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Increasing Professional Development Attendance in Higher Education

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Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

Honor Code

On my honor as a student, I have neither given nor accepted unauthorized aid on this assignment or exam.

A handwritten signature in black ink, appearing to read 'Elizabeth Padhi', with a stylized, flowing script.

Elizabeth Padhi

Executive Summary

Historically, higher education faculty have been held to different pedagogical standards, compared to their K-12 counterparts. As more students enroll in some form of post-secondary education, universities are realizing their teaching practices must change as well to meet the needs of an increasingly diverse population. The Centers for Teaching Excellence at each university provide opportunities for faculty to learn researched backed strategies to implement in their classroom. However, take-up and implementation of these strategies is low nationwide. This report seeks to understand the barriers preventing faculty from utilizing these evidence-based practices and identify practices that might increase take-up, with a focus on tenured and tenure-track faculty.

Tenure and tenure-track faculty have three job areas: research, teaching, and university service. Given the existing time constraints and the current tenure and promotion policies in place at many Tier One research universities, faculty are under-pressure to prioritize their research, leaving less time to improve their teaching. Quality teaching makes a difference in higher education, and that requires faculty to spend the time learning how to implement the evidence-based best practices recommended by the Center for Teaching Excellence.

I considered three alternatives in addition to maintaining the status quo: developing a credentialing system, partnering with faculty to act as department liaisons, and changing the tenure and promotion guidelines. These alternatives were evaluated against five criteria: budgetary cost, effects on faculty attendance, likelihood new practices are implemented, ability to obtain evidence of implementation, and political feasibility.

My recommendation is to begin developing a credentialing program. This program explicitly targets teaching practices valued by the university, incentivizes faculty to attend multiple workshops on a similar practice, and requires faculty to submit an artifact describing how their practice has changed before they earn their credential.

Acronyms

APT: Academic Professional Track

TTF: Tenure and Tenure-track Faculty

CTE: Center for Teaching Excellence

PD: Professional Development

Defining the Problem

Texas A&M is a top-rated public institution serving over 70,000 graduate and undergraduate students. These students are taught by both non-tenure track (known as academic professional track – APT) and tenured / tenure-track faculty (TTF). The Center for Teaching Excellence (CTE) exists to support faculty in their endeavors by emphasizing evidenced-based teaching strategies and offering workshops that vary in both scope and length. APT attendance is 40% higher and has remained consistently higher TTF, despite the fact they are and will be the leaders of their departments. Currently, too few tenured and tenure-track faculty attend CTE workshops.

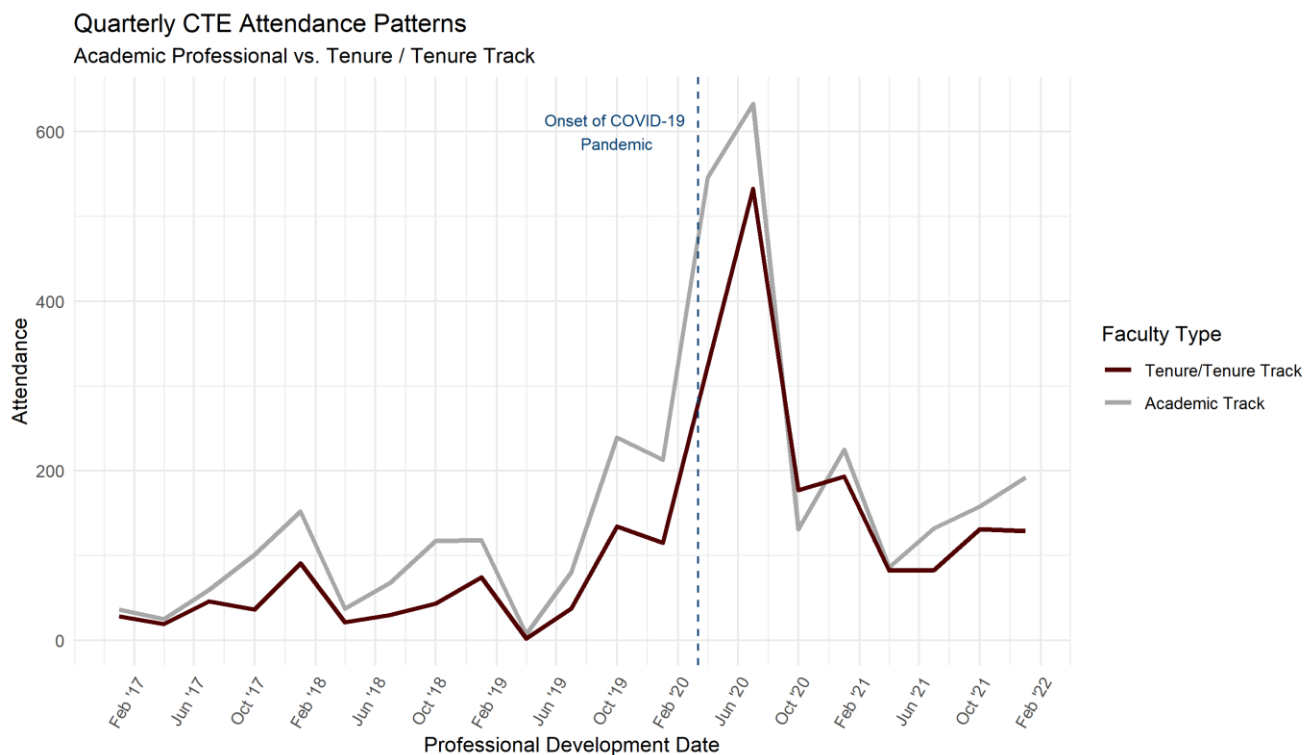


Figure 1 CTE attendance data from the last 5 years

Client Overview

Center for Teaching Excellence

The Center for Teaching Excellence (CTE) at Texas A&M University provides professional development opportunities on evidence-based teaching practices for faculty and graduate students. CTE also provides pedagogical consulting services at an individual, group, or department level. These services can provide targeted advice in specific areas or focus on broad curriculum redesign within a department. In addition to the 3,171 faculty in College Station, CTE serves the 133 faculty at TAMU-Galveston, 76 at TAMU-Qatar, and 561 at the TAMU Health Science Center.

