

Advanced Standards for Physical Education (2008)

INTRODUCTION

This document is organized into four distinct sections:

1. **Introduction.**
2. **2008 Standards for Advanced Physical Education, descriptive explanations and rubrics.**
3. **Reference list.**
4. **Glossary of terms used.**

Each section contributes to understanding the 2008 Advanced Teacher Education Standards and their use in reviewing advanced programs in physical education teacher education.

The descriptive explanation associated with each standard provides the context and rationale for selecting the skills, knowledge and performance that are envisioned as characteristics of a knowledgeable master's degree candidate. The rubrics were developed from this supporting narrative. Thus, a thorough understanding of the explanation is necessary for understanding the rubrics' concise language.

The Advanced PETE Standards are used in the NASPE/NCATE national recognition process to review advanced-level (i.e., master's degree, post-initial licensure) programs. Institutions that offer a master's degree program designed for initial preparation and licensure or certification to teach should use NASPE's Initial PETE Standards for national recognition review. In cases in which the advanced degree is in kinesiology, curriculum and instruction or education in general, rather than in physical education pedagogy, the institution should consider carefully whether a review using these Advanced Standards is appropriate.

Guiding Principles

NASPE identified four fundamental beliefs that serve as the guiding principles for creating and organizing the Advanced Standards and for developing the rubrics that describe unacceptable, acceptable and target performance levels.

1. **Focus on Learning Rather Than Teaching.** These standards and rubrics represent a belief in an approach to teaching (and to its evaluation) that focuses on learner outcomes and experiences rather than on what the teacher does (Hargreaves & Fink, 2006; Huba & Freed, 2000; NCATE 2008). The desired result of this type of teaching in physical education is individuals who are empowered to take control of and responsibility for their own ability to create healthy, active lifestyles. Critical components that distinguish acceptable and target performance levels include the ability to differentiate instruction for individual students and to include students in making decisions about their learning in ways that are developmentally appropriate. Therefore, acceptable-level descriptors, particularly for Standards 1 and 2, represent generalized pedagogical content knowledge and

effective instruction practice that accommodates individual differences. Target-level descriptors go further in recognizing and capitalizing on each individual's unique characteristics, needs and contributions. This focus on learning applies to teachers, as well as to students, and the revised Advanced Standards clearly reflect the notion that advanced teachers are, and must be, learners themselves. As Easton (2008) notes:

It is clearer today than ever that educators need to learn, and that's why *professional learning* has replaced *professional development*. Developing is not enough. Educators must be knowledgeable and wise. They must know enough in order to change. They must change in order to get different results. They must become learners, and they must be *self-developing* (p. 756).

Thus, these Advanced Standards don't prescribe courses and experiences for advanced teacher candidates or for their continued learning. Instead, they focus on what these candidates learn and how they apply their knowledge to enhance learning in others.

2. Integrated Knowledge Base. Linked closely to the outcomes-based approach is the belief that an advanced teacher must possess an integrated body of knowledge and skills. The importance of an integrated knowledge base is clearly supported by seminal works in identifying and developing teaching expertise (Berliner, 1994; Clark & Peterson, 1986). Moreover, this notion is firmly underpinned by Shulman's (2004a, 2004b) definition of pedagogical content knowledge (PCK) as the teacher's knowledge of and skill for "representing and formulating the subject that makes it comprehensible to others" (p. 203). Shulman contends further that acquiring PCK depends on two main elements:

- a. A deep and broad knowledge of content and how it is learned (Professional Knowledge).
- b. The ability to help students learn specific information through understanding why the learners find those topics difficult (Professional Practice).

This integration of content and pedagogical knowledge results in and contributes to the development, application and communication of a teacher candidate's PCK, which, in turn, advances the candidate's expertise and enhances student learning.

3. Importance of Inquiry. The importance and value of inquiry is another key belief imbedded in these standards and rubrics. While reflective practice is considered appropriate and adequate for initial teacher candidates, those who have completed a graduate-degree program are held to a higher standard. They are expected to examine their practice in a more systematic and formal way, reflecting the rigors of having completed a master's degree, as well as demonstrating their skills as master teachers. Shulman (2004c) writes that, if teaching excellence is truly to develop, inquiry into one's own teaching is essential for practitioners. Descriptors of acceptable performance in Standard 2 identify regular and systematic analysis of one's own practice; target performance extends inquiry to the level of testing hypotheses (through interpretive or positivist approaches) and generating new knowledge that can be shared with the professional community.

4. Role of Leadership. Conducting inquiry into one's own or others' practice and sharing the results leads naturally into the role of professional leader. Being a professional leader means participating in a community of scholars, and mandates that advanced teachers "not only investigate teaching" but be "teachers under investigation" (Shulman, 2004c, p. 296).

