

# Creating a Culture of Assessment: A Case Study for Building a Sustainable Model for Communicating Results to Guide Change

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## ABSTRACT

Programmatic and curricular assessment, as mechanisms of continuous quality improvement, are essential and require input from multiple stakeholders. Despite its essential nature, there are few resources to help guide the development of a sustainable model of assessment. The aims of this organizational case study are to describe a sustainable model. Data was collected from various stakeholders of the Doctor of Physical Therapy (DPT) program. Results were compared between and within groups to determine level of agreement and yearly trends. These results were discussed at the faculty assessment retreat. The outcomes included data collection timelines that have been operationalized and systematized. Five out of nine faculty participated in a post-survey. All respondents (100%) indicated a favorable impression of the event. Building a culture of assessment requires an intentional and sustainable plan. A retreat was an effective method to communicate the results of the assessment and to build trust and transparency.

## KEYWORDS

Assessment, Curriculum, Physical Therapy, Program, Retreat

## INTRODUCTION

Assessment in health-care professional education programs is essential to developing competent health-care providers (Mukhalalati & Taylor, 2019). This is true for assessments related to individual course learning objectives as well as for programmatic and curricular assessments. Programmatic and curricular assessments can serve as mechanisms of continuous quality improvement (Darling-Hammond, 2020). To do so, they require input/data from multiple stakeholders that can be analyzed and evaluated to determine appropriate action items (Schuwirth et al., 2017). Developing a culture of assessment is even more complex. A culture of assessment is most often described in the literature in one of two ways—either theoretically or based on empirical research of the practices, resources, processes, and/or factors identified as contributing to a culture of assessment (Fuller et al., 2016). Further complicating the construct of a culture of assessment is the underlying motivation for the assessment, which is likely multifaceted (Kline, 2019).

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## Theoretical Descriptions of Culture of Assessment

According to Banta's culture of assessment theory, a culture of assessment includes individuals who believe in the value of assessment and who influence assessment practices. It includes an organized process that supports quality assessment (Fuller et al., 2015; Fuller, 2013). A culture of assessment requires planning for the assessment process, effective communication, simplicity of the model, credibility of the data, and accountability of the assessment team (Amin, 2023). Maki identifies assessment as meaningful when it is anchored in the educational principles of the institution, intentionally designed, and woven into roles and responsibilities across an institution (Maki, 2012; Fuller et al., 2016).

## Empirical Research of Culture of Assessment

The resources involved in a culture of assessment vary. Rudolph et al. (2019) surveyed colleges and schools of pharmacy to assess the current structures and resources committed to assessment. The results demonstrated a wide variety of resources, from zero to six or more positions dedicated to assessment and zero to four or more committees tasked with assessment. Within these positions, there was even more variability in which position (dean, faculty, or assessment coordinator) was responsible for the assessment. The authors acknowledged that there were many resources associated with assessments and that this is likely in response to accreditation changes. While these researchers were able to ascertain the number of resources from a large sample size of pharmacy programs (84% response rate), these results were not correlated to program outcomes (Rudolph et al., 2019). Although institutions with cultures of assessment are often associated with quality (Simper et al., 2022), magnitude of assessment resources does not equate to having a culture of assessment.

One way to capture stakeholder values and beliefs regarding the value of assessment is to utilize the *Survey of Assessment Culture*. This tool was developed in 2011 using Maki's Principles of Inclusive Commitment to Assessment (Maki, 2012; Fuller et al., 2016; Fuller & Skidmore, 2014). The tool has 21 questions; each question has a 5-point Likert scale response. Fuller and Skidmore surveyed 917 respondents associated with assessment across the United States and then completed an exploratory factor analysis. The survey results generated a three-factor structure with good internal consistency. The three assessment culture factors identified from this survey were clear commitment ( $\alpha = 0.93$ , 95% CI [0.92, 0.94]), connection to change ( $\alpha = 0.92$ , 95% CI [0.91, 0.94]), and vital to institution ( $\alpha = 0.71$ , 95% CI [0.65, 0.77]) (Fuller & Skidmore, 2014).

The theoretical descriptions and empirical research regarding cultures of assessment offer significant overlap. For example, clear commitment and connection to change are demonstrated with communication. Having a variety of resources may indicate that the role/responsibility of assessment does not fall to just one or a few individuals at an institution; rather, it is the work of many, in multiple capacities. This overlap offers veracity to the underlying construct and demonstrates the complex nature of a culture of assessment.