Many CTEs struggle to accurately assess their effectiveness in producing meaningful change (Hines, 2017). Most centers collect surveys asking participants to rank their experience in their workshop, however, that information tells us very little about anything that might change when that faculty member returns to the classroom.

Given the size and scope of this project, I have decided to assume that most of what Texas A&M's CTE accomplishes is effective for those who attend, however I want to identify why others are not taking advantage of these resources. Systemic change will occur when most people in power work towards a solution, however if those in power are not concerned with changing their teaching practices, there is little hope for long-term impact.

Background

Broadly, tenured faculty teach, conduct research, and engage in other service to their university, and in exchange, tenured faculty are granted an indefinite appointment at their university that can only be terminated under extraordinary circumstances. Tenure safeguards academic freedom by protecting faculty from repercussions due to their speech, publications, or research findings (Tenure, 2006). However, public funding cuts have whittled down the numbers of tenured faculty by 24% since the early 90s, and now less than half of all full time faculty are tenured (Ehrenberg & Zhang, 2005; The Integrated Postsecondary Education Data System, 2019).

Lasting pedagogical change requires strong leadership within each department who are dedicated to the mission (Buhl, 1982). Tenured faculty can minimize the work and expertise that academic track faculty bring to their departments since APT's primary focus is teaching (Drake et al., 2019). And since tenured faculty will still be the future of the university and its priorities as they become department chairs and deans, it is vital that they value quality teaching to see increasingly positive academic outcomes for students. Failing to reach faculty who have or will have the most influence over their department could weaken the overall effect CTE has on campus.

At Texas A&M, the largest gaps in TTF and ATP professional development are occurring in the colleges with the greatest student enrollment. The Colleges of Engineering, Liberal Arts, Ag & Life Science, Education & Human Development, and Science and Mays Business School serve almost 45,000 undergraduates students combined, which is over 80% of the undergraduate population (Accountability - Student Enrollment by College, 2021).

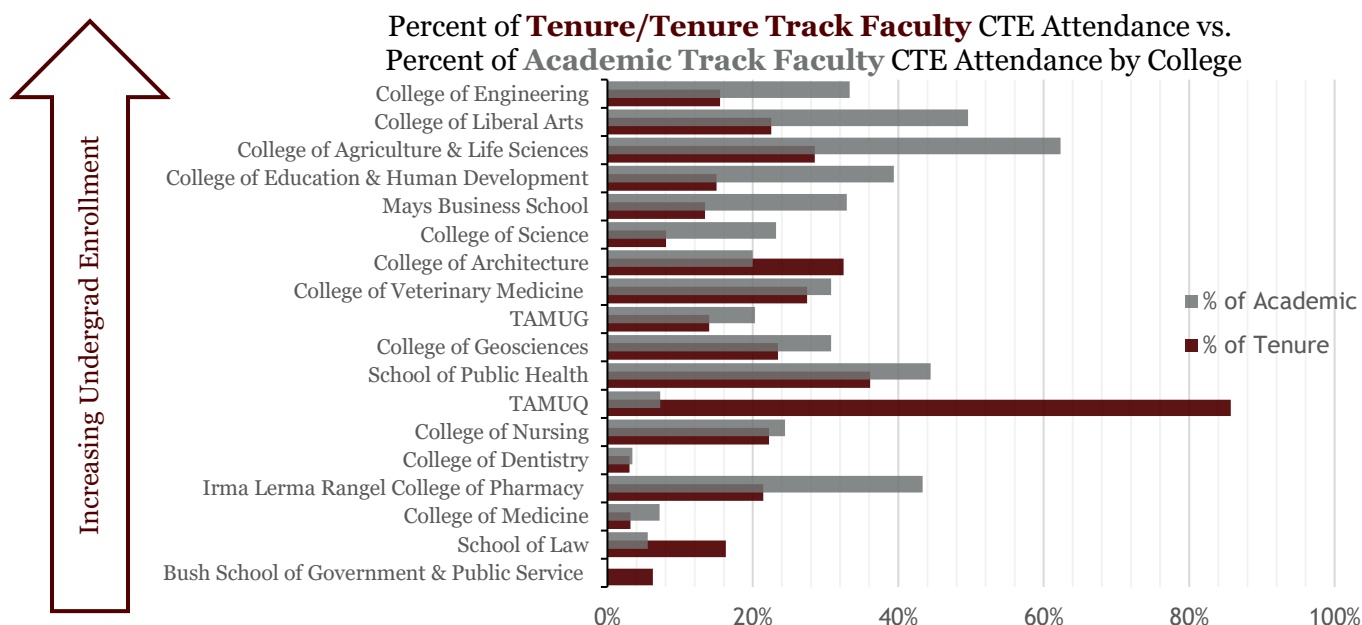


Figure 2 Faculty Attendance by College - 2019-2020

Two of Texas A&M's goals in their strategic plan are to increase first year retention rates and graduation rates, with a focus on decreasing academic equity gaps in both (Texas A&M, 2019). To see these improvements in student outcomes, faculty cannot continue doing what they have always done. Faculty must rethink how they approach their teaching responsibilities, so developing university policies that explicitly value quality teaching and work towards increasing attendance in professional development are vital for achieving these goals.