Thus, the integrated knowledge base described above also must include the skills, knowledge and dispositions to inquire about teaching (Professional Knowledge), as well as to contribute to the professional learning of others for the sake of advancing the profession (Professional Leadership) and, ultimately, benefiting students (Professional Practice).

Scope/Delimitations of the Advanced Standards

Standard 1. Professional Knowledge. The question of what constitutes the content knowledge necessary for effective teaching in physical education continues to be debated (e.g., Rink, 2007). Meeting the Initial PETE Standards ensures that candidates have a foundational knowledge of both movement and pedagogy drawn from the fields of kinesiology, education and psychology. At the advanced level, it's not enough to simply add more knowledge in these areas; it's critical that candidates find new and meaningful ways to use their existing knowledge (Rink, French, Lee, Solmon, & Lynn, 1994) and/or make new connections within existing knowledge to gain understanding of how to apply their knowledge to physical education teaching. Also, candidates must acquire knowledge and skill related to inquiry in the field, which, in turn, will help them access, analyze and integrate knowledge.

Because of the breadth of content knowledge that physical education teaching requires and the differences in philosophical approaches to physical education, the Advanced Standards prescribe no specific courses or number of content or research courses.

Standard 2. Professional Practice. These Advanced Standards are purposely written in a way that requires candidates to demonstrate their ability to integrate and apply the skills, knowledge and dispositions acquired in both their initial and advanced preparation programs rather than to demonstrate isolated techniques to meet discrete standards for each aspect of the teaching/learning process. Instead of requiring programs to teach specific techniques (such as the use of technology) or concepts (such as knowledge of specific instructional models), using and integrating such techniques and concepts appropriately to enhance student learning is what is important.

Assessing candidates' knowledge of good practice serves as evidence for Standard 1; assessing their ability to integrate and implement effective, appropriate knowledge and practices provides evidence for Standard 2.

Standard 3. Professional Leadership. Ongoing professional learning lies at the heart of becoming an advanced teacher leader. Nevertheless, the Advanced Standards and rubrics don't include expectations of membership in professional organizations or participation in professional conferences. This is not meant to minimize the value of such activities, but rather to shift the focus to the impact of such activities on practice. It also reflects the practical difficulties involved in requiring memberships or conference attendance as criteria for program review.

Because those opportunities might not be available to all candidates in advanced programs, the rubrics for this standard don't address them. Programs that do offer such opportunities to their candidates and that assess this type of engagement may include those results in their sources of evidence.

Assumptions About Candidates and Programs

These Advanced Standards assume that candidates entering graduate programs already possess the basic knowledge, skills and dispositions expected of a licensed educator. Institutions are responsible for ensuring that candidates possess initial certification or licensure in physical education before being admitted to the advanced program. Institutions that admit candidates who possess certification or licensure to teach physical education but don't possess all the skills, knowledge and dispositions reflected in the Initial PETE Standards must provide opportunities for candidates to acquire them. If not, these candidates won't have the knowledge and skill underpinnings they need to meet the Advanced Standards at the "acceptable" performance level.

Because developing advanced competencies requires opportunities to implement and apply knowledge, skills and dispositions, advanced programs are expected to provide appropriate field or clinical settings in which candidates work directly with students and other education professionals. For candidates who are employed concurrently as physical educators, their work settings will generally provide an appropriate context for developing and demonstrating advanced knowledge, skills and dispositions.

Providing opportunities to develop and demonstrate teaching skills in authentic settings is especially important for those candidates who enter advanced programs without prior teaching experience. The “wisdom of practice” doesn’t necessarily come quickly. Understanding the nuances of teaching and learning usually comes as “slow knowing” (Hargreaves & Fink, 2006, p. 43) from processing experiences over time. Programs are responsible for establishing the qualifications required for admission, as well as for their content and sequence. Therefore, programs must assess applicants’ potential for developing to the advanced level within the length and context of the program. This is particularly important for those who are not experienced teachers.

Relationship to Initial Standards

As NASPE crafted these Advanced Standards, it considered the composition and direction of the proposed revisions to the Initial Standards as requisite proficiencies upon which to build the Advanced Standards. Thus, these Advanced Standards represent the next step on the continuum of teacher development.

NASPE’s goal in revising the Advanced Standards is to set acceptable and target performance levels from which candidates emerge as competent, confident and knowledgeable professional teacher leaders. Having acquired in their initial program the basic technical skills of teaching, coupled with solid, foundational knowledge of movement and pedagogy, master’s-level candidates are challenged to:

- Form connections among deeper understandings of the knowledge bases;
- Represent and communicate content through meaningful, integrated instruction; and
- Develop a professional identity emanating from rich and varied leadership experiences.