## Accountability

A remaining component to consider when trying to understand a culture of assessment is the rationale for assessing. Maki identified assessment practices for a variety of reasons, including accountability, accreditation, reputation, access to financial resources, and/or inquiry into what students learned (Fuller et al., 2016). The value of assessment in higher education (and health-care professions education more specifically), for whatever reason, has risen in recent history (Rudolph et al., 2019). Brown (2017) argued that this was a result of calls for increased accountability in higher education. Accountability comes from multiple levels both internal and external to the organization. Using a framework from organization theory (institutional logics), the authors identified seven silos for accountability within higher education: assessment, accreditation, institutional research, institutional effectiveness, education measurement, evaluation, and higher education public policy. Within each silo, the market, the state,

and/or the profession may have exerted influence. For the assessment silo specifically, the primary influence was from the profession, which emphasized assessment for learning. However, in academic physical therapy, additional silos are also involved. In academic physical therapy, both the assessment and the accreditation silos exert influence from both the state and the profession for both compliance and student learning (Brown, 2017).

## Developing a Culture of Assessment

The literature related to creating a sustainable assessment culture recommends that responsibility for assessment and positive values toward assessment be shared (Amin, 2023; Fuller et al., 2016). The siloed nature of assessment within many institutions makes this difficult. Therefore, there must be clarity for why the assessment is being conducted and what the goal for assessment is. Faculty colleagues and leaders must feel confident that their contributions are respected so that open dialogue and trustworthy engagement can occur. Similarly, if there are disputes about assessment and who is accountable, those conversations should openly occur (Fuller et al., 2015).

A barrier to developing a culture of assessment is the readiness of faculty to participate in the programmatic assessment. Skidmore et al. (2018) investigated faculty perception of the culture of assessment and identified four primary categories of faculty perception: culture of student learning, evolving student learning, culture of compliance, and culture of fear. The results suggested the faculty who were in the category of student learning perceived the culture around assessment as meant to enhance student learning. The faculty who were in the compliance category perceived the culture or assessment to be about meeting minimum requirements set forth by accrediting bodies. Getting agreement from faculty about developing a culture of assessment was difficult if faculty were afraid of assessment or believed it was useful only to compare against minimal standards (Skidmore et al., 2018).

Additional barriers identified included historical resistance, university systems, and logistical constraints (Simper et al., 2022). These authors explored the culture of assessment at three medium-size doctoral degree-granting institutions in Australia, Canada, and Sweden. They conducted semi-structured interviews and used the data only when a minimum of five interviews were present from one institution. Their analysis was coded using a sociocultural framework, and despite the cross-national and cross-discipline design, their findings relating to barriers were consistent across all universities. To make progress toward a culture of assessment, Farkas (2013) proposed using Kotter's eight-step model for organizational change (Kotter, 2024). These steps included establishing a sense of urgency, forming a guiding coalition, creating a vision, communicating the vision, empowering others to act on the vision, planning for and creating short-term wins, consolidating improvements to create more change, and institutionalizing new approaches (Kotter, 2024).

## Culture of Assessment in Health-Care Education Programs

Farkas's work is useful in providing a theoretical lens for change leadership and even creating an initial culture of assessment. However, as in the literature on the culture of assessment, the theoretical component must be empirically explored and paired with information about the resources and process involved as well as the motivation or rationale for conducting the assessment to be most meaningful. Unfortunately, the literature on health-care education programs is limited in these respects. This is especially true in academic physical therapy, where the focus of most assessment discussion relates to meeting the minimum standards set forth by the accrediting body. The minimal standards for accreditation are developed by the Commission on Accreditation in Physical Therapy Education (CAPTE). CAPTE uses *Standards and Elements for Accreditation of Physical Therapist Education Programs* for assessment in DPT programs (Commission on Accreditation in Physical Therapy Education, 2022). The academic physical therapy community, however, is at a precipice, as the American Council for Academic Physical Therapy (ACAPT) has worked to promote the Excellence Framework (American Council of Academic Physical Therapy, 2023), with which DPT programs

may use an excellence standard as their benchmark as opposed to a minimum standard. Jensen et al. (2017) called for reform in academic physical therapy to create a culture of excellence. This call included four elements: shared beliefs and values, shared leadership with a clear vision, a drive for excellence with high expectations, and vital partnerships. The Excellence Framework reinforced these elements, and North et al. (2023) supported promoting a culture of data-sharing as an integral component to this end. In developing DPT programs, as the availability of data for shared decision-making increases, it is imperative to empower all stakeholders to have the open dialogues required within a culture of assessment. While data-sharing is certainly a vital component of assessment and developing a culture of assessment, there are limited resources designed to communicate how to do that best and most efficiently.

