Using Standards in Portfolio Construction



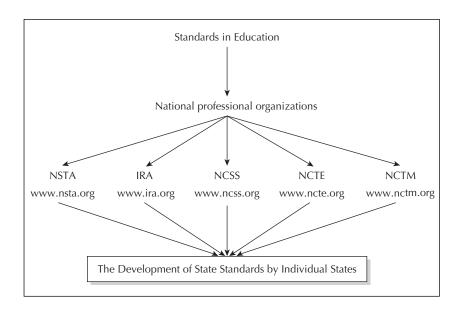
- Why are standards so important in education today?
- What standards apply to the professional growth of teachers?
- Where can I find standards?

INTRODUCTION

Standards are shared views within the education community of what constitutes learning. Performance standards, in particular, require an active generation of response that is observable directly or indirectly by a permanent product or process. Performance standards also are representative of real-world, or authentic, issues or problems. Portfolio assessments derived from performance standards ask learners to create a product that demonstrates their knowledge and skills, thus providing evaluators with a rich and complete picture of what learners know and are able to do. The strongest argument for using standards is that teachers and students are all focused on what all groups should know and be able to do. Standards create common ground on which learning foundations are built. Standards are important because they serve to clarify and raise expectations and also provide a common set of expectations (Kendall & Marzano, 1996). Kendall and Marzano (2004) noted some problems, however, on the scope, purpose, and nature of standards and suggest that a systematic effort be undertaken to remedy the following areas of concern:

- (1) multiple documents (137 documents across 14 areas of study were consulted) that state what students and teachers should know and be able to do—there needs to be a single comprehensive review so that states can identify information important to them;
- (2) differing types of content description within these documents can cause confusion among states when selecting and understanding standards, such as
 - procedural standards written as the learner is able to edit an essay,
 - declarative standards written as the learner understands the conventions of punctuation,
 - contextual standards written as the learner uses appropriate tone and style for a selected audience.

Although Kendall and Marzano (2004) addressed the concerns of curriculum developers in K–12, these concerns are valid for all levels of documents. However, they are by no means insurmountable concerns. Perhaps professional agreement pertaining to national standards would best resolve the issues listed above, and many professional organizations have done just that. For example, the National Council for Teachers of Mathematics (NCTM, www.nctm.org), the National Science Teachers Association (NSTA, www.nsta.com), the National Council for the Social Studies (NCSS, www.ncss.org), the National Council for Teachers of English (NCTE, www.ncte.org), and the International Technology Education Association (ITEA, www.iteaconnect.org) represent the major content-oriented national organizations that have developed quality performance-based standards, as shown in the following chart:



It is important to note that educational technology standards apply to all content areas at every level. Technology standards are governed by the ISTE, the International Society for Technology in Education. The ISTE has developed standards for students, teachers, and administrators and includes a profile of skills these populations should be able to perform to meet the appropriate standard.

NETS•T for Teachers

(Performance indicators for each standard can be found at http://cnets.iste.org/teachers/t_stands.html)

ISTE National Educational Technology Standards for Teachers (NETS•T)

Standard 1: Technology Operations And Concepts

Teachers demonstrate a sound understanding of technology operations and concepts.

Standard 2: Planning And Designing Learning Environments And Experiences

(Continued)

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(Continued)

Teachers plan and design effective learning environments and experiences supported by technology.

Standard 3: Teaching, Learning, And The Curriculum

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning.

Standard 4: Assessment And Evaluation

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.

Standard 5: Productivity And Professional Practice

Teachers use technology to enhance their productivity and professional practice.

Standard 6: Social, Ethical, Legal, And Human Issues

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice.

The ISTE National Educational Technology Standards for Teachers (NETS•T), which focus on preservice teacher education, define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. The process of portfolio development can meet many of these standards as students gain knowledge of and apply skills, such as planning for a multimedia presentation, hyperlinking, and using CD-R technology. In addition, the artifacts themselves can indicate proficiency with technology, such as a lesson plan that has technology embedded in the lesson as a natural part of instruction, evidence of the use of desktop publishing activities with students, or work with Webquests either planned for student use or created by the teacher.

