

Teaching to Changing Standards in Educator Preparation Programs

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Abstract This paper discusses how Educator Preparation Programs (EPPs) can align instruction and assessment to attain specific program outcomes, while meeting the ever-increasing expectations for training effective teacher candidates. Authentic examples are provided of how an EPP has developed program outcomes, aligned course instruction, analyzed multiple standards, and redesigned assessment in the journey toward national accreditation. Conclusions highlight the power of standards-based alignment and the importance of collaborative efforts among faculty members.

Keywords Accreditation, Assessment, Educator Preparation Program, Standards-based

1. Introduction

In an ever-changing climate of increased expectations of teacher candidates and for standards-based clinical instruction in the K-12 setting, educator preparation programs must adapt, align, and design more effective approaches to teaching amid ever-changing standards. Accompanying these changing standards, the internal pressures of seeking national accreditation serve as an impetus for educator preparation programs to shift foci in response to the new standards for K-12 student learning. This article purports to provide insights and practical application of how the members of an Educator Preparation Program (EPP) learned to work together to establish a standards-based and evidence-based culture in order to prepare teacher candidates to learn innovative ways of thinking and teaching in a climate of ever-changing standards.

The first step in creating a more effective approach in preparing teacher candidates to teach to changing standards began with the alignment of the entire program with national, state, and local standards on a perpetual basis with an attitude of continuous improvement. Research findings determined that demands for increased accountability in higher education in recent years have caused a shift toward Instructional Systems Design (ISD) methodology to assess higher education programs [13]. The ISD methods have been used in the business field and by the United States Armed Services since World War II [8]. The most basic model of ISD is known as “ADDIE” which means to

“analyze, design, develop, implement, and evaluate” [8]. The model may be adapted to meet the specific needs of any organization and because it is iterative, the model is data driven [8]. When a change occurs within an organization using the ISD model, the decision for change is based upon collected data.

Guided by the research, the EPP’s journey adopted the ISD model to develop and implement alignment with the national standards of the Council for Accreditation of Educator Preparation (CAEP) [4], the InTASC Core Model of Teaching, and the International Society for Technology in Education (ISTE) [6]; the state standards of the Texas Core Curriculum (TCC) of the Texas Higher Education Coordinating Board (THECB) [12], the Texas Administrative Code (TAC) for Educator Standards [9], Texas College- and Career-Readiness Standards (TCCRS) [10], the Texas Essential Knowledge and Skills (TEKS) [11]; and local standards that included the university’s overarching goals, strategies, and outcomes of the General Learning Outcomes (GLOs) [14]; and the Six Dimensions of Quality Teaching and Learning [7] [See Table 1].

Before the EPP may equip teacher candidates with the knowledge and skills required for teaching with new standards in the K-12 setting, the central standards that drive the collective work of the EPP had to first be identified and disseminated among faculty and candidates alike.

As another component of the ISD model, all of the identified standards were collaboratively analyzed by the EPP. This analysis determined that departmental educational learning outcomes for teacher candidates needed to be established to drive the collective work of the EPP. Afterward, each individual course within the department would be redesigned to not only ensure alignment with the standards, but also to produce authentic

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assessment data in meeting those standards.

2. Discussion

2.1. Redesigning Program Learner Outcomes in Order to Align Standards

As part of a continuous collaboration, the EPP redesigned the existing program learner outcomes of the conceptual framework into new Program Educational Outcomes (PEOs). These PEOs were a result of the in-depth analyses of the national, state, and local standards and what the EPP believed were performance requirements of a master teacher in the field of education.

The resultant PEOs yielded a global listing of candidate learner outcomes that not only was comprised of the numerous objectives from the identified standards, but also served as a reflection of what the EPP believed to be the core requirements of a master teacher.