The Advanced Standards differ from the Initial Standards in three principal ways:

1. The expectation that systematic inquiry becomes a sustained and trusted practice for evaluating and improving teaching and learning.
2. Planning, teaching and assessment become interwoven into a single, simultaneous process that results in instruction tailored to the needs of **all** learners.
3. The benefits of professional development extend beyond one’s own practice for the betterment of others and the improvement of the profession as a whole.

Relationship to 2001 Advanced Standards

At first glance, the 2008 Advanced Standards appear to differ substantially from the 2001 Advanced Standards (NASPE, 2001). A closer examination, though, reveals that the differences are not so great. While NASPE has reduced the number of standards from nine to three, the rigor and expectations called for in these three standards have not lessened. Instead, NASPE has reconceptualized, rewritten and expanded the concepts within the 2001 Advanced Standards and woven them into three comprehensive and focused standards that are soundly connected.

The new Standard 1 — Professional Knowledge — encompasses (and expands upon) the previous standards of Content Knowledge, Curricular Knowledge and Methods of Inquiry. The new Standard 2 — Professional Practice — includes (and integrates) Sound Teaching Practices; Assessment; Equity, Fairness and Diversity; and Reflection. The new Standard 3 — Professional Leadership — comprises Collaboration, Reflection, Leadership and Professionalism; Mentoring; and High Expectations for a Physically Active Lifestyle.

The Advanced Standards are sequenced purposely to present a progression in which the skills and knowledge of one standard serve as the basis for the next. Professional Knowledge serves as a necessary foundation, but the importance of that content knowledge is in its application to Professional Practice. And, while individual Professional Practice is important, Professional Leadership goes a step beyond, by identifying expectations for using advanced skills, knowledge and dispositions to advance the practice of others and the profession as a whole.

Meeting the Standards

Programs must demonstrate that their candidates meet all elements, because the standards and elements are linked inextricably. Meeting a standard holistically without meeting each of its elements is not possible. Only when it meets all elements can a program be assured that its graduates are truly advanced physical education teachers.

NASPE recommends that programs use multiple sources of evidence to demonstrate achievement, and that each assessment serves as a source of evidence for more than one standard. For example, assessing a thesis, creative component or action research project might provide evidence for all three standards: applying content knowledge to practice, demonstrating the types and effectiveness of instructional strategies used in teaching and disseminating findings through presentation or publication. The onus is on the program to show how such a study serves as evidence for each standard. One source of evidence alone, however, would not be adequate to satisfy all standards and all elements.

The rubrics presented in this chapter for reviewing advanced programs identify three levels of performance: “unacceptable,” “acceptable” and “target.” The knowledge, skills and dispositions identified as “unacceptable” represent practice that is below what is expected of advanced candidates. “Acceptable” performance is considered the minimum level necessary to meet a standard. “Target” represents the desired performance level. Candidates must meet the element at the acceptable level to meet it at the target level. Programs should strive to ensure that candidates reach target-level performance. This might be difficult for candidates who enter advanced programs without prior teaching experience.

STANDARDS, DESCRIPTIVE EXPLANATIONS AND RUBRICS

Standard 1: Professional Knowledge

Advanced physical education teacher candidates come to understand disciplinary content knowledge, the application of content knowledge to teaching physical education, and modes of inquiry that form the bases for physical education programs and instruction.

Content Knowledge

Content knowledge in physical education teacher education derives from knowledge of movement and of pedagogy. Knowledge of movement includes mastery of movement forms (e.g., games, sports, dance, aquatics, leisure activities) and information from kinesiology-related areas (e.g., exercise physiology, biomechanics, sport psychology/sociology, motor learning). Knowledge of pedagogy derives from education (e.g., education foundations, instructional technology, general methods) and psychology (e.g., child development, cognitive psychology). Advanced physical education teachers possess breadth and depth of content knowledge (Schempp, Manross, Tan & Fincher, 1998). Research on teaching in general, and in physical education specifically, indicates that a profound content knowledge base lies at the core of good teaching (Schempp, et al., 1998) and is essential to the teacher's ability to enhance student learning (Rovegno, 1995).

Advanced teachers view physical education content as more than physically active motor play and the related knowledge about these activities. In addition to updating and expanding their knowledge of movement forms continually, advanced teachers differ from initial-level teachers in their ability to find new and meaningful ways to use their existing knowledge (Rink, et al., 1994) of movement forms to achieve student outcomes beyond just skill acquisition. Advanced teachers possess a deep understanding of the content and are able to draw upon that knowledge to enhance students' overall development (Manross & Templeton, 1997).