STANDARDS FOR TEACHERS

The purpose of a preservice teacher's portfolio is to document professional growth and development. Many teacher preparation programs are requiring education students to create an exit portfolio to demonstrate performance-based evidence that they have met the standards of the program. Standards often are derived from state agencies that regulate the certification of teachers (see list and Web addresses of state agencies on the CD), but standards can also come from national accreditation agencies such as the National Council for Accreditation of Teacher Education (NCATE). NCATE standards address the skills, knowledge, and dispositions that are expected of every teacher candidate. The NCATE standards are closely aligned with and elaborate on the 10 model standards for teacher licensure developed by the Interstate New Teacher Assessment and Support Consortium (INTASC). The



Refer to the Student Resource CD for more department of education web links

INTASC standards outline a coherent continuum of teacher knowledge, skills, and dispositions for beginning teacher professional development. The point here is that, although there are state and national standards, a common language among standards is understood by professionals who review portfolios. Spending time thinking about what the standards mean to one's achievements, professional growth, and development is time well spent.

When selecting the standards and guidelines for preservice portfolio construction, many colleges and universities decide to use a combination of state and national standards because of the correlation between them. The connection among standards should be made clear to preservice teachers to assist them in taking the mystery out of interpreting multiple sets of standards.

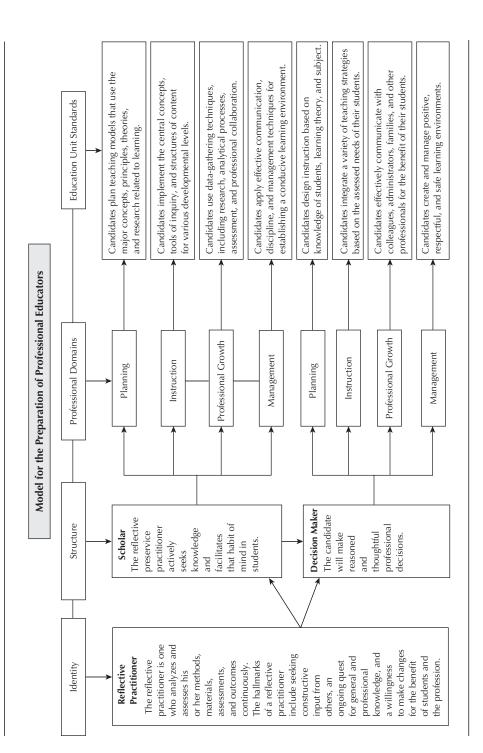
The University of Scranton's model for the preparation of professional educators sees the preservice teacher as a scholar and decision maker (see Figure 3.1).

The model has several strands of reflective practice built in to enhance the decision-making abilities of preservice teachers. These standards are available to students as soon as they enter the education program so that students can review their work as they proceed through the program. As students reflect on their work and improve it after receiving instructor feedback, they can decide to use it as an artifact that provides evidence of having met a performance standard. Figure 3.2 extends the model for the preparation of professional educators with a final column of possible artifacts that pertain to the standards for elementary education students.

The artifacts presented are in no way intended to be an exhaustive list of what should or could be included in an electronic exit portfolio for preservice teachers. Rather, because students will be conversant

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Model for the Preparation of Professional Educators, Created by Dr. Deborah Eville Lo, University of Scranton Figure 3.1



with the unit standards from the time they enter the education program, students can decide, as they progress through the program, which artifacts to use. In this way, the students can be creating a working portfolio of all standards-related achievements and then select exemplary artifacts for the exit portfolio. An exit portfolio can also provide the preservice teacher with a portfolio that will enhance the initial job search and interview process. Feedback that results from presentation of the exit portfolio can be used before molding the exit portfolio into a portfolio for employment.

In keeping with the definition of standards as shared views within the education community of what constitutes learning, the INTASC standards were developed for licensing new teachers (see Figure 3.4).