Undergraduate Key Performance Indicators

1. **Increase** underrepresented minority (URM) undergraduate enrollment to 33%.
2. **Increase** first-year retention to 95% with a stretch goal of 97% and decrease academic equity gaps.
3. **Increase** four-year graduation to 65% with a stretch goal of 70% and decrease academic equity gaps.
4. **Increase** four-year graduation rate for transfer students to 85% with a stretch goal of 88% and decrease academic equity gaps.

Figure 3 Texas A&M Strategic Plan 2020-2025

Professional Development in Higher Education

Professional development improves outcomes for students in higher education (Condon et al., 2016; Gyurko et al., 2016; Haras et al., 2017). However, the effectiveness of the professional development varies based on the workshop's design. After eight years of first year faculty courses, and well-attended short-term workshops, one university found little impact of student-centered learning (Blumberg, 2011). This result is supported by prevailing professional development research. There is little evidence that shows that short workshop-style, professional development sessions have any impact on student learning. In the K-12 setting, teachers need at least 15 PD hours on a specific topic before positive effects are observed (Yoon, 2007).

Unlike professional development in the K-12 setting, there are no mandates for professional development attendance, so centers must also consider the attendance and implementation barriers when designing these workshops. The following section focuses specifically the needs of tenured and tenure track faculty.

Targeting Tenured and Tenure Track Faculty

Barriers to Attending Professional Development

Time and conflicting institutional priorities are two of the biggest barriers faculty face (Jacobson, 2020). Especially within the context of large, Tier 1 research universities, the gaps between policy and practice can push teaching to the backburner as faculty must decide whether to allocate their time to research or teaching. Most STEM faculty at other R1 institutions believe that their universities and departments acknowledge the benefits of quality teaching and will support changing their practices. However, when asked if effective teaching plays a role in the promotion and review process, the levels of agreement dropped by about 20 percentage points (Dennin et al., 2017). Without any mechanism to reward quality teaching, faculty will not be incentivized to make the changes required to achieve the university's student achievement goals.

Motivation

Two main psychological principles that affect the motivation to attend professional development are motivated reasoning and self-determination theory. Motivated reasoning is the extent to which a person's ability to accept new information depends on their willingness to accept the full implications of that information (Kunda, 1990). Ryan and Deci's (2017) Self Determination Theory (SDT) explores how individual behavior as well as social context can affect a person's ability to act. SDT identifies three psychological needs—autonomy, competence, and relatedness—and the extent to which these needs are met affects their progress (Ryan & Deci, 2017).

A central tenet in higher education is the commitment to academic freedom, which provides faculty the autonomy to conduct research without “undue restriction”, report their findings as they see fit, and freedom in the classroom while teaching (University Statement on Academic Freedom, Responsibility, Tenure and Promotion, n.d.). High levels of faculty autonomy are associated with higher levels of satisfaction (McNaughtan et al., 2021). While this may seem to indicate that a mandate for professional development would instantly backfire, there is some evidence that professors would exchange increased autonomy in their research for more less pedagogical autonomy (McNaughtan et al., 2021).

Tenure and tenure-track faculty tend to have higher rates of self-efficacy in teaching compared to non-tenured faculty (Wilson-Kennedy et al., 2019). Perceived self-efficacy rates are associated with better student outcomes and professional development can lead to higher rates of self-efficacy (Emery et al., 2021). However, for some attending professional development might highlight inadequacies in their teaching performance, so some faculty might use motivated reasoning to justify non-attendance because they do not want to believe they have any deficiencies. In fact, these faculty members are likely to view invitations to attend professional development as an affront to their skill and validity as an instructor (G. A. Smith, 2020). The “remedial” style of most professional development sessions will not appeal to TTF but developing programming that allows for

attainable growth in relevant contexts could motivate them to attend CTE events (Haras, 2018; Smith, 2020).

The extent to which CTE can satisfy a professor's need for autonomy, competence, and relatedness, while also not activating resistance, should influence professional development participation rates.

Professional Development Needs

TTF would likely prefer content specific, targeted trainings over general professional development topics. TTF struggle to sustain the time and effort required to change their teaching style, especially under pressure to produce novel research (Jacobson, 2020). Broad professional development sessions were found to have no effect on a faculty member's perception of their effectiveness (Fabriz et al., 2021). Without a deficit perception, and lacking any noticeable gain, TTF would not be motivated to continue attending these sessions.

However, continuous support seems to increase faculty motivation, and leads to longer lasting change in classrooms (Jaramillo-Baquerizo et al., 2019; Wheeler, 2021). These findings align with the psychological theories proposed above. Unfortunately, most will not have the opportunity to observe quality teaching take place in a workshop then implement it themselves without support (Emery et al., 2021; Haras, 2018). These sustained, iterative sessions increase the likelihood that faculty will implement these strategies, and continue to improve on them throughout the semester (Zavala et al., 2017).

TTF prefer sessions that are taught by peers who are both content and teaching experts (Bleiler-Baxter et al., 2021; Hott & Tietjen-Smith, 2018; Jacob et al., 2019). A potential mechanism would be partnering with current "CTE frequent-flyers" in a content area, identifying strategies that work well, troubleshooting any difficulties, then presenting it to that subset of faculty (Brown, 2015; Truong, 2016). Using existing faculty provides validity to these techniques, gives attendees an additional point of contact should they have additional questions, and prevents faculty members from evading their work.

Many universities have sessions geared towards the incoming faculty, but fail to address the specific needs of the existing faculty and staff (Weuffen et al., 2020). Promotions change how faculty approach their job, and providing specific training on how to effectively navigate these new roles would keep them engaged with CTE throughout their career (Mortensen, 1983). It is worth noting that under-represented faculty members traditionally find these systems challenging (Sotto-Santiago, 2020). CTE must address the differing needs of their faculty members and can be an agent of change as academia diversifies (Hoffmann-Longtin, 2017).