Even experts don't know everything about their field. Therefore, advanced teacher candidates shouldn't be expected to have deep knowledge or mastery in all aspects of movement and pedagogy, but they should be well versed in several. What's essential is that they know how to relate their content knowledge to the teaching of physical education.

Developing Pedagogical Content Knowledge

Recognizing that excellent teaching results from the nexus of content and pedagogical knowledge, accomplished physical education teachers present the content so that learners comprehend the subject matter (Shulman, 2004d; Rink, 2007; Griffin, Dodds, & Rovegno, 1996). This blending of content and pedagogical knowledge is known widely as pedagogical content knowledge, or PCK (Shulman, 2004a). PCK enables teachers to predict and identify barriers to student learning and "provide remedies to overcome student difficulties" (Schempp, et al., 1998, p. 353).

Advanced teachers also know that classrooms are filled with an increasingly diverse student population representing a variety of contexts and settings. It's not enough to design instruction to address students' general characteristics; teachers must tailor instruction to the variations in ability and background presented by the learners and the learning context (Shulman, 2004b). Thus, advanced candidates must know how to combine content and pedagogical knowledge to make physical education meaningful for **all** students.

Creating New Knowledge

Possessing content knowledge is necessary but not sufficient to ensure success, and advanced teachers know that (Dodds, 1994). These teachers seek, reflect on, analyze, synthesize, create and disseminate the best available knowledge on physical education content and pedagogy to teach and to improve their teaching practice over time (Shulman, 2004c). Knowing how to do this enables teachers to “review, renew and extend” (O’Sullivan & Deglau, 2006, p. 441) their commitment to teaching.

As lifelong learners, advanced teachers use technology or other relevant tools to locate research reports, conceptual articles, Web sites and other resources that are pertinent to their teaching and learning. They then organize, analyze and interpret the information so that they can apply their findings to their teaching.

Advanced teachers design research — formal or informal, brief or extensive, classroom-based or schoolwide — focused on meaningful aspects of teaching and learning. They apply knowledge and skills of inquiry to assessing student learning. They also use inquiry to enhance and extend their content and pedagogical knowledge, and use their understanding of diverse learners’ growth and development to enhance the learning environment for all students. Knowing how to systematically formulate a research question, gather and interpret data to answer the question, and communicate the findings to appropriate audiences is essential (Shulman, 2004c). Thus, advanced candidates must to know how to use a range of research and assessment methods from both positivist and interpretive paradigms.

Standard I: Professional Knowledge

Advanced physical education teacher candidates (AC) come to understand disciplinary content knowledge, the application of content knowledge to teaching physical education, and modes of inquiry that form the bases for physical education programs and instruction.

Element	Unacceptable	Acceptable	Target
1a. Knowledge of content in movement and pedagogy.	AC has a broad understanding of movement or pedagogy. Or, AC understands both without knowing how they relate to learning and teaching in physical education.	AC has a depth of understanding in several aspects of both movement and pedagogy and can explain how they relate to learning and teaching in physical education.	AC synthesizes concepts from multiple aspects of both movement and pedagogy and can articulate how that information applies to specific students and contexts.
Element	Unacceptable	Acceptable	Target
1b. Knowledge of how to represent content knowledge to make it comprehensible to learners (i.e., pedagogical content knowledge).	AC knows that the integration of content and pedagogy is central to learning and teaching in physical education.	AC knows how to transform the content into understandable forms adapted to general learner characteristics.	AC knows how to transform the content into understandable forms tailored to the variations in ability and background presented by the learners and the learning context.
Element	Unacceptable	Acceptable	Target
1c. Knowledge of processes and methods of systematic intentional inquiry about learning and teaching in physical education.	AC has general understanding of systematic inquiry, takes research findings at face value and tries to apply them to learning and teaching in physical education.	AC has a thorough understanding of multiple modes of inquiry and can critique, synthesize and apply research findings to learning and teaching in physical education.	AC identifies pertinent questions about learning and teaching in physical education, as well as designs processes for collecting, analyzing and interpreting data to answer those questions.

Standard 2: Professional Practice

Advanced physical education teacher candidates use content knowledge and pedagogical content knowledge to design and conduct appropriate learning experiences that facilitate and enhance the growth of learners.

Goals of Teaching in Physical Education

The essence of teaching is facilitating and enhancing the growth and development of others. The ultimate goal is to provide learning experiences that benefit learners' psychomotor, cognitive and affective development (NASPE, 2007) and to prepare those learners for their role as active members of society. Teaching in physical education seeks to enhance student learning and development in a movement environment. The intent of instruction in physical education is two-fold:

1. To enable students to acquire movement skills and knowledge.
2. To help students develop the skills necessary to take control of their own learning and decision-making (Mosston & Ashworth, 2002).

