1 2 NA	Teaching statement Course portfolio	Review of syllabus/ course materials	FCQs
		Can identify most common student challenges; activities/innovations to help students overcome common challenges	1 2 1		Review of portfolio	Student letters
	preparation (e.g. grading, prepping activities, materials, tech use, etc)	Syllabus, materials, and course material are well-planned, integrated, and reflect commitment to meaningful assignments	1 1 2		Faculty interviews	
	Methods and Teaching Practices	Often uses effective or innovative evidence-based* methods to improve understanding *See: NAS Indicators	1 2	Self-reflection	Classroom observation	Student interviews/ CLIP
	What assignments, assessments, and activities are implemented? Are methods appropriate for environment and aligned for	Activities provide opportunities for practice/ feedback on important skills and concepts	1 1	Teaching statement Course portfolio	Review of syllabus/ course materials	FCQs
hing		Regular opportunities to practice skills	1 1	Inventory (e.g., TPI,	Review of portfolio	Student letters
Enactment of Teaching	student population (inclusive ed, course level) and goals (departmental,	Students consistently engaged, w/ occasional high levels of engagement	1 1 1	TBI)	COPUS	Survey (e.g., SALG)
nt of	course, student)	Implementation is high-quality/consistent	1 1		Inventory (e.g., TPI, TBI)	Inventory (e.g., TPI, TBI)
ctme	Presentation and Student Interaction What are the students' views	Evidence that classroom climate is respectful, cooperative, and encourages motivation and engagement	3 1 1	Self-reflection	Classroom observation	Student interviews/ CLIP
Ena	of the learning experience? How has student feedback informed the teaching? Are	Student reports of instructor accessibility and interaction skills are positive	3 2 1	Teaching Statement Course Portfolio	Review of portfolio	FCQs
	methods (#3) implemented effectively? Are students	Students perceive that they are learning important skills or knowledge	3 2 1			Student letters Survey (e.g.,
	supported (e.g. student/teacher interaction)?	Instructor gathers student feedback and articulates some lessons learned	3 2 1			SALG)

For more information about the Teaching Quality Framework, please visit our website: www.colorado.edu/teaching-quality-framework,

Departmental examples of adapting rubric mapping to their own available data sources

		Correspondir	ng items from:	ems from:		
Component of effective classroom teaching	Self-reflection	Peer Observation	FCQs	Syllabi and course materials	Your Score (1-5)	
Goals, Content, and Alignment What are students expected to learn from the courses taught? Are course goals appropriately challenging? Is content aligned with the curriculum and integrate other topics and/or courses?	High weight	High weight A3) Learning Goals A6) Prior Knowledge	Low weight S3 (intellectual challenge) CP5 (helpful materials)	High weight		
Methods and Teaching Practices What assignments, assessments, and activities are implemented? Are methods appropriate for and aligned with the learning environment, the student population (inclusive ed, course level) and departmental, course, and student goals?	Equal weight	Equal weight A4) Participation A5) Active Learning A8) Critical Thinking (C) A8) Corrective Feedback (L) C1) Strengths/expertise	Equal weight S3 (intellectual challenge) CP7 (opportunities for discussion) CP8 (helpful feedback on work)	Equal weight		
Presentation and Student Interaction Are methods from above implemented effectively? Are students supported (e.g. student/teacher interaction)?	Low weight	Mid weight A4) Participation A7) Engagement (L)	High weight S4 (how much learned) S6 (encourages interest) S7 (instructor availability) S8 (respect for students) CP3 (respectful environ.)	Low weight		
Student outcomes What impact do these courses have on learners? What evidence shows the level of student understanding? Are measures of learning (shift in student performance as a result of class/instruction) aligned with goals?	High weight	High weight A4) Participation A8) Corrective Feedback (L)	Mid weight S3 (intellectual challenge) S4 (how much learned) CP4 (invested in student success) CP8 (helpful feedback on work) See also: Classroom Interview Q2	Mid weight		
Reflection, Development, & Teaching Service/ Scholarship How has the faculty member's teaching changed over time? To what extent has the teacher reflected on and improved their own teaching?	High weight	NA	NA	High weight		
	 	•	Enter the ave	erage score across all components:		