Developing a culture that values CTE / PD

While publishing novel research is often the primary focus of tenured and tenure-track professors, many faculty members care deeply for teaching. Unfortunately, however, TTF

often feel they are alone in their prioritization of teaching. Multiple surveys indicate that TTF think teaching is valuable, but they think the rest of their department do not value quality teaching (Wilson-Kennedy et al., 2019; Wright, 2005). This disparity is not present in smaller, non-research based institutions, which is likely due to the irresolute nature of teaching expectations at these universities (Murray et al., 2019).

Departments provide the most social and professional interactions for faculty and can exert substantial influence on teaching practice (Emery et al., 2021). Departments that are aligned in teaching philosophy are more likely to engage in team teaching, peer review of instructional practice, and unstructured conversations on pedagogical best practice with their colleagues (Wright, 2005). One key piece of this collaborative practice is that faculty members must acknowledge each other's strengths and view these relationships as reciprocal (Bleiler-Baxter et al., 2021). This can be a challenge for departments who do not value APT as much as TTF. Creating a culture that acknowledges the strengths that each group of faculty members can provide is imperative to building a department focused on high quality instruction, since wide-spread implementation of research based instructional strategies is linked to the levels of support found within a department (G. A. Smith, 2020). Failing to acknowledge or address how this hierarchy influences interactions between faculty members can prevent the widespread utilization of evidence-based teaching practices.

Criteria

The policy alternatives will be evaluated against the following criteria to make a final policy recommendation.

Budgetary Costs

CTE is partly funded through state allocated dollars, and the rest comes from the endowment, grants, and student fees. As the rising price of higher education remains at the forefront of the public arena, we must be cognizant of the ways in which we spend money. Therefore, considering cost must factor into any analysis. Costs will be measured relative to the status quo budget.

Faculty Attendance

This criterion will assess an alternative's ability to increase attendance in CTE programming. I will use results from similar programs to project expected increases in attendance for each alternative. I will also look at heterogenous effects of the alternative on TTF and APT faculty attendance.

Effectiveness

CTE's goal is to improve faculty teaching quality through their use of evidence-based teaching practices. Unfortunately, one of the challenges with evaluating the effectiveness of a center is that there is rarely data to indicate that the services you provide are creating meaningful change their teaching practices (Hines, 2017). This criterion is two-pronged.

1. Faculty Adoption: This sub-criterion will evaluate the likelihood faculty will adopt the evidence-based teaching practices in their classroom.
2. Evidence of Change: This sub-criterion will evaluate the extent to which CTE will receive data which could be used to evaluate center effectiveness in the future.

Each part of the alternative will be assigned a score based on a 3-point system (1 - low, 2 - medium, 3 – high) for a total of 6 points.

Political Feasibility

There is likely a wide variance in how faculty members rank the importance of their research, teaching, and university service responsibilities by tenure status, college, and department. The faculty handbook stresses the importance of academic freedom and ensures full freedom in discussing subjects in their own classroom. Each alternative must be evaluated to assess how it would be perceived by the broader faculty. The alternatives will be assigned a score based on a 3 point system (1 - low, 2 - medium, 3 – high) based on how feasible the implementation of the alternative will be.

Alternatives

Alternative 1: Reevaluate the Changing Landscape & Develop Relationships

The first alternative is essentially maintaining the status quo. Currently CTE is streamlining their registration and data collection systems, identifying key core teaching competencies, and evaluating their past performance in meeting these standards. As CTE realigns their professional development offerings with these competencies, attendance numbers might naturally shift. There are also system-wide shifts that are affecting CTE. The Texas A&M System renewed a partnership with the Association of College and University Educators (ACUE) in 2021 and began offering courses aligned with their national recognized credential this semester (*ACUE Scaling Instructional Excellence for Student Success*, n.d.). Texas A&M is also restructuring the upper levels administration. CTE, which was once under the Office of the Provost, is now in Faculty Affairs. In addition, the university is considering consolidating the College of Liberal Arts and the College of Science (Varnell, 2021). By maintaining the status quo, CTE would be able to monitor how these changes affect faculty and alter their academic support needs.

While this alternative does not recommend any changes to programming, CTE should use this time to prioritize building and maintaining relationships with department heads and other administration. These relationships keep lines of communication open between the center and department needs, and as departments see CTE responding to the needs of their faculty, overall buy-in for professional development will increase. The payoff from these relationships might take years to come to fruition, but are key to building an effective CTE (M. Palmer, personal communication, February 10, 2022). **Because this component is invaluable, I am including it in all my alternatives, however I will only speak about it here to avoid being redundant.**

Budgetary Costs

Developing these relationships can be as simple as taking deans and department heads out to lunch, or hosting small round tables, and listening to their thoughts and needs regarding teaching and professional development (M. Palmer, personal communication, February 10, 2022). CTE could spend approximately \$500 per college in building and maintaining relationships each year, totaling approximately \$10,000.

Faculty Attendance

CTE's partnership with ACUE might motivate some faculty to attend training that they might not otherwise have attended. However, ACUE's course offerings last between 6-8 weeks and 25 weeks, which is not conducive to time-strapped tenure and tenure-track faculty (*ACUE Scaling Instructional Excellence for Student Success*, n.d.). Therefore, I expect most participants in this initial cohort to be faculty who were already engaged with CTE. The payoff from building relationships will likely not be realized in the first year.

Effectiveness

This alternative doesn't incentivize adoption of best practices or provide CTE a way to measure what is happening in classrooms. As a result, this alternative receives a score of one for both prongs, for a total score of two.