These outcomes prepare students to achieve and maintain healthy, active lifestyles so that they are willing, able and interested in seeking a lifetime of physical activity (NASPE, 2007).

Alignment of Planning, Instruction and Assessment

Advanced teachers integrate and apply content knowledge and pedagogical content knowledge (PCK) to designing, implementing and evaluating lessons and units of instruction that are appropriate for specific students in a given context. They view planning, instruction, assessment and reflection as inseparable components of an integrated process. These components are aligned with desired goals and objectives to make learning purposeful and meaningful for students.

Advanced teachers take that approach a step further by engaging learners in the process of identifying personally relevant goals and activities in a developmentally appropriate manner. Thus, they align learning experiences with specific learner needs and preferences. In addition to planning and implementing learning experiences to achieve short-term (daily and/or unit) outcomes, advanced teachers also apply these principles to achieving long-term outcomes and goals through curriculum and program development.

Differentiation of Instruction

Advanced teachers recognize both the general progression of learning in the subject/skill area and individual variations in progress toward achieving desired outcomes. They connect learning experiences to learners' prior knowledge and experience and tailor instruction to specific learner needs (Shulman, 2004b). This attention to student diversity refers not only to students with conditions typically referred to as "disabilities," but also to other forms of diversity within the general population.

To help make those connections, advanced teachers include multiple representations of the content (which might include using instructional technologies) and a range of learning experiences within a lesson or unit to address the range of learner needs. In addition, advanced teachers encourage and empower learners to monitor their own learning and needs and to seek experiences and solutions that are relevant to them. Thus, critical thinking and problem solving become part of learner development.

Investigation of Practice

Advanced teachers go beyond informal reflection to review and analyze the effect and effectiveness of their practice, including curriculum, instructional strategies and assessment, as well as their interaction with and understanding of their students. They apply their knowledge of modes of inquiry to the conduct of systematic inquiry: formulating questions, gathering and analyzing information and using the results to improve practice (Shulman, 2004c). Advanced teachers extend this process by engaging students in inquiry.

Standard 2: Professional Practice

Advanced physical education teacher candidates (AC) use content knowledge and pedagogical content knowledge (PCK) to design and conduct appropriate learning experiences that facilitate and enhance the growth of learners.

Element	Unacceptable	Acceptable	Target
2a. Teaching reflects understanding and application of content knowledge and pedagogical content knowledge appropriate to the learners, the learning environment and long- and short-term outcomes/goals.	AC demonstrates, through planning and/or instruction, limited or shallow understanding of content knowledge and PCK appropriate for the specific learners, context and/or long- and short-term outcomes/goals. Or, AC's planning and/or instruction reveals gaps or misunderstandings in content knowledge or PCK.	AC demonstrates, through planning and/or instruction, accurate and sufficient content knowledge and PCK appropriate for the specific learners, context and long- and short-term outcomes/goals.	AC demonstrates, through planning and/or instruction, a deep understanding of content knowledge and PCK, and articulates a rationale for instructional choices. Or, AC discovers opportunities to refine or develop new understandings that add to the professional body of knowledge.
Element	Unacceptable	Acceptable	Target
2b. Teaching reflects integration of planning, instruction and assessment as a unified process to achieve long- and short-term outcomes/goals.	AC aligns some — but not all — of the components of the learning cycle (planning, instruction, assessment and reflection) with the other components, learner needs and/or long- and short-term outcomes/goals. Or, AC's teaching deviates from planned activities so that desired goals are not assessed or achieved.	AC uses knowledge of learners' current levels of progress in achieving desired outcomes/goals (results of prior assessment) to design and carry out appropriate sequential learning experiences and instructional activities, and to assess learner progress and/or achievement. The results of this latter assessment are then used to further design or modify and carry out future learning experiences.	AC uses learners' prior knowledge and personal history (e.g., language, culture, family and community) to plan, implement and assess meaningful learning experiences. AC engages learners in the process of defining long- and short-term outcomes/goals, designing or choosing learning experiences and monitoring their own learning in ways that are developmentally appropriate.

Continued

Standard 2: Professional Practice (Cont.)