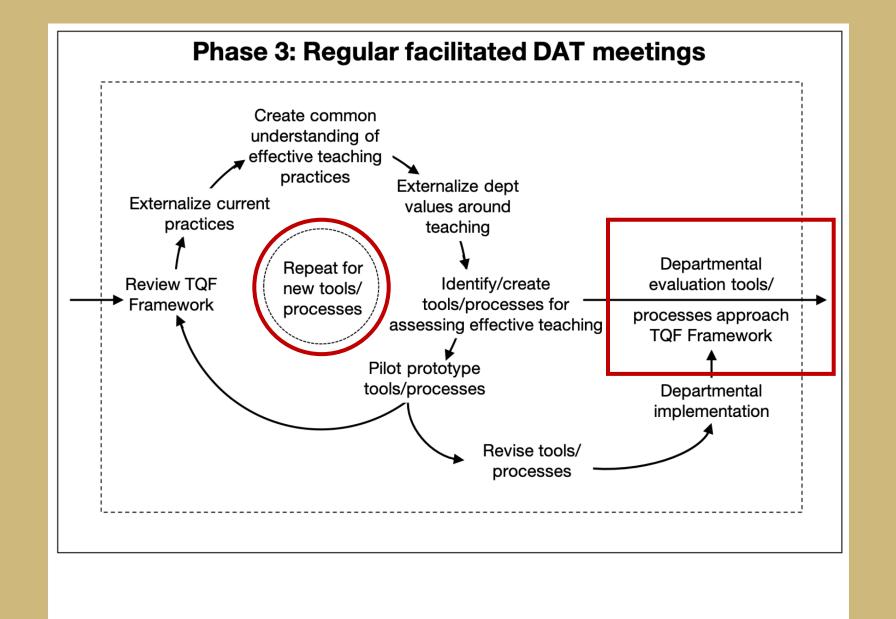
What do we know about a given instructor's teaching and how do we know (i.e., where do we look for this information)?