Political Feasibility

This option is politically feasible. As the university finishes realignment, there is a possibility that the university issues new policies concerning teaching. Rather than implement something that would then need to be changed, maintaining the status quo would allow CTE to re-evaluate its plan once the dust settles. Using this time to build relationships will also provide CTE data on how to proceed. However, some administrators might expect CTE to respond immediately to the changing climate and push back on the lack of new programming. As a result, this alternative receives a score of 2.5.

Alternative 2: Develop a Credentialing Program Aligned with TAMU's Core Competencies

The second alternative is to develop a credentialing system aligned with CTE's desired core competencies, similar to the Passport to Great Teaching program at the University of Florida or the Digital Badging program at Auburn University ("Digital Badges at Auburn University - the Biggio Center," n.d.; "Passport to Great Teaching Program," n.d.). Earning a credential will require faculty member to attend a certain number of professional development sessions and submit evidence indicating how they have implemented that competency in their practice.

The requirements for each credential will change based on the complexity of the topic area. While attendance is an obvious component of earning a credential, the critical piece is the collection of artifacts demonstrating implementation. These artifacts would be different depending on the competency, but could include submitting a revised syllabus, an annotated lesson plan, an activity, or a reflection.

Once a faculty member earns the required number of points, they would receive a physical and digital credential that can be used to signal their accomplishments to their peers.

Faculty who have recently attended workshops that would have counted towards a credential should be awarded credit towards that competency credential. As this alternative is implemented across the university, faculty who believe they are already proficient should be able to demonstrate proficiency in that core competency without having to attend the same number of sessions. Faculty would need to submit more quality artifacts to demonstrate their skill in order earn the credential without attending sessions.

Budgetary Costs

To achieve sustainability in this alternative, CTE must be intentional in developing the requirements and artifacts required for each credential (*How To Design a Digital Badge Strategy* - WBT Systems, n.d.). The full planning of each credential will likely take

consultants between 15 – 20 hours, which is would approximately be valued at \$490 - \$600 / credential.¹ The development of subsequent credentials will likely take similar amounts of time since most of the work is credential specific.

Once CTE has outlined their credential strategy, the actual credentials will need to developed. Outsourcing this to a badging company will remove some of the administrative burdens that could be associated with badging. Comparably sized programs have cited the annual maintenance price around \$5,000 (Leonard, 2018; “Pricing,” n.d.). However, start-up fees are estimated to be \$7,500 the first year. A consultant would need to be the point person for the badging program and would be responsible for approving artifacts and managing the system. I would expect this role to take an average of 1 hour per week, which would be valued at approximately \$1,625.

If the badging system highlights missing programming, CTE would likely develop this in house. Using time estimates from third party developers, and the average salary of CTE consultants, the costs for developing a new workshop would be approximately \$20,000. Costs would drop if consultants can utilize aspects of programs previously offered.

Faculty Attendance

Badging alone shouldn't be the main reason faculty attend professional development, however it can be the additional nudge needed to convince faculty to finish what they were putting off (Dyjur & Lindstrom, 2017). Earning a credential provides evidence of accomplishments in teaching, which is especially important in higher education where credentials are associated with content knowledge (Dyjur & Lindstrom, 2017). Programs that have implemented credential systems have reported increases from ranging from both 5-10 percentage points (Agola, 2020; Hart, 2015; Yu et al., 2015). If similar effects were observed at A&M, attendance would increase between 175 – 360 people.

However, there are some concerns about the mixed perception of the credentialing system. Some perceive it as less credible than paper certificates, or an inauthentic ploy to incentivize work (Dyjur & Lindstrom, 2017). To mitigate these concerns, credentials must require evidence of implementation. Including this requirement increases the credibility of the credential among faculty (Stefaniak & Carey, 2019).

The extent to which these feelings overlap with tenured and tenure-track faculty might result in heterogenous effects. Anecdotal evidence from the University of Florida indicated that new faculty who were exposed to their Passports to Great Teaching program when they first arrived at UF have been more engaged with CTE throughout their career than those who did have that program (Z. Sheets, personal communication, December 8, 2021). If badging remains a consistent practice that provides meaningful

¹ An average consultant salary of \$65,000 and a 2,000 hour work year are used to calculate these estimates

benefits to earners, take-up is likely to increase steadily as new faculty take on more senior positions within the university.

Effectiveness

The ultimate hope of professional development is that faculty take what they learned and implement it in their classrooms. Badging requires faculty member to engage with a specific topic over the course of multiple sessions, which increases the likelihood a professor will change their teaching practice. Requiring faculty members to provide an artifact or evidence of their implementation as part of the credential process would increase the likelihood that faculty continue to use that technique since they already attempted it at least once (Zavala et al., 2017). This artifact would also provide CTE evidence on how effective their programming is in changing instruction in the classroom. This alternative receives a two for faculty adoption of evidence-based practices since there faculty are not forced to implement what they learned or submit evidence of changed behavior. The alternative receives a three for evidence since CTE will have tangible material indicating how their workshops are used in a classroom. Even though not everyone will submit an artifact, CTE can compare the faculty who do and do not submit evidence towards a credential and use that information to improve future offerings. The total score is five.

Political Feasibility

The political feasibility of this program depends on the perception of the credential's credibility. Faculty are naturally wary of new initiatives and fads in education, and might be hesitant to devote a significant amount of time to something that might not be valued in six months (Brew & Cahir, 2014). While CTE cannot guarantee that the University's policies will not change, a badging system is flexible enough to meet the changing needs of faculty development. While attendance is voluntary, faculty must be able to justify to themselves and their department that these credentials are worth the time they could be spending on their research. The strength of this messaging will vary by department, and CTE will have to partner with department heads to develop a culture that would allow this system to thrive. Based on the potential resistance during the initial rollout, I give the badging system a score of 2.