Program Educational Outcomes:

1. Critical creative thinkers who develop solutions to improve the educational environment and who inspire students or co-workers.
2. Effective communicators who use verbal, nonverbal, electronic, and print modes of communication to establish a positive school or work environment and promote thinking and learning.
3. Advocates for diverse learners who appreciate, promote, and model the values of diversity.
4. Users of technology who seamlessly integrate multimedia in learning environments as instructional and management tools to enhance learning.
5. Life-long learners who take responsibility for their own learning and continuously foster their professional renewal.
6. Stewards of the Profession who represent ethical and professional dispositions.
 - a) Demonstrate an expectation that all students can learn and are a vital part of the learning community.
 - b) Display sensitivity to students' needs.
 - c) Work with peers, clinical instructors, cooperating teachers, university field supervisors, and relevant stakeholders to advance learning.
 - d) Model poise, maturity, and sound judgment.
 - e) Engage in continuous self-evaluation and improvement.
 - f) Promote ethical and professional standards in teaching, learning, and research.

Table 1. Program Education Outcomes (PEOs) and Standards Alignment for the EPP

EPP Program Educational Outcomes (PEOs)	ISTE	CAEP	InTASC	TCC/THECB/G LOs	CCRS	TAC	Research
1. Critical Creative Thinkers	ISTE 1	CAEP 1, 2, 4	InTASC 1, 2, 3, 4, 5, 6, 7, 8	Critical Thinking Skills: GLO 2, 7	College and Career Readiness Standards (CCRS) P-16 Initiatives	Title 19, Part 2, §149.1001 Teacher Standards	Six Dimensions of Teaching and Learning (DL)
2. Effective Communicators	ISTE 3, 4	CAEP 1, 2, 4	InTASC 1, 2, 3	Communication Skills: GLO 1	CCRS P-16 Initiatives	§149.1001 Teacher Standards	DL
3. Advocates for Diverse Learners	ISTE 2, 4	CAEP 1, 2, 4	InTASC 1, 2, 3, 4, 5, 6, 7	Teamwork: GLO 4, 5	CCRS P-16 Initiatives	§149.1001 Teacher Standards	DL
4. Users of Technology	ISTE 2, 3, 4	CAEP 1, 2, 4, 5	InTASC 4, 5, 6, 7, 8, 9	Empirical and Quantitative Skills: GLO 6	CCRS P-16 Initiatives	§149.1001 Teacher Standards	DL
5. Life-long Learners	ISTE 1, 5	CAEP 1, 2, 4, 5	InTASC 1-10	Critical Thinking Skills: GLO 3, 5, 6	CCRS P-16 Initiatives	§149.1001 Teacher Standards	DL
6. Stewards of the Profession	ISTE 4	CAEP 1-5	InTASC 9, 10	Social Responsibility GLO 4	CCRS P-16 Initiatives	§149.1001 Teacher Standards	DL

2.2. Redesigning Individual Courses to Reflect Program Educational Outcomes by Using Backward Design

After creating the global PEOs, the EPP became keenly aware that each course in the program should be clearly linked to the EPP's conceptual framework, promote the desired ethical and professional dispositions of candidates, and support the stated PEOs. These important course alignment goals were achieved through the use of the ISD methodology to encourage more consistent collaboration among the faculty members of the EPP and through harnessing the philosophies of backward design [15]. A specific challenge encountered by the EPP's faculty members was the customarily entrenched practice of higher education faculty working in "silos" rather than working together to establish a more collaborative culture. Historically, each professor in the program would align their courses with various state standards, and then would complete a matrix showing the various state standards that their courses had met. With this system, each professor worked individually, and there was no formal assessment of each course. The members within the EPP had to abandon their "silos" and create an organizational culture that fostered a collaborative effort to fully meet the EPP's overall objectives.

To promote consistent teamwork, regular faculty meetings were held to provide a venue for more effective communication and the development of shared understandings. One of the faculty's first tasks was to revisit and revise the department's mission and vision statements. This required the faculty to discuss the outcomes of the EPP and articulate what was envisioned for teacher candidates when they left the program. This collaborative work and continued discussion served as catalysts for program changes and the creation of the Ethical and Professional Dispositions for all teacher candidates.