In pharmacy education, Islam and Yang (2023) have detailed how a US pharmacy school was able to develop and implement an assessment culture while highlighting some of the challenges in a recent case study. Additionally, Meny et al. (2021) described the faculty perceptions of using a town-hall model for engagement in continuous quality improvement. Both articles cited accreditation standards as the rationale for implementing their assessment practices and the desire to build a culture of assessment. These studies, however, are the few examples that exist in explaining how to create a sustainable model of culture of assessment and are related most directly to pharmacy education.

For assessment activities to be productive, identified action items must be implemented and then further analyzed to determine their effects at all levels. Assessment is not an easy process and can be time-consuming and overwhelming. Furthermore, without training or interest in assessment, continuous quality improvement may not be prioritized. A culture of assessment can help to counter these challenges. Establishing this culture of assessment early on will promote the sustainability of the assessment model. Therefore, the specific aims of this case study are:

- to describe the development of a sustainable model for collecting key assessment data;
- to describe the development of a sustainable model of analysis and communication of key assessment results;
- to describe the process of a faculty assessment retreat to preserve time for shared decision-making regarding program and curriculum assessment.

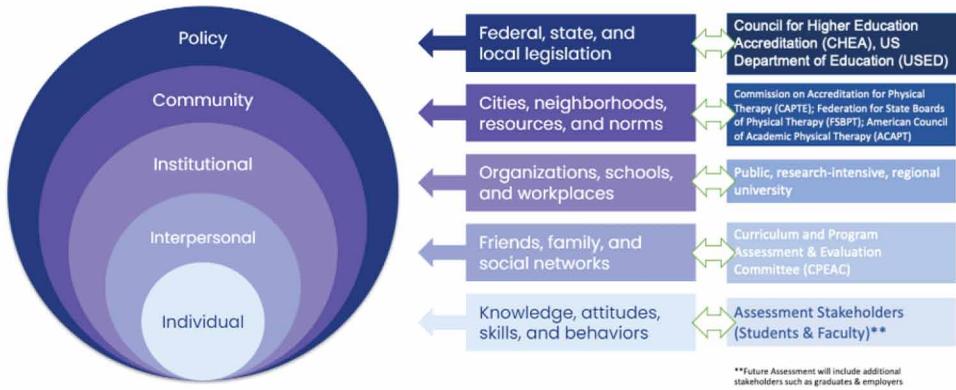
## Theoretical Framework

Situating the culture of assessment within a DPT program within the context of Bronfenbrenner's Ecological System (ES) theory (Guy-Evans, 2023) is useful to identify the various stakeholders and therefore the necessary communication pathways that should exist. ES is useful in analyzing assessment of the DPT program because it offers a lens to view how interconnections affect multiple components of the same organism (Crawford, 2020). This theoretical framework is most often used to describe biological, psychological, and spiritual factors and their interactions with social, cultural, and economic factors (Crawford, 2020) but is useful for exploring the interactions of other entities as well. The ES model generally includes concentric shapes as components of the framework. Each component represents constituents and includes individual, interpersonal, organizational, community, and public policy (Guy-Evans, 2023).

Applying this theory is supported by Brown's (2017) research into the silo of assessment in which each silo has multiple influences, including the market, the profession, and the state. These influences are beyond that of the individual stakeholders but contribute greatly to the individual experience.

For this case study we are operationalizing individuals as the stakeholders giving feedback to the assessment process. In this case, individuals include students, faculty, graduates, and external stakeholders (employers, advisory committee members, clinical partners, and patients). The interpersonal includes the Curriculum and Program Evaluation and Assessment Committee (CPEAC) and represents the exchange of data and results between CPEAC and the individuals identified.

Figure 1. Applying the SES model to case study



Note. Image adapted from Killam (2020).

Organizational/institutional represents the resources, both human and capital, for creating a sustainable model of assessment and culture of assessment within the institution. In this case, it represents a public, regional, R2 institution in the Midwest. The institution provides resources for data collection (Qualtrics), mini grants to develop assessment activities, statistical support, etc. Community reflects the relationships between the DPT program and the institution as well as the relationship between the DPT program and other organizations such as the Federation of State Boards of Physical Therapy, which develops the licensure exam; CAPTE, the accrediting body for all DPT programs; and ACAPT, which fosters excellence in physical-therapy education and promotes continuous quality improvement and shared decision-making. Lastly, organizations such as CAPTE report to the Council of Higher Education Association and ultimately the US Department of Education nationally. Locally, licensure regulations are dictated by state jurisdictions. While individual programs do not report to the institutions directly responsible for public policy, this policy is designed to protect the patients/constituents that these graduates will be treating.