Alternative 3: Redesign Faculty Workshops to Include Department Liaisons

Most professional development currently offered by CTE is broad enough to allow faculty from all colleges to attend (Annual Report Center for Teaching Excellence 2019-2020, 2020; TAMU CTE - WORKSHOPS, n.d.). While these broad sessions provide opportunities for inter-department collaboration, tenured faculty are often time-constrained and would prefer to attend PD that was tailored to their content area (Bleiler-Baxter et al., 2021; Hott & Tietjen-Smith, 2018; Jacob et al., 2019).

By including faculty liaisons who have demonstrated their mastery in a workshop topic, attendees can access subject specific implementation support, both during the session and after (T. W. Smith, 2020). In addition, these liaisons can also develop content specific

professional development. These liaisons would then become a first point of contact for faculty within their department and provide the content-specific support a professor needs to change their teaching habits.

If CTE chooses to implement alternative two, the awarded credentials can be an indication of potential liaisons across the university.

Budgetary Costs

Depending on the level of partnership between CTE and the faculty liaisons, these costs could be high. Faculty liaisons should be paid for their work in this role. Additional programming would have to be developed for these faculty as they take on this new role. Providing the necessary support and a stipend will likely average out to cost \$500 - \$2500 per liaison annually. If CTE can have a liaison in every department, that would be about 135 liaisons with an approximate cost of \$67,500 - \$337,500. Current data shows that faculty from 80 different departments have attended CTE recently. With this number the approximate cost would be between \$40,000 and \$200,000.

Faculty Attendance

Faculty would be more likely to attend professional development sessions that are aligned with their general content area. Results from a faculty survey indicate that faculty are the most likely to attend if their friend or someone they respect is presenting (Burdick, 2015). By choosing quality liaisons from within each department, CTE can expect an increase in participation with these events. The averaged results indicate that a friend presenting ranked higher (1.05) than items related to ease of implementation (.70-.86) and was like items related to autonomy (1.06) and content (1.05). These rankings align with the needs identified through self-determination theory (Ryan & Deci, 2017). While motivation does not always translate to actual attendance, these results indicate that the motivation to attend increased by roughly 10 percentage points. An increase in motivation does guarantee attendance, however we can estimate that we would see an approximately 3-7 percentage point increase in attendance, which is an increase between 100 – 250 people.

Effectiveness

A faculty liaison could serve two roles within their department that would increase the likelihood research-based practices would be implemented and provide CTE evidence suggesting their workshops are effective. Their proximity to the other members of the department makes them a convenient resource for faculty who might need more support, leading to higher implementation rates (Brown, 2015; Truong, 2016). In addition, the liaison can report back the effects that they are observing to CTE, as well as advocate for certain programming that might be needed to support high quality instruction. This alternative receives a 3 for faculty adoption of evidence-based practices, and a 2 for evidence provided to CTE.

Political Feasibility

This alternative would be welcome by the APT faculty who would likely be the first to fulfill these roles. Its viability would depend on the quality of the liaison and the relationships within the department, however CTE can be selective on who is chosen and is not required to immediately have a liaison in every area. Departments whose staff already attend CTE workshops would be more likely to benefit from this system, and hopefully encourage other related departments to start attending as well. This alternative receives a 2.5 for political feasibility.

Alternative 4: Tenure & Promotion Guidelines

Quality teaching is part of the tenure and promotion review for all teaching faculty, but there is no mention of professional development or specific pedagogical priorities in the TAMU promotion and tenure guidelines indicators of teacher quality (University Guidelines for Tenure and Promotion, 2022).

The fourth alternative is to petition the Department of Faculty Affairs to include specific language in the tenure and promotion guidelines that would require faculty to provide evidence demonstrating their willingness to improve their curriculum over time or evidence that their curriculum aligns with certain broad competencies.

Every college and department has slightly different tenure and promotion guidelines and would need to revise their guidelines to include this language. CTE consultants should create an exemplar of the updated guidelines and provide examples of competencies a department might want to encourage (e.g., active learning, metacognitive skills, etc.) as well as examples faculty could submit to show they met this requirement. CTE should also be available to consult with departments as they develop these plans and provide the necessary resources and workshops to help faculty meet these goals.

Budgetary Costs

While the burden of changing the guidelines would fall on the individual departments, CTE will need to spend time developing guidelines and consulting with departments. Assuming it takes about 15 hours to develop the materials, and 135 hours are spent consulting (approximately 1 hr/department), labor costs for this alternative are \$4,875. If additional programming had to be written to account for the large increases in take-up and potential demands from specific departments, the cost for hiring an additional full-time consultant would be about \$65,000.

Faculty Attendance

Attendance data provided by CTE indicate approximately 373 different tenure-track faculty attended a CTE session during the 2019-2020 school year, representing almost 18% of all tenure-track faculty at Texas A&M (Accountability - Faculty Headcount, n.d.). However, this value is likely skewed by the onset of the COVID-19 pandemic. There were fewer than 100 unique attendees the year before. Only 50-60% of all tenure-track faculty receive tenure (Tenure Process, 2012). If each of these faculty members began attending

CTE sessions to meet this requirement, CTE could expect attendance rates to increase by about 200 people. APT attendance would likely increase as well for those who are eligible for promotion. This alternative likely would not affect attendance for tenured faculty.

Effectiveness

Professors often cite mixed messages from university administration in the value of teaching versus research, and the current guidelines reinforce this narrative (Murray et al., 2019). Including these requirements within the tenure and promotion guidelines would encourage faculty to spend time improve their teaching. However, there is no guarantee that faculty would receive this training through CTE, and this alternative has no requirement that faculty share with CTE how they implemented these strategies. The tenure review process is confidential, so CTE would not have access to these files without filing a records request, which would ruin the credibility of CTE. This alternative scores a three for encouraging adoption of best practices, but a 1 for providing evidence to CTE, for a total score of 4.