To facilitate standards alignment and improve candidate learner outcomes for all courses within the EPP, faculty addressed the first step of backward design by beginning with the end in mind. Wiggins and McTighe [15] explain that the first step in backward design is to identify the desired results. According to Wiggins and McTighe [15] it is difficult to make effective plans until educators know exactly what they want their students to learn; therefore, the faculty started the journey by clearly articulating the goals that focused their planning and guided purposeful action toward the expected outcomes. The previously held interpretations of faculty seemed narrowly focused on only the Educator Preparation Program (EPP) state competencies or were loosely tied to professional standards such as the International Literacy Association (ILA) or the NCTM (National Council of Teachers of Mathematics). However, embracing the ISD model encouraged faculty to realize the importance of developing deeper knowledge about all of the salient standards, and appreciating how these relevant standards dovetail, coordinate, and are interconnected. As a

direct result, the EPP began to delve deeper into the Interstate Teacher Assessment and Support Consortium (InTASC) and Council for the Accreditation of Educator Preparation (CAEP) standards. This intentional study of the research resulted in a precision of purpose not only for specific programs within the EPP, but also facilitated professional growth for each faculty member. This fresh understanding ameliorated faculty to create higher quality course assignments and more effective evaluation tools for teacher candidates within the program.

While the collaborative effort proved beneficial, the EPP remained faced with the task of moving the entire program in the direction of the desired ISD model. By using this model, data from each individual course could be used in order to assess the program as a whole. Understanding this task, redirecting the thinking of faculty towards an ISD model of program assessment would be challenging. EPP administrators began at the course level when facilitating change in faculty thinking. Faculty members were charged with converting a list of course objectives into learner outcomes that had a broader, more global scope.

Designing learner outcomes using an ISD model required faculty to analyze the performance requirements of a master teacher in the field, evaluate the role a particular course would play in creating that future master teacher [8] and design, develop, and implement instruction that would lead candidates to master teaching. Once again, the first step of backward design was used. Faculty examined what the desired end result for candidates should be and asked themselves various questions when converting their lists of course objectives into learner outcomes:

- What would content knowledge look like in practice by a master teacher in the classroom?
- At the end of this course, will the candidate be able to exhibit the same characteristics of using that knowledge as a master teacher in a classroom?
- What will our candidates need to know and what would they need to be able to do to be a master teacher?

By responding to these guiding questions, we transformed narrow content-based course objectives to encompass a broader, holistic view of actual field-based work. Here are some specific examples of how a children's literature course implemented this shift from course objectives linked only to content to more comprehensive learner outcomes:

Original Course Objectives (6 of 16)

1. Be familiar with a variety of classic and contemporary children's literature.
2. Be familiar with authors and illustrators who are influential in the field of children's literature.
3. Be familiar with the historical development of children's literature.
4. Recognize and apply specific criteria for evaluating and selecting genre in children's literature.

5. Understand how children's literature might be integrated into the K-8 school curriculum.
6. Know criteria for building a balanced collection of children's books in a classroom or home library.

New Learner Outcomes

Within a transactional, constructivist, and socio-linguistic theoretical framework, teacher candidates will:

1. Create a diverse classroom library.
2. Evaluate literature's potential for integration across the curriculum.
3. Evaluate literature's use in culturally responsive instruction.
4. Analyze literature's capacity for building oral and written language proficiency.
5. Develop within learners an aesthetic appreciation of literature.

The second step of backward design is to discover if candidates are learning the designed knowledge and skills educators want them to attain and to decide what types of evidence will be used to evaluate their mastery. The third step is to actually plan learning experiences and design assignments [15]. The second and third steps of the backward design model were implemented into the work of the EPP. Once the course learner outcomes were completed, faculty then developed a Knowledge Effectiveness Indicator (KEI) assignment for each course in order to measure candidate mastery of course content and key standards-based expectations. Because the ISD methodology is iterative, professors had to design KEI assignments in such a manner that data collection from the assignment would serve as the driving force in course improvement [1], [8]. On the graduate level, it was noted that the program's comprehensive exam would be considered the KEI assignment for all graduate work.