Despite its essential nature, there are few resources to help guide the practical and/or initial development of a sustainable model of assessment. Beyond determining the most meaningful data points and the mechanics of collecting the data, information regarding establishing a culture of assessment within a given organization offers even fewer resources. As a result, this organizational case study is designed to answer the question, “How does one develop a culture of assessment and shared decision-making in a developing DPT program?” The case-study research design is useful because it allows for a deep examination of complicated and complex issues. The question posed requires careful consideration of theoretical, resource/processes, and motivational elements for assessment both internal and external to a program. In the resources and processes used by one DPT program, the authors hope to provide a resource to other academic programs just beginning their journeys toward cultures of assessment.

## METHODS

### Participants

The case for this study was selected out of convenience and came from a recently developed DPT program (initial accreditation in 2021) at a research-intensive institution in the Midwestern United States. The participants included 9 faculty, 30 first-year DPT students, 30 second-year DPT students,

and 29 third-year DPT students. The 30 first-year and 30 second-year DPT students completed their student surveys in September 2021. The 29 third-year DPT students completed the student survey in September 2021 and then graduated in December 2021. These 29 graduates were also the participants in the curriculum and program debriefing session and the individuals who were tested on the National Physical Therapy Exam (NPTE), from which we drew the NPTE reports.

## Data Collection

Data were collected from various stakeholders involved in the DPT program. The data were collected at various time points in the academic year and were analyzed in preparation for the faculty assessment retreat in May 2022 (see Table 1).

Table 1. Stakeholders and time frames for data collection

Stakeholders	Tool	Time Frame	Evaluation Component
Faculty	Faculty Survey	August 2021	Program
1st-Year Students	Orientation Survey	August 2021	Program
2nd- & 3rd-Year Students	Student Survey	September 2021	Program
Graduates	Debriefing Session	December* 2021	Curriculum & Program
Graduates	NPTE Reports**	February 2022	Curriculum
Faculty	Post-Assessment Retreat Survey	May 2022	Faculty Assessment Retreat

Note. \*December data collection takes place just prior to graduation. \*\*The National Physical Therapy Examination is developed by the Federation of the State Boards of Physical Therapy.

Faculty data were collected via survey. Eight out of nine faculty members completed the survey (89%). The survey was developed by the members of the department's Curriculum and Program Evaluation and Assessment Committee. The survey included questions directly tied to CAPTE's *Standards and Elements for Accreditation of Physical Therapist Education Programs* and the program's goals for faculty. Student data were collected in a variety of ways. First, each student cohort participated in the student surveys. The student surveys for second- and third-year students were the same and included questions directly tied to CAPTE's *Standards and Elements for Accreditation of Physical Therapist Education Programs* as well as student goals for the program. Sixty out of 60 second- and third-year students (100%) completed the surveys. The first-year survey is an abridged version of the second- and third-year student survey, as the first-year students, at the time of data collection, have not completed enough of the curriculum to comment on many of the components of the complete survey. Thirty out of 30 first-year students (100%) completed the survey.

Second, in addition to the student surveys, graduate data were collected in two parts during a required formal debriefing session just prior to graduation (December). During the debriefing, a survey was administered first. The survey included open-ended text responses (see Appendix). Next, the members of the department's CPEAC alternated between leading group conversations and taking notes regarding several primary questions. The questions, related to specific courses, included:

- 1) What went well?
- 2) What needs to be improved upon?
- 3) What needs to stop immediately?
- 4) Did this thread of courses prepare you for the clinic?

The CPEAC members opted for this two-step approach to make sure all voices in the cohort could be heard and had an opportunity to share their experiences. The open-ended nature of the questions allows for thick descriptions and leaves space for follow-up and clarifying questions.

Following the debriefing session, the data from the debriefing survey responses were entered into a qualitative-analysis software system, Dedoose, and coded by a third party. The third party, a paid research assistant, reviewed each response and coded it as a positive, negative, or neutral response. A response was coded as positive if the participant indicated they had a positive experience in the course and/or if the response indicated that the course contributed to the student's learning. A response was coded as negative if the participant indicated they had a negative experience in the course or that the course did not contribute to their learning. A neutral response was coded if the response didn't apply to the question (i.e., the student identified a course in the response that wasn't asked about), if the response indicated a mixed review (i.e., the student liked the course but indicated that the course didn't contribute to their learning or vice versa), or if the response did not make sense (i.e., "???", which did not offer any valuable information). To determine internal consistency between the primary authors and the third-party reviewer, approximately 25% of codes were reviewed by the primary authors to determine the code. The primary author's code was then compared to the third-party researcher's code to determine consistency and validity. At the onset, the consistency between the primary authors and third-party researcher was 95%. Following this initial check, any responses that the research assistant was unsure how to code were discussed and resolved with the corresponding author.

