



# California University of Pennsylvania

## Conceptual Framework for Teacher Education and Educational Specialists



California University of Pennsylvania has a rich history of preparing teachers and educational specialists since 1852. The faculty is committed to the preparation of today's students to become tomorrow's teachers and educational leaders. Advances in learning theory, assessment, technology, global communications, and a better understanding of changing family dynamics require that tomorrow's educational leaders and teachers have the most up-to-date skills and understandings as possible.

The theme for our conceptual framework is "Preparing Tomorrow's Educational Leaders through Knowledge, Professional Practices, and Professionalism." The conceptual framework for California University of Pennsylvania's teacher education and educational specialist program is based upon the three principles of Knowledge, Professional Practices, and Professionalism, which form our philosophical foundation. Three elements support each of the conceptual framework principles, creating a strong base for our candidates to build the knowledge, skills, and dispositions required of a 21<sup>st</sup> century educational leader and teacher.

### Conceptual Framework Principles

#### #1 – Knowledge

- ◇ Content (1A)
- ◇ Standards (1B)
- ◇ Technology (1C)

#### #2 – Professional Practices

- ◇ Child Development (2A)
- ◇ Diversity (2B)
- ◇ Design, Implement, & Assess (2C)

#### #3 – Professionalism

- ◇ Professional Disposition (3A)
- ◇ Leadership Development (3B)
- ◇ Personal Learning (3C)

#### Principle #1: Knowledge

When preparing to work with students, our candidates' mastery of specialized knowledge of content is crucial. Standards guide our candidates' practice. Technological literacy is essential for educators in the 21st century as they seek to effectively meet the needs of all students. Education candidates and educational specialists must have expertise in these areas:

##### **Content (1A)**

Content is the significant information that establishes the foundation for each discipline. Education candidates and educational specialists must possess a strong content knowledge base in their discipline. Mastering content is challenging in an information age when knowledge grows and evolves quickly. They must understand the need to update relevant discipline knowledge, and how to apply that knowledge effectively in their practice with students.

**Content (1A) Rationale:** Shulman introduced the concept of pedagogical content knowledge to go beyond solely the knowledge of subject matter to the element of subject matter knowledge required for teaching. Educators should be exemplary in content aspects of teaching as well as the elements of the teaching process. They must be able to illustrate ideas, analogies, examples, explanations of subject matter, and demonstrations to assist in comprehensible student achievement in the classroom (Shulman, 1986). Exceptional teachers display extensive amounts of pedagogical content knowledge in their field, which is generally referred to as expert knowledge in their content specific disciplines. Pedagogical content knowledge is the integration of knowledge and skills in the classroom and described as "the knowledge to transform formal subject matter into meaningful learning outcomes for students which involves an understanding of a particular topic and how teachers explain the topic or concepts to make sense to the students in the classroom" (Nezvalová, 2011). Pedagogical content knowledge is being more widely used in the design and development of teacher education programs, where the basis of the idea of content knowledge is to transform the subject matter the teacher possesses for classroom teaching to take place. (Deng, 2007). Teachers are expected to maintain a high level of knowledge and skills to apply in their classroom on a day to day basis to make learning effective for all students in their classroom. Teachers who

demonstrate strong subject matter knowledge are proven to provide more time into writing lesson plans, asking students questions, and supply students with information outside of the textbook (Nezvalová, 2011).

### **Standards (1B)**

Standards set the minimum requirements for achievement, thereby forming the building blocks for education. Standards are set forth by the Pennsylvania Department of Education and related specialized professional associations. Education candidates and educational specialists are held accountable for meeting discipline specific standards and designing professional practices in alignment with all standards for their discipline.