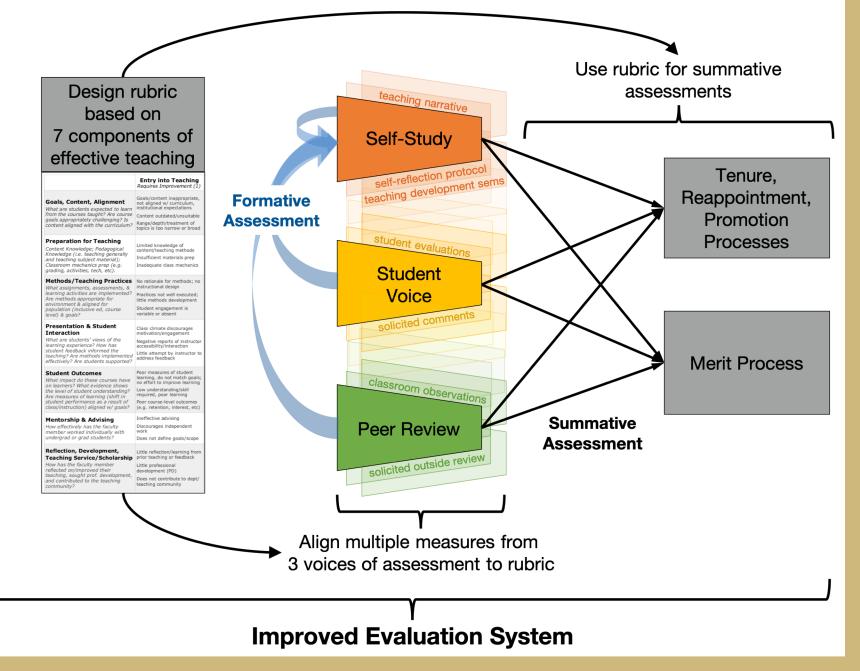
	How do we know/where do we look?			
What do we know about an instructor's teaching? ¹	Merit	RT&P (everything in merit plus)		
Goals, Content, and Alignment What are students expected to learn from the courses taught? Are course goals appropriately challenging? Is content aligned with the curriculum and integrate other topics and/or courses?	FCQs:2 - S3 (intellectual challenge) - CP5 (helpful materials) - OP1 (connections to other classes/life)	Peer Observations ³ - Review of syllabus - A1) Resources - A5) Content - A6) Motivation		
Preparation for Teaching Did the instructor demonstrate sufficient content, background, and pedagogical knowledge? Was the instructor well-prepared in terms of classroom mechanics (e.g. grading, prepping activities, materials, tech use, etc.)?	FCQs: - CP4 (invested in student success) - CP5 (helpful materials)	Peer Observations - Review of syllabus - A1) Resources - A2) Organized - A3) Accuracy - A4) Active Learning - A5) Content - A7) Depth - A8) Reasoning - A9) Informal Assessment		
Methods and Teaching Practices What assignments, assessments, and activities are implemented? Are methods appropriate for and aligned with the learning environment, the student population (inclusive ed, course level) and departmental, course, and student goals?	FCOs: - S3 (intellectual challenge) - CP7 (opportunities for discussion) - CP8 (helpful feedback on work)	Peer Observations - A4) Active Learning - A8) Reasoning - A9) Informal Assessment - A10) Engagement - A11) Participation - C1) observations of what the instructor did well		
Presentation and Student Interaction Are methods from above implemented effectively? Are students supported (e.g. student/teacher interaction)?	FCQs: - S4 (how much learned) - S6 (encourages interest) - S7 (instructor availability) - S8 (respect for students) - CP3 (respectful environment)	Peer Observations - A6) Motivation - A9) Informal Assessment - A10) Engagement - A11) Participation		
Student Outcomes What impact do these courses have on learners? What evidence shows the level of student understanding? Are measures of learning (shift in student performance as a result of class/instruction) aligned with goals?	FCQs: - S3 (intellectual challenge) - S4 (how much learned) - CP4 (invested in student success) - CP8 (helpful feedback on work)	Peer Observations - A9) Informal Assessment - A11) Participation		
Mentorship and Advising How effectively has the faculty member worked individually with undergraduate or graduate students?	FRPA Teaching Activities: - Advisees/mentees - Students' supported in independent work			
Reflection, Development, & Teaching Service/ Scholarship How has the faculty member's teaching changed over time? To what extent has the teacher reflected on and improved their own teaching?	FRPA Service Activities: - Attendance at teaching professional development activities (Service Activities) - Participation in departmental/institutional teaching-related committees FRPA Scholarly Works: - Pedagogical publications			

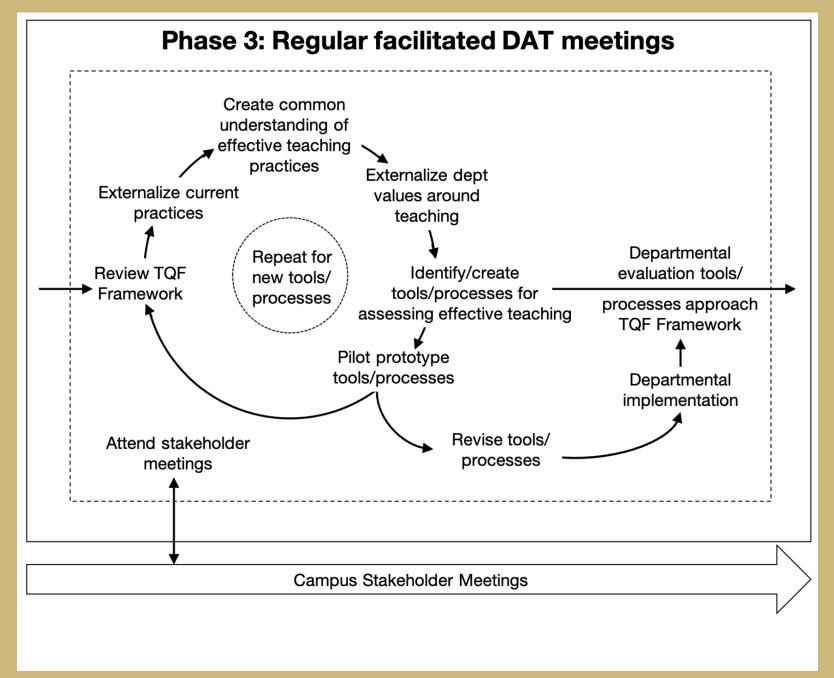
¹Seven components of effective teaching from the TQF rubric