The INTASC standards were developed by representatives from the teaching profession along with personnel from 17 state education agencies. These standards were developed to be compatible with the advanced certification standards of the National Board for Professional Teaching Standards (NBPTS). This work helps to develop a coherent approach to educating and licensing teachers based on shared views among states and within the profession of what constitutes good teaching.

The NBPTS standards are presented here (see Figure 3.5) as well so that one can readily see the compatibility and overlap among standards for teachers. Although the NBPTS standards are used for veteran teachers, the differences from one set of teaching standards to another is negligible and provides more evidence that standards really are a composite view of what the profession states that teachers should know and be able to do. Many universities and state agencies have developed their own sets of standards for evaluating teacher performance, and since standards are a shared view of what is important for quality teaching and learning to occur, such standards *can* be tailored to individual institutions but can also connect to national standards.

The Education Department at the University of Scranton has designed an exit portfolio for preservice teachers based on the INTASC standards and the Pennsylvania Department of Education (PDE) standards. Figure 3.3 shows how the University of Scranton unit standards correlate with the INTASC standards for beginning teachers. For example, the more global INTASC Standard 2 is aligned with the more specific standards for both Scholar 1 and Scholar 4 in the Scranton standards. Thus, preservice teachers understand how children learn and develop, and they can provide learning opportunities that

Samples of Possible Artifacts for Education Department Unit Standards, University of Scranton

A Sampling of Artifacts for an Elementary Preservice Teacher Using the Scranton Model

Education Unit Standards	Partial Listing of Artifacts That Demonstrate Success in Meeting the Standard
Candidates plan teaching models that use the major concepts, principles, theories, and research related to learning.	Integrated, thematic lesson plans and rubrics Short-term and long-term goal statements Research papers
Candidates implement the central concepts, tools of inquiry, and structures of content for various developmental levels.	Lesson plans created for a variety of grade levels Guided-discovery lesson plan with photos or video of children working Teacher-designed tasks that give students a choice of products Content supervisor's evaluations
Candidates use data-gathering techniques, including research, analytical processes, assessment, and professional collaboration.	Anecdotal student records with reflective analysis on use Authentic tasks and rubrics that support learning standards Student journals samples and how they are used Evaluations of student work
Candidates apply effective communication, discipline, and management techniques for establishing a conducive learning environment.	Philosophy of classroom management statement Room arrangements that facilitate communication Classroom rules with rationale for the rules
Candidates design instruction based on knowledge of students, learning theory, and subjects.	Student interest inventories and prior knowledge assessments Lesson plans and units that demonstrate attention to individualized instruction strategies Photos and explanations of an integrated learning center
Candidates integrate a variety of teaching strategies based on the assessed needs of their students.	Lessons that demonstrate a variety of strategies that allow students to explore concepts in depth Reflective essay on how to access the prior knowledge of students and the impact of this knowledge on instruction Interest inventories and their use in planning instruction
Candidates effectively communicate with colleagues, administrators, families, and other professionals for the benefit of their students.	Team-planning/team-teaching experiences with reflection on process Newsletters, notes to parents, parent conference notes, and comments Portfolio review parties with other classes Field trips and guest speakers
Candidates create and manage positive, respectful, and safe learning environments.	Reflection on appropriate elementary learning environments Survey of student comments on the established learning environment Letters from parents and students Observations from others

Alignment of the University of Scranton Standards and INTASC Standards Figure 3.3

The University of Scranton Unit Standards

As Decision Makers, teacher candidates . . .