Additionally, faculty developed assessment rubrics for KEI assignments to measure course learner outcomes. For decades, the "grading" rubric has been the educator's rubric of choice, and most of the rubrics being used at the course level were used only for evaluating specific assignments in order to assign grades. However, the design of a grading rubric differs from the design of an assessment rubric. Asking faculty to relinquish grading rubrics and replace them with assessment rubrics proved to be a point of contention. However, being professional educators, they rose to the challenge.

Because of the EPP's limited experience in ISD methodology, creating rubrics has proven to be challenging. The authors of this article formed a rubric committee and invested hours in creating two rubrics - one rubric for assessing program learner outcomes and one for assessing graduate level comprehensive exams. The committee has been through multiple versions of the two rubrics and each version has resulted in a better product. As learning of the ISD process continues, additional improvements to the rubrics by faculty will be ongoing.

In the field of education, there is a tendency to wait until

a rubric is perfected before assessing with the rubric begins. In reality, perfection is illusive [1]. Assessment begins not only with the best rubric that is currently available, but also with an understanding that continued improvement of a rubric's reliability will ensue [1]. The reliability of a rubric is contingent upon the quality of level descriptors [1], [5]. When a quality rubric is provided to a teacher candidate up front, the rubric advocates for a better and more successful performance by the teacher candidate. In the EPP's quest for creating quality rubrics, the authors as a rubrics committee have assembled the following basic characteristics that support beginning rubric development.

A reliable rubric will contain level descriptors that are definable, observable, have distinct levels of performance, and provide quality feedback to teacher [2]. The levels can be additive, meaning that as the levels ascend, advanced behaviors are added to the next level; the levels can be qualitative wherein a description of the quality of behavior occurs at each level; or the levels can be both additive and qualitative [13].

If the categories are definable, faculty and candidates alike will have a clear understanding of what is being measured, and the clarity of measurement will lead to better performance from teacher candidates. To aid in clarity, the presence of actions rather than the absence of actions should be emphasized. This emphasis on actions indicates a quality of performance that is observable [2], and observable performance leads to self-evaluation. When engaging in self-evaluation, descriptive levels will provide a quality of feedback that will enable the candidate to discern what type of improvement is needed [2]. It is then up to the candidate to make the improvements, and in doing so, will close a loop of self-directed assessment [13]. When administered consistently, such a rubric will yield fairness in evaluation.

The rubrics committee also discovered characteristics that would diminish rubric effectiveness. Level descriptors that define performance through counting measures such as "fewer than 3 strategies" or "no more than 5 grammatical errors" should be avoided [2], [13]. Such descriptions cause the level descriptors to be too narrow. Quality descriptors maintain a degree of flexibility that allows for more than one possibility [2], [13].

Furthermore, the use of relative terms such as *excellent*, *good*, *fair*, *poor*, *somewhat*, *several*, *most*, *some*, *all*, *moderate*, etc. should be avoided [2], [13]. Relative terms make it difficult to create descriptor levels that are definable. Relativity can cause a candidate to misinterpret what is truly expected, and, therefore, will not prompt a better performance. The best level descriptors will be precise in that they are definable, observable, and have distinct levels of performance. At the same time, the descriptor will include a level of inference, which creates a degree of flexibility [2], [13].

The rubrics committee discovered that assessment is better achieved using a four level rubric rather than a three or five level rubric. With an odd number, assessment has a

tendency to fall to the middle [2], [13]. A four-level rubric emphasizing descriptors that are definable and observable with distinct levels of performance allows for quality feedback and calls for a more analytical approach when assigning an assessment score. A four level rubric that includes two levels of development and is used for multiple assessments is even more effective. In such a case, the assessment is indicative of scaffold learning [13].