The CPEAC members reviewed the debriefing coded results in a heat map. Given that there was a large amount of qualitative data to digest and then compare to quantitative data via faculty and student surveys and NPTE outcomes, using the heat map allowed the researchers to quickly make inferences related to courses that were generally considered positive or negative related to specific content areas. These inferences were then carried over by the CPEAC members to review the quantitative results.

The results from the annual surveys (Faculty, Year 1, Year 2, and Year 3) were recorded in a Microsoft Excel spreadsheet. These results were reported as a percentage of agree/strongly agree statements. The outcomes from the NPTE were also recorded on a separate Microsoft Excel spreadsheet. These results were reported as whole numbers reflecting the scaled scoring system of the exam.

Following the debriefing session and the faculty assessment retreat, CPEAC disseminated surveys to gather feedback about the assessment process that had been developed. CPEAC developed these surveys to include questions that reflected the goals of each of the sessions. These results are used to modify any necessary components in the future.

## Analysis

CPEAC members performed the initial analysis of the results. The results from the annual surveys were compared between each stakeholder group to determine the level of agreement. The results were also reviewed within each stakeholder group as a benchmark to determine year-over-year trends in the future. Because each of these surveys included the same components of CAPTE's *Standards and Elements for Accreditation of Physical Therapist Education Programs*, there were many questions that can be directly compared against stakeholder groups for a more holistic perspective. Any items with lower than 80% agree/strongly agree, with more than 10% discrepancy between stakeholder-group responses, or with a 10% or more decline in year-over-year results were identified as topics for further exploration at the faculty assessment retreat.

CPEAC was able to triangulate results between graduate debriefing survey results, notes from graduate debriefing discussions, and results from the NPTE. The results from the NPTE were analyzed in this first year as the program's outcomes versus national data as well as five selected institutions for benchmarking. When the program's performance was lower than the national or benchmark mean, this was also identified as a topic for further exploration at the faculty assessment retreat. The coded debriefing results and notes from the debriefing discussion were used to gain a deeper understanding

of what specific negative or positive experiences students had related to areas of poor performance or exceptional performance on the NPTE, respectively. These areas, specifically those of concern, were also identified as a topic for further exploration at the retreat.

### **Faculty Assessment Retreat: Shared Decision-Making**

In academic physical therapy, CAPTE identifies core faculty as having a role in curriculum development and planning (Commission on Accreditation in Physical Therapy Education, 2022). As a result, all raw data were distributed to all core faculty in preparation for the faculty assessment retreat. The results identified as topics for further exploration at the retreat were highlighted to indicate that those results would be prioritized for discussion. The retreat agenda was built to facilitate shared decision-making around those areas identified for further exploration.

Conversation and further detailed discussion of the areas identified from the annual surveys, debriefing with graduates, or triangulation with NPTE scores occurred at the retreat. Since all data had been shared prior to the retreat, faculty had an opportunity to prepare for this discussion. To promote all voices in the group discussion, exercises from Liberating Structures were implemented in addition to time for open discussion (Lipmanowicz, 2014). Participants in the retreat included all core faculty. The faculty assessment retreat was designed and facilitated by the members of CPEAC and paid for with funds from the assessment mini grant awarded.

## **RESULTS**

The results from this assessment project are multilayered. There are assessment results that reflect the themes and topic areas identified by annual surveys and graduate debriefing that were discussed at the faculty assessment retreat but were beyond the scope of this paper. Rather, the results presented here are process-related results that speak to the aims of this case study: developing a sustainable model for the collection, analysis, and communication of key assessment data and results and preserving time for shared decision-making based on these results.

### **Sustainable Model**

Data-collection time lines have been operationalized, systematized, and made recurring (see Table 1) to ensure that all stakeholders know when and why they are being asked for data. The timing of data collection also predicates when assessment and dissemination can take place. The assessment process is detailed and communicated to students and faculty to facilitate their engagement in the process. Beyond dissemination of results, as it relates to communication, the faculty needs the information and time to review and process the information prior to discussing. All raw data were shared with the faculty to develop a culture of transparency. Along with the raw data, an executive summary was shared to highlight the areas that CPEAC would be facilitating discussion about at the faculty assessment retreat so that the faculty could be prepared to be active participants.