Element	Unacceptable	Acceptable	Target
<p>2c. Teaching reflects differentiation of instruction based on personal and cultural characteristics of learners.</p>	<p>AC provides the same learning experiences for all learners regardless of their personal strengths, characteristics and/or experience. Or, the range of learner characteristics and needs exceeds the multiple learning experiences provided.</p>	<p>AC uses multiple representations and explanations of concepts, a variety of appropriate learning tasks and structures and a variety of assessment strategies to design and/or adapt instruction to meet the current needs of individual learners.</p>	<p>AC establishes a learning environment that respects and celebrates learners' diverse experiences and approaches to learning. AC uses multiple strategies to engage learners in appropriate opportunities that promote development of performance capabilities, critical-thinking skills and/or the ability to recognize their own needs and seek experiences to meet those needs.</p>
Element	Unacceptable	Acceptable	Target
<p>2d. Teaching reflects systematic inquiry about the practice and the learners served.</p>	<p>AC places responsibility on learners for failure to achieve desired outcomes. And/or, the reflective cycle and assessment are too shallow to provide insight about ways to improve practice.</p>	<p>AC regularly and systematically analyzes the effectiveness of instruction on learner engagement and progress in meeting short- and long-term goals. AC takes responsibility for using this information to modify instruction and develop professional learning goals and plans.</p>	<p>AC engages learners in the process of analyzing teaching effectiveness and learning, and uses the results of systematic analysis to test hypotheses and generate knowledge according to the methods of inquiry and standards of evidence used in physical education.</p>

Standard 3: Professional Leadership

Advanced physical education teacher candidates are continuous, collaborative learners who further their own professional development and use their abilities to contribute to the profession.

Leadership

Leadership in the broad sense is about renewing a culture of learning and improvement at all levels of the school's organization structure through inquiry, professional learning communities, involvement in school decision-making and professional learning networks (Hargreaves & Fink, 2006). The ultimate goal of learning among professionals is to "continuously seek, share learning and act on that learning" (Hord, 1997, p. 1) for the benefit of students.

Easton (2008) prefers the term "professional *learning*" rather than "professional *training*" or "professional *development*" to reflect how teachers must continue to learn and self-develop; or, as she says, "how teachers change the way they work as a result of their learning" (Easton, 2008, p. 758). Building a culture of learning is characterized by inquiry and reflection in an ongoing collaborative environment in which teachers learn from one another, take part in school-based conversations, think differently about leadership and governance, as well as " ... about data collection and use, about appropriate learning activities, about evaluation of professional learning, about role changes and — ultimately — about cultural changes that both promote and result from learning" (Easton, 2008, p. 756).

Extending and Sharing Knowledge

Teacher-to-teacher communication about teaching and learning provides a powerful source of professional learning and instructional improvement (Sparks, 2003). Communication might begin as reflective practice that engages teachers in dialog about their craft with trusted colleagues. Advanced teachers, on the other hand, extend the reflective process to a level at which they examine assumptions and practices critically through formal inquiry (Ferraro, 2000). Inquiry becomes a process originating at the bottom, within schools, "with educators identifying what students need and so what they themselves need to learn" (Easton, 2008, p. 758). It stimulates constant questioning and seeking answers about student work, teacher practices, assessments, organization structures and content in a supportive, collegial environment that honors the contributions of school staff members, as well as those of educators.

Advanced teachers seize opportunities to grow toward greater professionalism by working with students and teachers as facilitators, mentors and/or coaches, or by collaborating with colleagues on school-improvement teams and committees (Easton, 2008; Hargreaves & Fink, 2006; Mihans, 2008). Often, these endeavors lead to initiatives such as offering advice to a new colleague, trying out a new technique with students, modeling effective professional practice or taking an action research approach to solving a real classroom issue or school problem. In this sense, one practices leadership as an activity while in the role of teacher, thereby breaking with the traditional notion that only those in formalized administrative positions express leadership (Spillane, 2006).

Ongoing Development

The goal of practicing leadership that puts student learning at the core of teaching becomes possible when teachers, parents, communities and administrators participate together in cultivating an environment of sustainable school leadership. That leads to forming positive connections that focus on deep learning by all, to the ultimate benefit of students.

Advanced teachers advocate and practice sustainable leadership by:

1. Making learning paramount in all leadership activity.
2. Making learning transparent among all educators in the school.
3. Demonstrating evidence-informed leadership through active inquiry into learning.
4. Modeling deep and broad adult learning in their own leadership development and in the kinds of staff development offered to others (Hargreaves & Fink, 2006).

In this way, leadership becomes a distributed or shared process that emphasizes the importance of the interactions that one develops with others and champions roles such as coaching and mentoring (Easton, 2008; Mihans, 2008). Advanced teachers who demonstrate professional leadership are essential to perpetuating and advancing physical education and professional learning in the schools.

Standard 3: Professional Leadership

Advanced physical education teacher candidates (AC) are continuous, collaborative learners who further their own professional development and use their abilities to contribute to the profession.