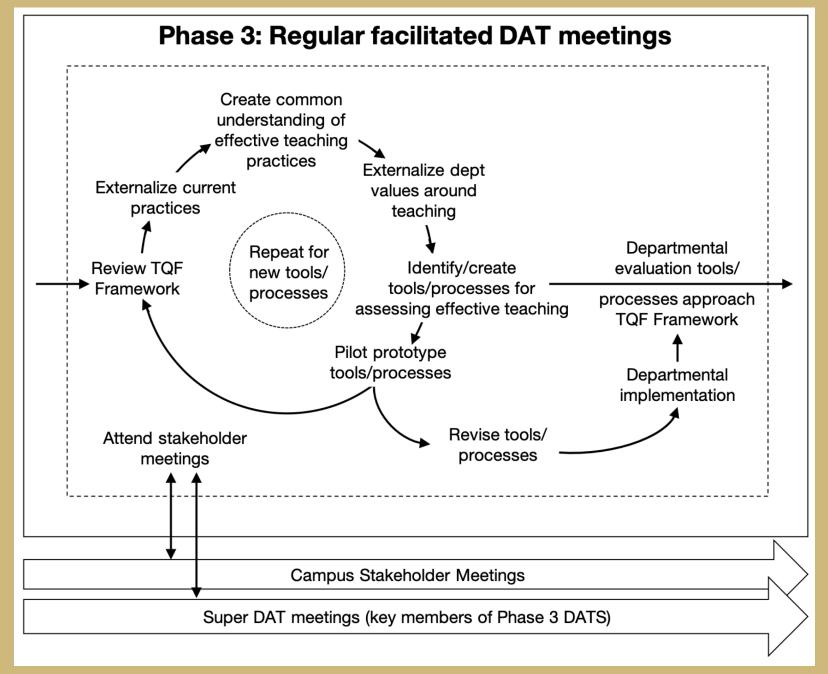
²For FCQs, S = standard questions, CP = core pilot questions, and OP are [DEPT]-specific optional pilot questions