After the EPP had designed program educational outcomes, changed course objectives to course learning outcomes, developed KEI assignments, developed a master rubric for the program educational outcomes, and developed assessment rubrics to measure the data from KEI assignments and graduate comprehensive exams, it was time for the EPP to begin the process of assessing the entirety of the program.

2.3. Assessment of the Educator Preparation Program with Changing Standards

The ultimate goal of the EPP is for all teacher candidates to develop the skills and expertise necessary to become highly qualified and reflective teacher practitioners. Therefore, faculty members must model as a learning progression the skill of reflection that candidates can then use to promote their individual professional growth [3]. One of the most important insights resulting from this journey was the development of a well-organized assessment system that was directly linked to program standards. The EPP ensured that the assessment measures were valid, reliable, unbiased, and could be used across all courses and all programs within the department. A three-year program evaluation assessment cycle was established to ensure the consistent assessment of all programs and courses in the EPP. Each program also developed an assessment plan targeting different annual outcomes to validate continuous assessment of all components of the program. By intentionally reflecting, planning, and assessing to close the loop for each of the identified outcomes, the EPP remains confident that a solid plan based upon appropriate standards has been established that can achieve the desired goals for the EPP.

A master rubric to measure each of the six program educational learner outcomes has been developed to facilitate candidate mastery and learning. This “master” rubric can be used in any course, at any level whether graduate or undergraduate, and can be used by faculty in developing an assessment of candidate performance on a KEI assignment. Data resulting from a KEI assignment may be routinely collected to provide evidence of mastery and then analyzed to direct needed course adjustments. Each semester the EPP now has a process of continuous assessment through the use of KEI assignments for every course in the program. Because these KEI assignments produce tangible data on candidate performance, the results of the KEI assignments align with ISD methodology.

Based on the experiences of implementing the ISD

methodology, the EPP has concluded that no assessment or evaluation was complete until the continuous improvement cycle was closed. Through the assessment process journey, the EPP has created improved goals and objectives that are directly aligned to the PEOs. As an educator preparation program, the unit wanted to know what goals were to be accomplished and to identify the evidence of the accomplishment of these goals. The EPP assessed and collected data, examined the results, and reflected upon and analyzed the evidence to determine what was effective and what still needed to be improved. As a result, an action plan was created for each of the PEOs. The EPP considered each assessed outcome and how the results could be connected to future educational outcomes. This allowed the process to be cyclical and resulted in continuous improvement with both vertical and horizontal alignment to national, state, and local standards that included university, program, and departmental standards.

The implementation of how this assessment was implemented in the graduate reading department of the EPP is included in the next section.

2.4. Example of Program Assessment

In the 2013-2014 academic year, the reading program of the EPP was still using learning outcomes in its graduate reading program to evaluate candidates’ performance and success in meeting objectives. However, once the EPP began evaluating the reading program and disaggregating data, program faculty realized that changes needed to be made in the reading program for continuous improvement.

In the 2014-2015 academic year, the reading program again reviewed the learning outcomes they had been using and found there were too many outcomes and that they were too specific. Due to this realization, faculty began a complete realignment of all standards and moved to the more global Program Educational Objectives or PEOs. From the standards realignment, faculty members found that the past learning outcomes focused on what the candidate could do after completing the program, whereas the PEOs now focused on who the candidate will be as an educator after completing the program. In the assessment cycle, the EPP’s reading program focused on evaluating two PEOs each academic year. The committee gathered data on these PEOs and assessed their program’s effectiveness each academic year. Because program faculty engaged in this evaluation of the reading program and its effectiveness, faculty members learned what they had been doing needed to be changed and that the current standards needed revision. This process allowed program faculty to become better educators and more effective models for the teacher candidates within the program.

Currently, the EPP’s reading program is evaluating two different PEOs in the 2015-2016 academic year, and next year, the assessment cycle will be complete as program faculty evaluates the final two PEOs. As the committee progressed through the program evaluation, they had to

verify what was stated with evidence and supporting documentation. When the program faculty first began this process, it was difficult to go back and find evidence of things they had done in past courses. As an evidence-based approach, faculty began to understand the standard alignment process required them to retrieve documents that would substantiate everything they were reporting. This is why the documents and records were so important.