Element	Unacceptable	Acceptable	Target
3a. Conducts inquiry into professional knowledge and practice and communicates results of inquiry to the profession and community.	AC assesses teaching by thoughtfully considering own practice in relationship to successful practitioners. Results from reflection might be used to improve instruction but are not disseminated to or shared with others.	AC conducts inquiry into professional knowledge and practice. AC shares professional knowledge with colleagues and/or community.	AC questions professional knowledge and practice by conducting formal inquiry into teaching and learning. AC seeks formal means of sharing findings with the profession as a whole and/or advocating for instructional and school improvement.
Element	Unacceptable	Acceptable	Target
3b. Continues personal development through contributions to the growth and professional learning of others.	AC participates in professional learning opportunities for personal benefit.	AC contributes to the improvement of peers', colleagues' or others' practice that leads to the professional learning of all involved.	AC contributes to the development of all involved through sustained formal curricular and/or instructional support to fellow professionals by serving as a mentor or instructional coach, or in other leadership roles.

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GLOSSARY OF TERMS

Advanced Programs*: Post-baccalaureate levels for (1) continuing education for teachers who have previously completed preparation or (2) preparation for other school professionals. Advanced programs commonly award graduate credit and include master's, specialist and doctoral degree programs, as well as non-degree licensure programs at the post-baccalaureate level.

Alignment: Congruence of outcomes, courses/ experiences and assessment activities.

Assessments*: Evaluated activities or tasks that programs or units use to determine the extent to which teacher candidates have mastered specific learning proficiencies, outcomes or standards. Assessments usually include an instrument that details the task or activity and a scoring guide used to evaluate the task or activity. Appropriate assessments in physical education are linked to lesson or unit goals and objectives, are conducted within the context of instruction, and match the developmental level of both the student and teacher candidate.

Collaboration: Interaction and communication with other professionals within and outside the physical education discipline. These interactions ultimately increase opportunities for students and/or reduce barriers related to a physically active lifestyle.

Content Knowledge: In physical education teacher education, content derives from knowledge of movement and knowledge of pedagogy. Knowledge of movement includes mastery of movement forms (e.g., games, sports, dance, aquatics, leisure activities) and information from kinesiology-related areas (e.g., exercise physiology, biomechanics, sport psychology/sociology, motor learning). Knowledge of pedagogy derives from education (e.g., education foundations, instructional technology, general methods) and psychology (e.g., child development, cognitive psychology).

Critical Elements: Essential components of skillful movements. Example: For throwing, the critical elements include arm, body and leg actions.

Developmentally Appropriate: Instruction or activity that is suitable to the learner's level of physical, social, emotional and intellectual development.

Developmentally appropriate instruction accounts for the fact that "developmental change is qualitative, sequential, directional, cumulative, multifactorial and individual" (NASPE, 1995, p. 17).

Disciplinary Knowledge: Foundational information from the knowledge areas of movement and pedagogy that support the field of physical education.

Dispositions*: The attitudes, values and beliefs that educators demonstrate through both verbal and non-verbal behaviors as they interact with students, families, colleagues and communities. These professional dispositions support student learning and development (NCATE, 2008).

Diversity*: Differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, geographical area and/or development.

Exceptionalities*: Physical, mental or emotional conditions — including gifted/talented abilities — that require individualized instruction and/or other education-related support or services.

Health-Enhancing Fitness: Intentional and systematic physical activity that positively enhances the components of personal physical fitness (i.e., cardiovascular and muscular). Improving these components reduces the risk of disease and illness, and enhances overall health and well-being.

Inquiry: Conscious effort to seek answers by posing questions, gathering and analyzing data, drawing conclusions, making inferences or generating hypotheses.

Instructional Cues & Prompts: Verbal cues that direct or focus students' attention to the key elements of a skill or that prompt students to perform key movement components of skills (e.g., "platform with arms" for a volleyball forearm pass).

Instructional Feedback: Specific, intentional, well-timed augmented information that the teacher provides the student that serves the primary purpose of increasing student motor skill learning and performance. Some intentional feedback (used sparingly) also can increase

motivation and/or reinforce appropriate behaviors during practice or performance.

Instructional Formats: Teaching approaches ranging from direct to indirect.

Learners: See NCATE definition for *students*.

Learning Experiences: Planned instructional activities designed to help meet learning goals and objectives.

Motor Competency: Competency implies that the teacher demonstrates the activity's fundamental skills and applies those skills effectively in a game situation or performance. Demonstrating competency includes using fundamental game strategies or applying skills to solve advanced movement problems (Chepko & Arnold, 2000, p. 245).