Political Feasibility

This alternative is not likely to be politically feasible. University faculty zealously protect their time and autonomy and implementing a mandate would fly directly in the face of that goal. When most think of threats to academic freedom, people think of external threats such as the Lt. Governor threatening to eliminate tenure from public universities in Texas (Vogel, 2022). However some faculty view any policy that seeks to influence the curriculum taught and delivery method as a threat to their academic freedom as well (Hayes, 2021; Neem, 2019). Trying to force through this change could backfire in the Faculty Senate, and with college deans and other administration. Additionally, there might be department heads who do value their research over teaching and will resent a mandate to divert their attention towards pedagogy. Implementing this mandate might galvanize these faculty to proactively work against CTE's goals. The political feasibility score for this alternative is one.

Outcomes Matrix

		Reevaluate the Current Landscape	Develop a Credentialing Program	Redesign Faculty Workshops to Include Dept Liaison	Include in T&P Guidelines
Budgetary Costs Relative to Status Quo		Relationship Building: \$10,000	First credential: \$13,000 Subsequent credentials: ~\$550 /credential Program development & maintenance: \$10,000 - \$20,000 Relationship Building: \$10,000	Faculty Liaisons and Programming: \$40,000 - \$200,000 Relationship Building: \$10,000	Guideline development and consulting: \$4,875 New Consultant: \$65,000 Relationship Building: \$10,000
		Total: \$10,000	Total: \$33,000 - \$45,750	Total: \$50,000 - \$210,000	Total: \$14,875 - \$79,875
Change in Faculty Attendance		0	175 – 360 people 20-40% increase from 2018-19	100 – 250 people 11-28% increase from 2018-19	200 - 250 people 22 – 28% increase from 2018-19
Effectiveness	Faculty Adoption	Low 1	Medium 2	High 3	High 3
	Evidence Shared with CTE	Low 1	High 3	Medium 2	Low 1
Political Feasibility		Medium-High 2.5	Medium 2	Medium-High 2.5	Low 1

Recommendation

I recommend Alternative 2—implementing a credentialing system that is aligned with TAMU’s core competencies. This alternative has the lowest costs, an expected unique attendance rate greater than 20% relative to pre-pandemic trends and will provide CTE the evidence to begin assessing the center’s effectiveness. This credentialing system allows faculty to understand which teaching practices are valued at Texas A&M and earn credentials for the work that they do to improve their teaching. Faculty would be encouraged to attend a diverse mix of faculty development sessions and show evidence of changed practice to earn the full credential for that competency.

Implementation

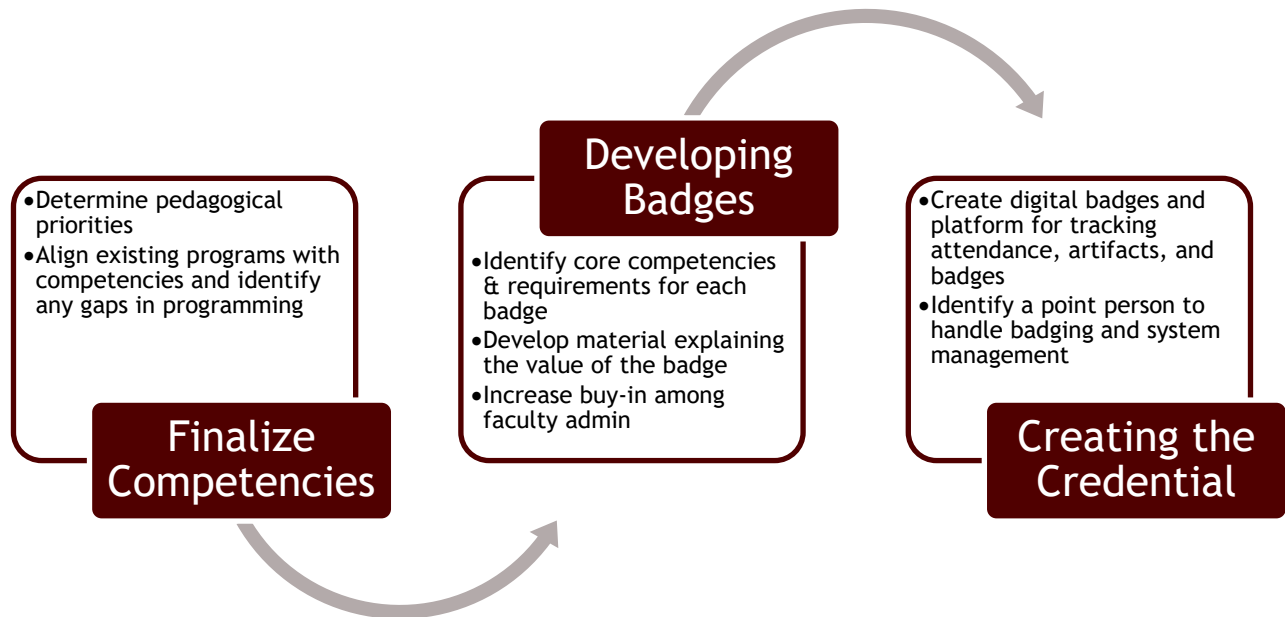
Credential Development

The first step will be finalizing the core competencies and skills that CTE wants their faculty to master. Developing each overall goal for each credential will be an iterative process within CTE. Some centers choose to award credentials by specific skills, others require faculty to engage in broader learning to earn a credential (“Digital Badges at Auburn University - the Biggio Center,” n.d.; “Passport to Great Teaching Program,” n.d.; UCalgary Badges, n.d.; McCullough & Buch, 2020).