**Content (1B) Rationale:** The United States educational reform has focused on educator performance, which has resulted in the development of professional teaching standards within disciplines that set forth what teachers should know and be able to employ in their classroom. The standards based movement was a result of criticism in the 1980's continuing into the 1990's that claimed high school graduates were not prepared for the work field or college education. The standards based development in teacher education is implemented in many states, and as a result, education candidates should have a strong knowledge base of the discipline standards. The standards are a measure of individual quality teacher performance and an important framework for teacher education programs (Hoewook & Hyunjin, 2010). The United States has now adopted the Common Core state standards for professionals in the education field. Literacy standards for grades 6 and above will assist in students' ability to read, write, speak, and listen using the language of each individual discipline. The mathematics standards are focusing on important topics so that students may build conceptual understanding, achieve the skills needed for the field, and transfer what they have learned in the classroom to solve problems in the real world. Consistent state standards focus strongly on what students need to be prepared for in their college career to be successful (Phillips & Wong, 2012). Education candidates require the need for a strong knowledge base of state standards so that they can play an important role in implementing the necessary knowledge base to their students in the classroom. Many educators have general knowledge of the standards for their discipline. They have read them, are willing to implement them into the classroom, and think very highly of the state aligned standards. However, many do not understand the shifts in teaching the standards will require (Gewertz, 2012).

### **Technology (1C)**

Technology refers to the integration of appropriate and meaningful technological devices to enhance learning. Understanding and using technology is critical for our education candidates and educational specialists. They are expected to gain knowledge and skill in the use of discipline-appropriate technology. The integration of technological devices within our programs allows candidates to observe, participate in, and practice technology-related skills to effectively enhance student learning in P-12 education.

**Content (1C) Rationale:** Teacher education programs are now aligning technology use into coursework as a crucial element so that teacher candidates are better prepared to implement technology into their future classrooms. These candidates not only need multiple exposures to technology, but also consistent use to be able to be efficient in the practices for a natural transition into the classroom (Donovan et al., 2011). Our society is switching from the older traditional model of education into the new information age with learner centered classrooms. The factory model does not take into consideration students' differing needs in the education setting, which can transition into the students being unmotivated to learn material and dissatisfaction by students. Students today have grown up in a technology advancing period, where they have never been exposed to life without the Internet. Since students have an expanding knowledge of technology and use it with everything they do, there has been a shift to incorporate as much technology into the K-12's teachers' beliefs and teaching to support learner centered classrooms. The concept of technological, pedagogical, and content knowledge has been introduced as a framework that builds upon Shulman's pedagogical content knowledge theory (An & Reigeluth, 2011). Effective learning in the classroom is dependent on the use of instructional design and technology. Erişti, Kurt, and Dindar define instructional design as "the development of functional learning systems that meet the educational needs of a certain target audience." This is very important for education candidates to be aware of with the technology that is available for use and the appropriate technology that would be beneficial to their grade

level classroom. The basic idea of instructional technology is that it is found in all instructional models. Classroom activities can be organized in a way to promote technology use. The uses of instructional technologies provoke interests, stimulate learning in the classroom, and promote students to study. Most importantly, technology use can relate the information being learned to real life experiences (Erişti et al., 2012). However, technology is not a one size fits all to all subjects; it should be modified to the specific topic being taught in the classroom as well as to the specific audience (Donovan et al., 2011).

## **Principle #2: Professional Practices**

Knowledge of professional practice is key for the development of all our candidates. They need to understand the theories of child development, and how to adapt their practices to meet the needs of diverse populations. Our candidates learn to design, implement, and assess their professional practices to meet the needs of all students. Education candidates and educational specialists must have expertise in these areas:

### **Child Development (2A)**

Child development focuses on the physical, emotional, psychological, and educational growth of children and adolescents. Tomorrow's professional educators need to be knowledgeable about differing needs and abilities of children and adolescents. They need to understand developmentally appropriate practices to meet the needs of different age groups. Our candidates become proficient in working with children of different age groups and at all ability levels so all students are treated fairly and learn to their potential.