### **Preservation of Time**

CPEAC applied for and was given an institutional mini grant. This funding made developing a retreat possible. The faculty were asked to reserve a full day after the spring semester ended and prior to the start of the summer session six months prior to the date. CPEAC coordinated a venue off-campus and food and drink, which included coffee/tea/water, breakfast, snacks, and lunch. A faculty social gathering was planned at a local venue after the retreat. Faculty were asked to commit the entire day (8:30 a.m. to 4 p.m.) to the assessment retreat; the social gathering following was optional. At the onset of the retreat, CPEAC explicitly asked faculty to refrain from responding to emails and to set their technology aside, unless it was being used to investigate information related to the discussion at hand. This request was made to garner the full attention of the faculty participants.

At the retreat, 9 a.m. to 12 p.m. was scheduled for curriculum assessment. Lunch and a nature hike were scheduled from 12 to 1 p.m. and program assessment from 1 to 4 p.m. During both the curriculum-assessment and program-assessment components, participants had 20-minute “bio and tech” breaks. CPEAC members alternated between facilitating discussion and taking notes. Conversations among faculty were facilitated by both open forum (i.e., no specific structure, simply gathering voluntary participant feedback) and using a Liberating Structures design that required faculty to reflect, discuss with other participants, and share their ideas.

The post-retreat survey was sent to all faculty participants at the conclusion of the retreat, and five out of nine faculty responded. All respondents (100%) indicated a favorable impression of the event. All (100%) indicated they thought the retreat was well-organized, the data shared prior to the event were beneficial, and the location was conducive for the event.

## DISCUSSION

The process results detailed above created a strong foundation for a culture of assessment. Preserving time for shared decision-making is consistent with previous theoretical descriptions of a culture of assessment that includes shared beliefs and values (Amin, 2023; Fuller et al., 2016). The structure requires minimal resources other than human resources, which is contrary to the literature in pharmacy education (Rudolph et al., 2019) but is realistic in academic physical therapy. There are components of the process to modify in future iterations, but in general, the process produced a sustainable model that can carry the program forward into continued program and curriculum assessment and continuous quality improvement. The instituted process demonstrates a clear commitment creating a culture of assessment, explicitly links data and communication to proposed change, and is vital to the program (Fuller & Skidmore, 2014).

The assessment process and plan were fully executed, and all the initial goals were met. Additionally, we have been able to develop a clear time line for data collection with various stakeholders. This clarity of time lines and objectives from multiple stakeholders is key to developing a good culture of assessment (Fuller et al., 2015; Schuwirth et al., 2017). It is essential in the planning for assessment to be intentional about using relevant methods and appropriate resources, and CPEAC was able to accomplish this with the assistance from the university’s mini grant funding (McCullough & Jones, 2014).

It is also essential to avoid the pitfalls of not having comparative data and adding to faculty workload (McCullough & Jones, 2014). CPEAC was able to do this by using benchmarking reports and preparing comparative data that were sent with the raw data to the faculty. Although this was an additional responsibility of each faculty member, with enough notice they were able to plan the workload appropriately to engage fully. The faculty’s willingness to participate is a testament to their commitment to student learning. Although there wasn’t a formal assessment of the faculty’s perception of the assessment, their meaningful participation reflected a culture of emphasis on student learning (Skidmore et al., 2018).

## Challenges/Limitations

Logistically, there were several challenges/limitations to the process that others should be mindful of when creating their own assessment plans. First, the debriefing survey, completed by the students just prior to graduation, had all open-ended text questions that did not add significant value and made interpretation difficult. This served as a reminder that the details of survey development are paramount and surveys should be developed with the output in mind. Second, having the faculty assessment retreat in May was difficult because it competed with end-of-year events. CPEAC moved up the retreat the next year to April. Finally, one detrimental factor in our ability to interpret the results is that in the current model, there is minimal stakeholder involvement, specifically only students and faculty. Future iterations will include part-time/associated faculty, graduates, and employers of graduates.

## Future Research and Recommendations

Future research and recommendations are focused on resourcing for the assessment plan. While literature supports faculty buy-in as a necessity to lead the charge in assessment (Piascik & Bird, 2008), it is recommended that there be more than just one or two individuals. Quality assessment is time-consuming, and having a committee structure may be the best way to allocate the work. Prioritizing funds for assessment and/or a retreat is always a challenge, but it is justifiable with improved outcomes. Moreover, monitoring the time required for analysis/discussion at the retreat is prioritizing the human capital required of assessment. It is necessary to be mindful of the time that individuals are contributing to this process to avoid burnout and disengagement. Lastly, it is relevant to include an assessment of the individual faculty member's perception of assessment prior to engaging them. It is always good practice to meet individuals where they are, and if faculty have a perception equivalent to a culture of fear or culture of compliance (Skidmore et al., 2018), the discussions may be designed differently to bring those faculty into the fold of assessment as continuous quality improvement for student learning.