Motor Proficiency: Implies that the learner has mastered advanced skills in game situations or performance. Demonstrating proficiency includes using advanced game strategies, creating movement patterns or creating unique combinations of movements (Chepko & Arnold, 2000, p. 245).

Movement Patterns: Fundamental movements as the essential building blocks to skillful movement. These include locomotor (i.e., jumping and running), non-locomotor (i.e., bending and stretching) and manipulative (i.e., striking and throwing) movement patterns.

Non-Verbal Communication: Techniques of communicating that use expressions, gestures, body posture and/or signals rather than words. Also can include materials, technology and alternative resources such as task cards or poster boards.

Pedagogical Content Knowledge (PCK)*: Interaction of the subject matter and effective teaching strategies to help students learn the subject matter. Requires a thorough understanding of the content to teach it in multiple ways, drawing on students' cultural backgrounds and prior knowledge and experiences.

Pedagogical Knowledge*: The general concepts, theories and research about effective teaching, regardless of content areas.

Performance Assessment*: A comprehensive assessment through which candidates demonstrate their proficiencies in subject, professional and pedagogical knowledge, skills and dispositions, including their abilities to exert positive effects on student learning.

Performance Concepts: Knowledge and action concepts related to skillful performance of movement and fitness activities. Includes the aspects of (1) correct *selection* or "what" to do when performing a skill (i.e., when to choose a drop shot or why to choose low repetitions for strength training); and (2) correct *execution* or "how" to do a skill (i.e., executing a wrist flick or the speed of lowering the weight in a repetition) (Rink, 2003).

Personal Competence in Motor Performance: The teacher candidate demonstrates movement skill and movement patterns at a level necessary to perform a variety of physical activities. Teacher candidates are expected to be at least minimally competent in many movement forms and proficient in a few movement forms (NASPE, 2004). Teacher preparation programs can assess teacher candidates' personal competence of in a variety of ways.

Personal Competence in Health-Enhancing Fitness: The teacher candidate demonstrates that he or she is physically fit and participates regularly in physical activity that enhances personal fitness and overall health (NASPE, 2004). Teacher preparation programs can assess teacher candidates' achievement and maintenance of health-enhancing levels of physical fitness in a variety of ways.

Physically Educated Individuals: See Note 3 on p. 58.

Portfolio*: An accumulation of evidence about individual proficiencies, especially in relation to explicit standards and rubrics, used to evaluate competency as a teacher or in another professional school role. Contents might include end-of-course evaluations and tasks used for instructional or clinical experience purposes, such as projects, journals and faculty observations, videos, comments by cooperating teachers or internship supervisors, and samples of student work.

Professional Development*: Opportunities for professional education faculty to develop new knowledge and skills through in-service education, conference attendance, sabbatical leave, summer leave, or inter-instructional visitations, fellowships and work in P-12 schools, etc.

Professional Dispositions*: Professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities. These positive behaviors support student learning and development.

Professional Learning: Changes in practice resulting from a culture of inquiry and reflection in an ongoing collaborative environment among all involved in the school setting (Easton, 2008).

Reflection: Mental process in which teacher candidates consider relevant instruction and context-related factors (i.e., student diversity, developmental differences, motor skill type), student learning outcome achievement and assessment data to modify instruction and enhance future student learning.

Reflective Cycle: The systematic and comprehensive process of using assessment data to inform the teacher candidate about students' learning outcomes achievement and modifying instruction (based on assessment data) to enhance student learning.

Short- and Long-Term Plans: For Initial Standards, short-term plans refer to daily lesson plans; long-term plans refer to unit plans (weeks or collection of daily lessons). Daily lesson plans comprise unit plans. For Advanced Standards, short-term plans refer to daily and unit lesson plans; long-term plans refer to yearly or curriculum/program plans.

Students*: Children and youths attending P-12 schools, as distinguished from teacher candidates.

Teacher Candidates*: Individuals admitted to, or enrolled in, programs for initial teacher preparation, teachers continuing their professional development or other professional school personnel. Candidates are distinguished from students in P-12 schools.

Technology*: What teacher candidates must know and understand about using information technology to work effectively with students and professional colleagues in (1) delivering, developing, prescribing and assessing instruction; (2) problem-solving; (3) school and classroom administration; (4) education research; (5) electronic information access and exchange; and (6) personal and professional productivity.

Variety of Physical Activities: Specific motor skills and activities that, together, constitute P-12 physical education. Can include but are not limited to: aquatics, dance and rhythm, fitness activities, fundamental motor skills, lifetime leisure activities, outdoor activities and sports (team, individual and dual).

* Definitions adapted from and used with permission from the National Council for Accreditation of Teacher Education (NCATE).