**Content (2A) Rationale:** It is commonly assumed that teachers have a theoretical knowledge of children's cognitive development and how it applies to the social and moral development of learning. Even though they may not be able to identify the source of their ideas, they should be able to describe how children learn, and in return, how it guides their teaching practices. They should have knowledge of Piaget's stages of cognitive development to expand an explicit system of teaching and display knowledge on morality, and how other aspects other than cognitive reasoning, such as emotions, are important factors in learning (Boulton-Lewis, et al, 2011). As an educator, it is a vital characteristic that a teacher be aware of children's individual needs in their classroom so they can establish positive relationships with the child and their family to better understand the beliefs, interests, abilities, and goals for the child. Teacher-child relationships can play a significant role in child development. Fumoto observed teachers' interactions with children by verbal and non-verbal interactions as well as interactions during group activities. It was concluded that teachers demonstrated objectivity in understanding each child and establishment of the context of child development is an important aspect in the role a teacher plays in education. Teacher interactions are based upon their ability to understand children's past, present, and future experiences, which are all important aspects of child development (Fumoto, 2011). Developmentally appropriate practices serve as an influential framework for childhood education which helps to best promote children learning and development in the classroom. Teacher candidates with formal education can acquire the skills needed to distinguish developmentally inappropriate practices from developmentally appropriate practices (Jisu & Neuharth -Pritchett, 2010). In previous studies, it was concluded that in the U.S. as grade level increases, teacher developmentally appropriate beliefs and practices decrease. However, Hegde and Cassidy's study revealed this to not be true by finding little difference between grade levels and developmentally appropriate teacher beliefs and practices in the classroom. This is an important finding due to that some teachers have appropriate beliefs but inappropriate practices in their classroom (Hegde & Cassidy, 2009). Higher quality classrooms implementing developmentally appropriate practices will have the best outcomes for children's learning. Therefore, it is important for teacher candidates to have a substantial amount of child development so they can ensure to implement developmentally appropriate beliefs and practices into their classrooms.

### **Diversity (2B)**

Diversity is recognizing that all students come from unique backgrounds. California University of Pennsylvania is committed to meeting the diverse learning and social needs of P-12 students and of our own education candidates. Candidates' professional practices demonstrate the belief that diversity takes many forms and that all students can learn. Education candidates and educational specialists must hold high expectations when interacting with and supporting all students, regardless of their background.

**Content (2B) Rationale:** Our country is working to close the achievement gaps that are present in the United States. Teachers aim to provide equal learning to all students in their classroom, regardless of race, ethnicity, abilities, gender, or beliefs as part of an education reform in today's society, where multicultural teacher education plays a role in reforming instruction. Multicultural education is defined as "aiming not only to enhance knowledge and skills in culturally responsive teaching, but also to develop teachers' capacities to critically assess the existing educational systems and to oppose unequal education learning opportunities provided to students of diverse groups." Teacher education programs need to implement this theory into their practices and preparation for future educators (Akiba et al., 2010). Without multicultural teacher education, false expectations, miscommunication, and unintentional bias can occur in the classroom because most student teachers are not exposed to the multicultural view of the world. This may cause unintended discrimination in equity among the teacher-student relationships. Many schools offer a type of multicultural education program, but many teacher candidates are unsure of how to implement some of the practices into their own classrooms (Reiter & Davis, 2011). It is important for teacher candidates not only to be aware of diversity, but to know how to implement multicultural education into their teaching to ensure the equality of all students. Shudak states that "diversity in education acts as a double helix because it consists of two strands; the descriptive and the normative plus a bonding agent called cultural matching. The descriptive strand is identity based and pertains to basic demographical changes taking place in society as well as to how individuals come to identify and understand themselves. The normative strand pertains to some form of action that society, its institutions, and even individuals must take to affirm and recognize identity." The bonding agent is the theory and practice of matching similar backgrounds in terms of skin color, cultural tastes, life experiences, and language, which is a problematic area in the field of teacher education. Teacher candidates are better prepared for the classroom by altering their current views on diversity, aiming towards cultural affirmation (Shudak, 2010). Diversity is one of the six NCATE 2008 standards for teacher candidates to develop knowledge of diversity, dispositions that respect different values, and skills needed for working with a diverse population (Akiba, et al 2010).

### **Design, Implement, & Assess (2C)**

Sound learning begins with the ability to design, implement, and assess educational experiences for students. Candidates are able to plan and implement practices that reflect standards, knowledge, global events, and emerging technologies. They will understand assessment and how to utilize it effectively in professional environments. By learning to analyze, design, implement, and evaluate their instructional and professional efforts, our candidates will be equipped to make data-driven decisions to address the needs of all learners and constituents.