## CONCLUSION

Building a culture of assessment requires a clear and intentional plan for data collection, assessment process, dissemination of information, and preservation of time to discuss the results. For data collection, it was helpful to use the ES model to determine all levels of communication and stakeholder involvement. For results analysis, a retreat was an effective method for this case. To build trust and transparency, being sensitive to and having a mechanism to address results that may target an individual faculty member is helpful. Similarly, designing opportunities for all faculty to share their insights or using a tool like Liberating Structures is useful to avoid disengagement and/or lack of participation. Finally, there must be a champion for assessment—and it cannot be just one person. A committee to develop a plan and implement the assessment plan is critical. Building a culture of assessment is work, and having a plan for that work will create a strong foundation.

Within academic physical therapy, a shift toward a culture of assessment is integral. Without a standard set of outcome goals and/or tools/measures, each program is left to develop its own. Without structured guidance, programs produce heterogeneous outcomes, which leads to increased unwarranted variability within academic physical therapy as well as the profession.

## AUTHORS NOTE

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## APPENDIX

### Curriculum Review Survey

Q1 Please briefly describe how well the courses below related to each other and your understanding of Acute Care/ Cardiovascular & Pulmonary physical therapy?

- PT 6000 Gross Human Anatomy \_\_\_\_\_
- PT 6005 Fundamentals of Clinical Palpation \_\_\_\_\_
- PT 6020 Patient Care Management & Mobility \_\_\_\_\_
- PT 6100 Medical Physiology 1 \_\_\_\_\_
- PT 6110 Human Movement 1 \_\_\_\_\_
- PT 6120 Clinical Examination Skills \_\_\_\_\_
- PT 6200 Medical Physiology 2 \_\_\_\_\_
- PT 6210 Human Movement 2 \_\_\_\_\_
- PT 6220 Clinical Interventions 1 \_\_\_\_\_
- PT 6250 PT Mgmt. of Acute/ Cardiovascular & Pulmonary \_\_\_\_\_
- PT 6320 Clinical Interventions 2 \_\_\_\_\_
- PT 6390 Comprehensive Assessment 1 \_\_\_\_\_
- PT 6570 PT Mgmt. of Lifespan: Pediatrics \_\_\_\_\_
- PT 6770 PT Mgmt. of Lifespan: Geriatrics \_\_\_\_\_
- PT 6760 Integrated Complex Cases \_\_\_\_\_
- PT 6890 Comprehensive Assessment 2 \_\_\_\_\_

Q2 Please briefly describe how well the courses below related to each other and your understanding of Musculoskeletal physical therapy?

- PT 6000 Gross Human Anatomy \_\_\_\_\_
- PT 6005 Fundamentals of Clinical Palpation \_\_\_\_\_
- PT 6020 Patient Care Management & Mobility \_\_\_\_\_
- PT 6100 Medical Physiology 1 \_\_\_\_\_
- PT 6110 Human Movement 1 \_\_\_\_\_
- PT 6120 Clinical Examination Skills \_\_\_\_\_
- PT 6200 Medical Physiology 2 \_\_\_\_\_
- PT 6210 Human Movement 2 \_\_\_\_\_
- PT 6220 Clinical Interventions 1 \_\_\_\_\_
- PT 6320 Clinical Interventions \_\_\_\_\_
- PT 6390 Comprehensive Assessment 1 \_\_\_\_\_
- PT 6540 PT Mgmt. of Musculoskeletal Conditions 1 \_\_\_\_\_
- PT 6570 PT Mgmt. of Lifespan: Pediatrics \_\_\_\_\_
- PT 6640 PT Mgmt. of Musculoskeletal Conditions 2 \_\_\_\_\_
- PT 6770 PT Mgmt. of Lifespan: Geriatrics \_\_\_\_\_
- PT 6760 Integrated Complex Cases \_\_\_\_\_
- PT 6890 Comprehensive Assessment 2 \_\_\_\_\_

Q3 Please briefly describe how well the courses below related to each other and your understanding of Neuromuscular physical therapy?