CTE consultants should start by thinking what successful implementation of a specific competency would like for a faculty member and work backwards to identify the required artifacts and workshops necessary to develop this skill (How To Design a Digital Badge Strategy - WBT Systems, n.d.). In addition, consultants must identify why a faculty member should work to obtain this credential and how it will benefit them and their students (Hott & Tietjen-Smith, 2018). Time is valuable and earning this credential will be at the expense of another aspect of their work. A convincing case must be made to indicate that losing the potential research time is worth it.

At the same time, CTE consultants should also begin strengthening their relationships with other academic administrators within Faculty Affairs, as well as deans, to gather support for the badging system. Their endorsement to earn these credentials will help increase take-up initially. I also recommend building relationships with department heads, beginning with the departments with the highest attendance rates per college. Developing this political capital is vital to successful implementation of this (and future) initiatives. Maintaining this relationship will also allow CTE to maintain a pulse on professional development needs across the university.

Once the badging requirements have been identified, CTE will need to partner with a badging company or develop a system to track and award credentials. Digital credentials should contain metadata explaining what a faculty member did to receive this credential. This will build credibility and emphasize that faculty did more than attend workshops to earn the credential (No Guts, No Glory, n.d.; Stefaniak & Carey, 2019).



Potential Development Challenges

The length of this first stage will vary depending on the length of time it takes to organize the competencies, develop the badging guidelines, and garner enough support from other administrators. I think the best time to rollout the credentials will be a new faculty orientation. However, the development process should not be rushed to meet this deadline, since the credibility of the credential depends on how faculty perceive it. If CTE is not prepared to roll out the credentials by August, a large-scale launch can be postponed a year. During that year, consultants can develop additional credentials, continue building relationships, and ensure the workshops faculty need to complete each credential are scheduled.

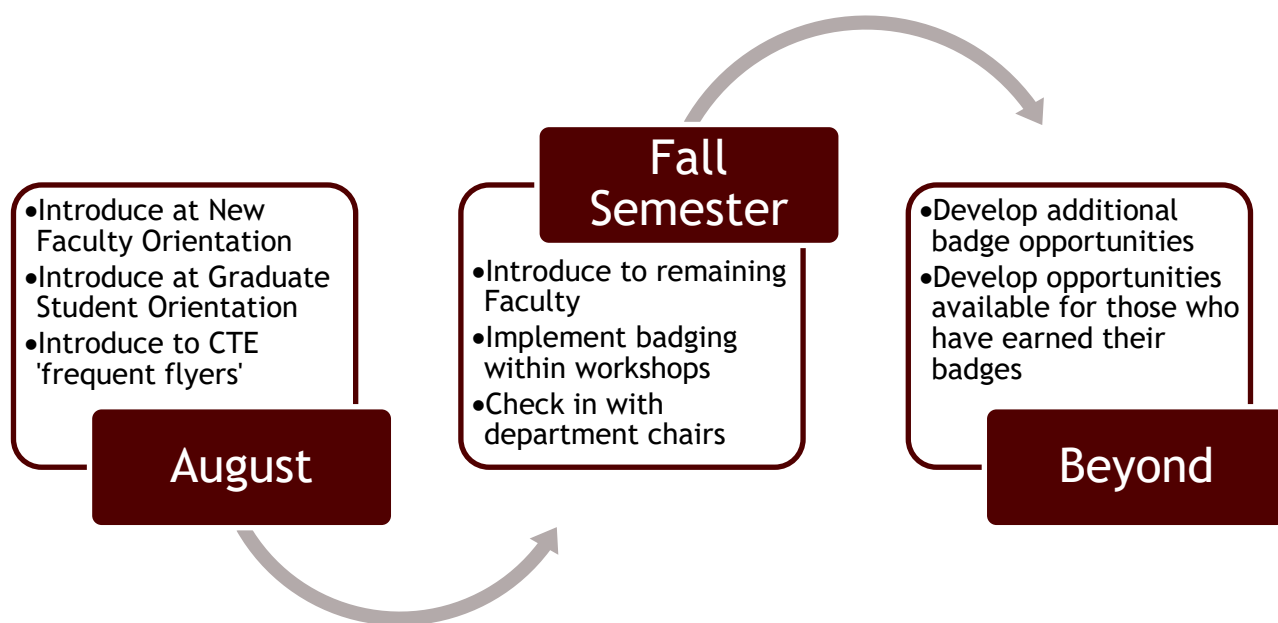
Credential Rollout

Faculty will be invited to participate in the badging system in different phases. The first big rollout will be during orientations for new faculty and graduate students. The badging system can provide insight into Texas A&M's expectations for their faculty and provide a means of developing credibility in their first few semesters at the university. In addition, CTE should reach out to faculty who frequently attend CTE events and introduce the credential system to them. Faculty should be able to earn credentials based on workshops

attended within the last three years, provided they can also provide the additional artifacts required to earn the credential.

Finally, throughout the fall semester, CTE should introduce the credential system to remaining faculty. Workshops throughout the fall semester should begin with a quick overview of the credential system and how to earn credit towards a specific credential. CTE can work with department heads to develop a time that a consultant can attend a meeting and introduce the credential system. Faculty who attended CTE workshops should have their progress pre-marked on their credentials to incentivize completion.

The credential system will likely be ignored by those who have not engaged with CTE recently. However, as their peers begin earning and displaying their credentials, those who would not have attended any sessions might be more willing to attend. Long term, CTE should provide awards, recognition, and leadership and research opportunities for those who have completed their credentials. Developing these long-term goals provides additional value to the credentials, since they will then be perceived as a gateway to these other goals instead of as a cheap gimmick.



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