**Content (2C) Rationale:** Instructional planning is a core task in learning to teach. Teacher candidates study much of their learning to plan from universities; but they also receive a large amount of experience from their student teaching placements. Planning is a central task of teaching in knowing how to design a lesson and implement it in a way that students will relate to. According to Norman, admirable planners of instruction should be able to "frame worthwhile purposes; gather, assess and adapt a range of curricular resources; check their own subject matter understanding; consider what students already know; and decide how to introduce activities, organize and engage students, and guide and assess their learning." Teachers may encounter unpredictable moments when teaching. Therefore, they must be able to adapt to the needs of the students while applying content knowledge in context (Norman, 2011). Teacher education programs need to produce teacher candidates which are skilled and prepared for classroom teaching. They are required to be able to produce lesson plans that reflect current theories of practice. They must also display active learning in everything they do and be efficient in assessment practices. Jones stated that there are common mistakes that novice teachers encounter when delivering a lesson. For example, a clear learning objective to students and teachers can avoid overwhelming amounts of information to be taught. Learning objectives can be used focus effort on content directly related to the target. Assessment should be a product of what students have learned. It is described as an "active and visible process that helps students to link the material that have learned to the intended learning objectives." In the end, assessment ends up being a powerful part of the learning process for students. As a result of well defined learning outcomes set forth by the teacher, assessments should reflect what was taught and expectations for learning of the students (Jones, et al, 2011). Assessment has more than one purpose. First, it can provide information about improving student learning and teachers with teaching. It can also be an important aspect in students obtaining their

potential and is a direct link to teacher-student relationships with it being an end product of enduring teachers' teaching and students' learning. Assessment can also be used as a formal check of learning outcomes at the end of a lesson. It can give teachers information to what students know to assist in making decisions to better enhance student learning. Lastly, assessment in learning refers to a "being-in" experience assessment concerning being immersed in teaching and engaged with the students and their learning (Earl & Giles, 2011).

### **Principle #3: Professionalism**

Candidates' professional attitude toward learning, children, adolescents, schools and agencies or organizations is essential for success and is developed throughout their program. They learn the importance of developing relationships with colleagues, caregivers, and agencies within the community to support students/clients learning and well-being. Education candidates and educational specialists must have expertise in these areas:

#### **Professional Disposition (3A)**

Professional disposition is the set of values, commitments, ethics, and attitudes that distinguish our education candidates and educational specialists as professionals. Professional disposition will be demonstrated in alignment with our university's core values of integrity, civility and responsibility. Integrity is displayed in decisions and actions of our candidates; civility is exhibited in their respect for all people. Responsibility is demonstrated as our candidates develop professional maturity in working with young people and other professionals, in our classes as well as in their experiences in schools.

**Content (3A) Rationale:** Serdyukov and Ferguson state that teacher education programs should not only be concerned with what teacher candidates should know by the end of the education program, but also know who they are accepting into the profession and preparing to teach future children based on individual features that will influence their teaching success, known as dispositions. In teacher education programs, the instructors of future educators are able to better maintain an effective learning experience if they are able to understand the candidates who will be teaching in the future. Serdyukov and Ferguson also state that the disposition process is critical because the qualities a teacher education candidate possesses will affect how they are able to transfer their knowledge into their own classroom and model the behaviors and attitudes towards their future students (Serdyukov & Ferguson, 2011). Teacher education programs are required to document candidate competencies, skills, and dispositions for effective teachers to maintain the University's program accreditation approval. Teacher education programs establish performance standards to prepare future educators to hold the competencies that are necessary to be successful educators. At times, teacher candidates may meet the requirements for content knowledge and pedagogical skills, however, they may lack the professional disposition to be able to educate effectively. Since teaching involves more than solely planning, instructional knowledge, and teaching, professional dispositions must be extended to assess the teacher education candidates. The National Council for Accreditation of Teacher Education (NCATE) describes dispositions as determining "the values, commitments, and ethics that influence behaviors towards students, families, colleagues, and communities that affect student learning, motivation, and development as well as the educator's own professional growth" (Almerico, 2011). A main purpose of a disposition assessment is to determine whether teachers are likely to apply the knowledge and skills they have obtained in their education program to their personal classroom teaching when they are not being critiqued by a professional. A strong correlation exists between the evaluation of dispositions in teacher education candidates and the quality of learning their students' exhibit. Therefore it is important to produce candidates with a strong disposition through a teacher education program (Almerico, et al, 2011).