- PT 6000 Gross Human Anatomy \_\_\_\_\_
- PT 6005 Fundamentals of Clinical Palpation \_\_\_\_\_

- PT 6020 Patient Care Management & Mobility \_\_\_\_\_
- PT 6100 Medical Physiology 1 \_\_\_\_\_
- PT 6105 Foundations of Neuroscience \_\_\_\_\_
- PT 6110 Human Movement 1 \_\_\_\_\_
- PT 6120 Clinical Examination Skills \_\_\_\_\_
- PT 6200 Medical Physiology 2 \_\_\_\_\_
- PT 6210 Human Movement 2 \_\_\_\_\_
- PT 6220 Clinical Interventions 1 \_\_\_\_\_
- PT 6320 Clinical Interventions 2 \_\_\_\_\_
- PT 6390 Comprehensive Assessment 1 \_\_\_\_\_
- PT 6530 PT Mgmt. of Neuromuscular Conditions 1 \_\_\_\_\_
- PT 6570 PT Mgmt. of Lifespan: Pediatrics \_\_\_\_\_
- PT 6630 PT Mgmt. of Neuromuscular Conditions 2 \_\_\_\_\_
- PT 6770 PT Mgmt. of Lifespan: Geriatrics \_\_\_\_\_
- PT 6760 Integrated Complex Cases \_\_\_\_\_
- PT 6890 Comprehensive Assessment 2 \_\_\_\_\_

Q4 Please briefly describe how well the courses below related to each other and your understanding of Medical & Integumentary physical therapy?

- PT 6000 Gross Human Anatomy \_\_\_\_\_
- PT 6005 Fundamentals of Clinical Palpation \_\_\_\_\_
- PT 6100 Medical Physiology 1 \_\_\_\_\_
- PT 6105 Foundations of Neuroscience \_\_\_\_\_
- PT 6110 Human Movement 1 \_\_\_\_\_
- PT 6120 Clinical Examination Skills \_\_\_\_\_
- PT 6200 Medical Physiology 2 \_\_\_\_\_
- PT 6210 Human Movement 2 \_\_\_\_\_
- PT 6220 Clinical Interventions 1 \_\_\_\_\_
- PT 6320 Clinical Interventions 2 \_\_\_\_\_
- PT 6390 Comprehensive Assessment 1 \_\_\_\_\_
- PT 6560 PT Mgmt. of Medical & Integumentary Conditions \_\_\_\_\_
- PT 6570 PT Mgmt. of Lifespan: Pediatrics \_\_\_\_\_
- PT 6770 PT Mgmt. of Lifespan: Geriatrics \_\_\_\_\_
- PT 6760 Integrated Complex Cases \_\_\_\_\_
- PT 6890 Comprehensive Assessment 2 \_\_\_\_\_

Q5 Please describe how well these courses related to each other and your understanding of Research/ Evidence Based Practice?

- PT 6220 Foundations of Research \_\_\_\_\_
- PT 6380 Applied Discovery 1 \_\_\_\_\_
- PT 6580 Applied Discovery 2 \_\_\_\_\_
- PT 6680 Applied Discovery 3 \_\_\_\_\_
- PT 6980 Applied Discovery 4 \_\_\_\_\_

Q6 Please describe how well these courses related to each other and your understanding of Professional Responsibility/ Professionalism?

- PT 6190 Professionalism in Clinical Practice 1 \_\_\_\_\_
- PT 6290 Professionalism in Clinical Practice 2 \_\_\_\_\_
- PT 6370 Health & Wellness Promotion in PT \_\_\_\_\_
- PT 6670 PT Practice Management \_\_\_\_\_
- PT 6470 Professionalism & Leadership Development 1 \_\_\_\_\_
- PT 6670 Professionalism & Leadership Development 2 \_\_\_\_\_
- PT 6970 Professionalism & Leadership Development 3 \_\_\_\_\_
- PT 6895 Professional Licensure Prep Course \_\_\_\_\_

Q7 Please briefly describe how well these courses related to each other and your clinical education experience?

- PT 6290 Professionalism in Clinical Practice 1 \_\_\_\_\_
- PT 6390 Professionalism in Clinical Practice 2 \_\_\_\_\_
- PT 6490 PT Clinical Experience 1 \_\_\_\_\_
- PT 6690 PT Clinical Experience 2 \_\_\_\_\_
- PT 6990 PT Clinical Experience 3 \_\_\_\_\_

Q8 Please briefly describe your experience related to the DPT programs defined curricular threads.

- Discovery of Profession \_\_\_\_\_
- Discovery of Science \_\_\_\_\_
- Discovery of Self \_\_\_\_\_
- Professional Behaviors \_\_\_\_\_
- Biopsychosocial \_\_\_\_\_
- Collaborative & Team Approach \_\_\_\_\_

Q9 Please briefly describe your experience with the overall course sequencing of the curriculum?

\_\_\_\_\_

Q10 Please briefly describe your experience with the overall intensity/ performance expectations of the curriculum \_\_\_\_\_

Q11 Any additional insight you would like to share about your experience with the curriculum?

\_\_\_\_\_