For each of the PEOs that were assessed in a former academic year, the committee created a data analysis chart for each course they evaluated; these in turn were vertically aligned to the university, state, and local standards to ensure all objectives were aligned with current standards. The committee also examined specific courses taught each semester of the current academic cycle. Through this process, the committee evaluated the program's effectiveness for each PEO by assessing the KEI assignments. The program listed the course, the semester, how many graduate candidates were enrolled in that course, a description of the KEI assignment, and the results-percentage of mastery level on the data analysis chart. The committee used the new assessment rubrics to evaluate candidate performance on the KEI assignments,

and acknowledged that program faculty was meeting those outcomes when high percentages of candidates ranged from proficient to distinguished [See Table 2].

Concerning the assessed PEOs, instructional outcomes were measured using data sources such as KEI assignments, certification exam results, and comprehensive exam results. The committee explained the criteria of these data sources and what each one entailed in an assessment narrative. After analyzing this data, faculty wrote the assessment results for each of the assessed PEOs for that academic year. Essentially, this was a narrative explaining the implications of what the reading program was doing right, what was working, and what still needed improvement.

From the implications, the committee created an action plan where the reading program continued what was working and then wrote a detailed improvement plan to address the issues found through the evaluation. From this point, the committee considered what their next steps would be. This included which PEOs had been addressed in previous academic years, the current academic year, and which PEOs would be addressed in the future on the assessment cycle. The effectiveness of actions addressed the action plan: Did it work? What still needs to be addressed?

Table 2. Program Assessment Data Analysis Chart

Course Name:	Semester	Number Enrolled in Course	Assignment Description: (Source #1)	Results: Based on the Reflection rubric criteria	% of mastery level	KEI Assignment Description: (Source #2)	Results: Based on the Reflection rubric criteria	% of mastery level
EDPD 5378: Language Development	Spring 2014	5	SLA Journals: A progressive series of 5 journals where candidates took free online language lessons to learn a 2 nd language with which they had no previous experience. The candidates had to reflect on the language learning process, how potential Culturally and Linguistically Diverse (CLD) students might feel about 2 nd language learning in the classroom, and how they could apply this learning to help future students.	Distinguished: 3 candidates	60%	Philosophy Paper: Candidates reflect over the course learning and synthesize the content learning by creating a philosophy of education concerning teaching CLD students. Candidates discuss specific ways in which they will apply the learning from the course to educating future students. They also discuss how to implement the ELPS standards and ways in which they will seek continuous improvement after they graduate.	Distinguished: 2 candidates	40%
				Proficient: 2 candidates	40%		Proficient: 2 candidates	40%
				Developing: 0 candidates	0%		Developing: 1 candidate	20%
				Emerging: 0 candidates	0%		Emerging: 0 candidates	0%

3. Conclusions

It is important to note that the EPP has barely left the starting gate with this ISD methodology, and the process is ever evolving. The purpose in sharing these evaluative tools and the process in building them is to generate a discussion of identifying what meaningful measures of standards-based learning outcomes are in order to achieve more common measures across the state, to strengthen accreditation efforts, and to reduce burdens of assessment design for educator preparation programs by promoting collaboration, communication, and collegiality among educators. The purpose of this article was to provide the insights and practical application of how an EPP learned to work together to establish a standards-based and evidence-based culture to prepare teacher candidates to succeed in ways of thinking and teaching in a climate of every-changing standards. How do educators build a high quality standards-based assessment? This question may only be answered by a rigorous continued discussion of engaged educators who seek to create an integrated, inclusive assessment system by building a culture of standards-based evidence. As educators, all must abandon the “silos” of isolation and emerge into the lighted hallways of active collaboration, real communication, and rewarding collegiality. Teacher candidates deserve nothing less.

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