#### **Leadership Development (3B)**

Leadership development is the activity by which education candidates and educational specialists guide students and constituents to achieve success. Our candidates must continue to develop their leadership practices in relationship to their work with students, colleagues, and community members. Our candidates must be able to communicate and collaborate effectively. Positive professional relationships are essential to reach a shared goal of meeting the needs of students.

**Content (3B) Rationale:** The challenge in schools today is ensuring that all students are adequately prepared. This places a large emphasis on teacher leadership and how teachers can produce successful learners (Helterbran, 2010). Teacher leaders are commonly referred to as teachers who are able to educate

well and assume additional responsibilities that assist in improving the overall learning experience at a school (Bond, 2011). Teacher leaders demonstrate a strong knowledge base on how to educate students well and how to establish school and classroom conditions that better benefit learning. The teacher leaders who possess the skills of knowing how to teach in the context of a classroom are regularly trusted by other teachers, and can be influential in decision making within the school environment. Teacher leaders are seen as mentors within their field, and need to be able to work with the adult culture, besides their colleagues and classrooms, work with administrators, and work with other veteran teachers (Lieberman, 2011). Research has shown that school leadership is a key element in strengthening student achievement and success. Both the principal and teachers have important roles in the leadership of a school environment. This role is defined as when “leadership takes place in the interactions between people in the school and the situations they face; therefore for leadership to be effective, it must be shared or distributed.” Teacher leadership rises within teaching ranks to be able to express itself in a variety of ways to better the students and the school. Educators are suggested to instill the concept of effective leadership among them. Confidence is a key element in establishing leadership development. Confident teachers are able to establish both formal and informal avenues to express their leadership roles within their school to better reform the learning process. For example, a teacher leadership role could occur when the teacher identifies a problem and takes the rein to address it within his or her own means (Helterbran, 2010). Teacher preparation programs are the suggested environment to introduce the concept of leadership and its importance in the framework of courses for working with PreK-12 students in delivering instruction to them (Bond, 2011).

### **Personal Learning (3C)**

Personal learning refers to the commitment of lifelong intellectual, personal, and professional growth. We expect them to use goal setting and reflection processes to guide their personal learning and growth in the rapidly evolving environment of professional education. We encourage continual personal research, the development of a personal learning network, and membership in professional organizations.

**Content (3C) Rationale:** Teachers are encouraged, as well as supported, to continue learning throughout their teaching career with expectations of becoming more efficient professional educators. Since teachers play a large role in supporting a learning experience of students, they are crucial in how the education system evolves and the implementation of current reforms. In order to be able to implement current reforms, teacher educators must exhibit a career in lifelong learning to stay up to date on current classroom practices. Not only is lifelong learning a philosophy, but it is a practice that involves knowledge, beliefs, skills, concepts, and values. It is a process that is ongoing, occurring across time, and constantly evolving. As a result, the school environment is a place for learning for both students as well as educators (Theodosopoulou, 2010). A study by Buza examined the trends of lifelong learning education as a reflection tool of experience. They concluded that 97% of teachers reported that the school’s curricula and their personal educational practices have shown a great influence to the development of lifelong learning practices. Those teachers from the study also reported that they are able to teach in ways to develop students’ commitment to ongoing lifelong learning. They concluded that both pedagogy and technology are important aspects in lifelong learning and should both be important considerations for continuing education (Buza, et al., 2010). Teachers may also expand personal knowledge by subscribing to various resources that are dedicated to the continuation of learning and improvement in professional practices. A professional learning network is simply described as a “system of interpersonal connections and resources that support informal learning.” These professional learning networks allow the teacher to access information and connections among a vast array of individuals with expertise in specific areas. Teachers commonly use professional learning networks to share information with peers, connect with other members of the network, availability to resources, obtain feedback, and solicit ideas with other professionals. The access to professional learning networks are transforming the professional development and advancing learning opportunities for teachers in today’s society (Trust, 2012).

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