³Peer observations are based on draft items currently under review

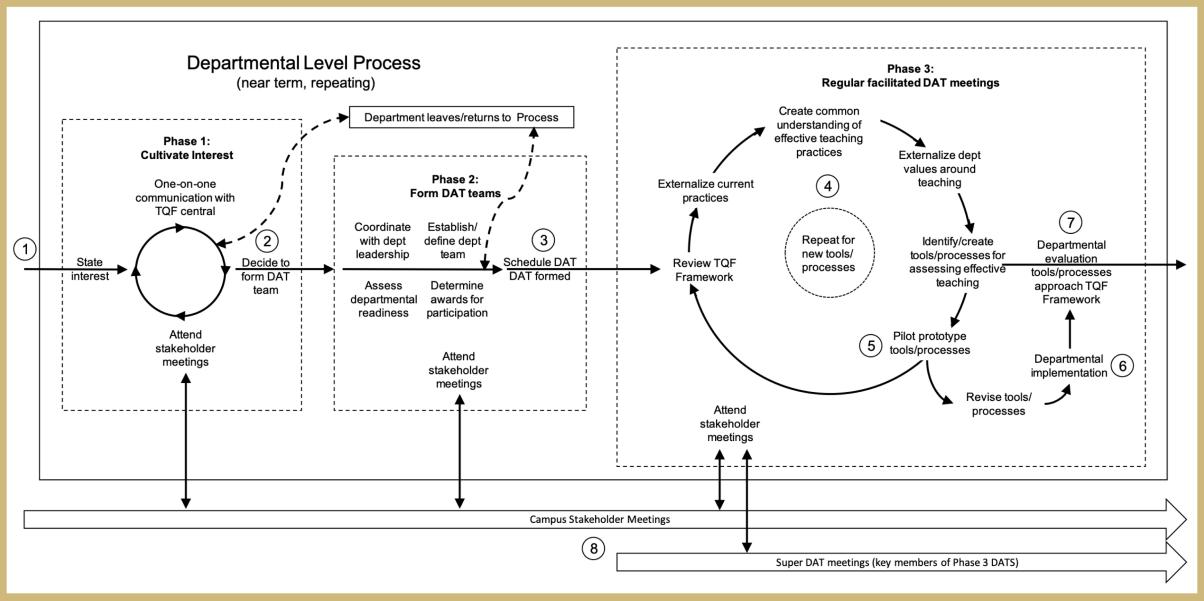




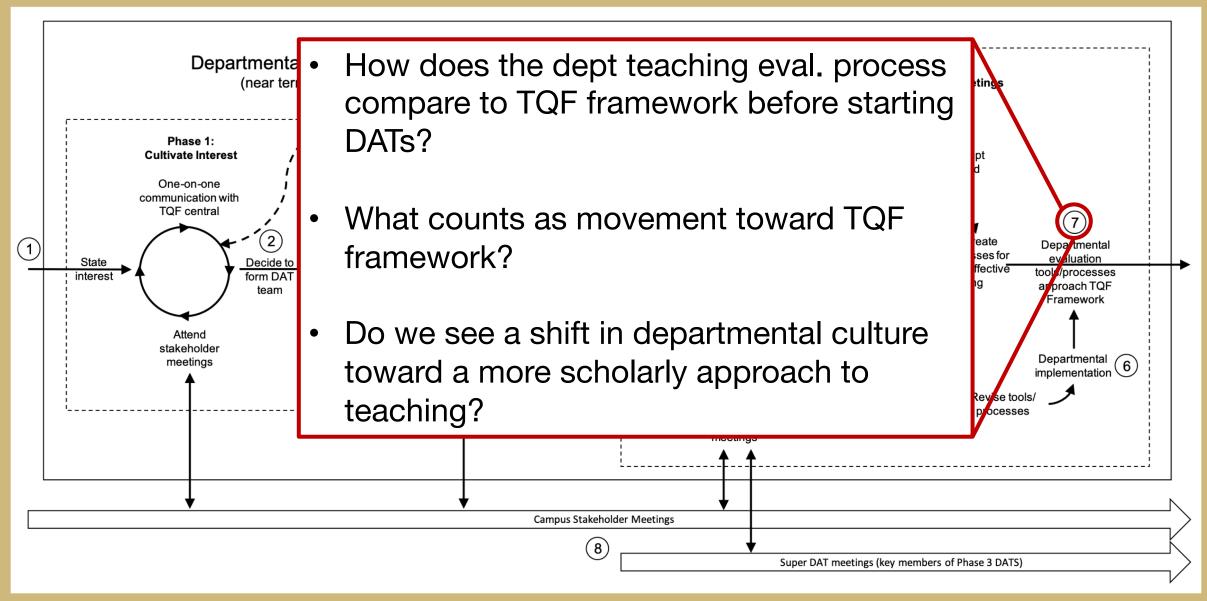




Conclusions and Future Directions



Conclusions and Future Directions



Interested in learning more?!

Hear more about TQF, DATs, and other TEval affiliated projects at these sessions later today:

- 1:15pm-1:45pm, Oral Presentation Session F in Woodlawn I (DATs):
 - Characterizing departmental culture and assessing change with the DELTA survey
- 1:15pm-2:45pm, Thematic Symposium in Fountainview:
 - National Academies' Roundtable on Systemic Change in Undergraduate STEM Education: Directions and Opportunities
- 2:45pm-3:30pm, Poster Session in Admiral (Student Evaluations):
 - Building a better SET: An "outside-in" approach to developing and implementing improved student evaluations of teaching
- 3:30pm-5pm, Thematic Symposium in Waterfront (Rubric, etc.):
 - Improving Learning by Transforming the Evaluation of Teaching: Resources, Challenges, and Change Processes

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Questions?

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