As Scholars, teacher candidates...

the	Use data-gathering	Apply	Design	Develop goals	Show concern	Effectively
	techniques that	effective verbal,	instruction for	and objectives	for peers and	communicate
	include research,	written, and	the diversity	appropriate for	students by	with colleagues,
	analytical	technological	of student	all students and	managing	administrators,
	processes,	communication	needs, based on	integrate	positive,	families, and other
	assessment,	and	the use of	a variety of	respectful, and	professionals and
	and the use	management	appropriate	teaching	safe learning	facilitate the social
	of appropriate	techniques,	learning theory	strategies based	environments	acceptance of
	technology	and react with	and content	on the assessed	and by	diverse populations
	throughout the	sensitivity to the	knowledge,	needs of their	demonstrating	by encouraging
	curriculum.	various needs	including	diverse student	the belief that all	positive
and use	Candidates practice	and feelings	academic	population.	children can	relationships and
	proper professional	of students,	content		learn.	considering
	behaviors and deal	families,	standards,			feedback from those
	ethically with	colleagues, and	multicultural			relationships.
	colleagues,	others.	materials, and			Appropriate
	superiors, students,		technological			professional
	and families.		options.			behaviors are
						practiced
						consistently.
	3. Management	4. Professional	1. Planning	2. Instruction	3. Management	4. Professional
		Growth				Growth

Figure 3.3 (Continued)

Understands Understands the central how children concepts, learn and develop and incuits and consolides									
	Understands	Understands	Uses an	Uses	Plans	Understands	ls a reflective	Fosters	
	n how	and uses a	understanding	knowledge of	instruction	and uses	practitioner	relationships	
	students	variety of	of individual	effective verbal,	based on	formal and	who	with school	
	differ in their	instructional	and group	nonverbal, and	knowledge	informal	continually	colleagues,	
_	approaches	strategies to	motivation	media	of subject	assessment	evaluates the	parents, and	
		encourage	and behavior	communication	matter,	strategies to	effects of his or	agencies in	
		students'	to create a	techniques to	students,	evaluate and	her choices	the larger	
	instructional	development	learning	foster active	the	ensure the	and actions on	community	
	opportunities	of critical	environment	inquiry,	community,	continuous	others	to support	
		thinking,	that	collaboration,	and	intellectual,	(students,	students'	
	adapted to	problem	encourages	and supportive	curriculum	social, and	parents, and	learning and	
	diverse	solving, and	positive social	interaction in	goals.	physical	other	well-being.	
_	. learners.	performance	interaction,	the classroom.		development	professionals		
that make		skills.	active			of the	in the learning		
these			engagement			learner.	community)		
aspects of			in learning,				and who		
subject			and self-				actively seeks		
matter			motivation.				ont		
meaningful							opportunities		
for students.							to grow		
							professionally.		
	INTASC 3	INTASC 4	INTASC 5	INTASC 6	INTASC 7	INTASC 8	INTASC 9	INTASC 10	
Aligned Aligned with		Aligned with	Aligned with	Aligned with	Aligned	Aligned with	Aligned with	Aligned with	
		Decision	Scholar 3;	Decision	with	Decision	Scholar 4;	Decision	
Scholar 1	Scholar 2; Decision	Maker 1	Decision Maker 3	Maker 3	Decision Maker 1	Maker 2	Decision Maker 3, 4	Maker 4	
	Maker2								

Figure 3.4 The Interstate New Teacher Assessment and Support Consortium (INTASC) Standards

INTASC Standards for Beginning Teachers

Standard 1: Content Pedagogy

The teacher understands the central concepts, tools of inquiry, and structures of the discipline he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Standard 2: Student Development

The teacher understands how children learn and develop and can provide learning opportunities that support a child's intellectual, social, and personal development.

Standard 3: Diverse Learners

The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Standard 4: Multiple Instructional Strategies

The teacher understands and uses a variety of instructional strategies to encourage student development of critical thinking, problem solving, and performance skills.

Standard 5: Motivation and Management

The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Standard 6: Communication and Technology

The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Standard 7: Planning

The teacher plans instruction based on knowledge of subject matter, students, the community, and curriculum goals.

Standard 8: Assessment

The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Standard 9: Reflective Practice: Professional Growth

The teacher is a reflective practitioner who continually evaluates the effects of his or her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Standard 10: School and Community Involvement

The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

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support their intellectual, social, and personal development (INTASC Standard 2) by

- planning teaching models that use major concepts, principles, theories, research, and technology related to learning, including attention to the needs of diverse learners (Scholar 1) and by
- applying effective verbal, written, and technological communication and management techniques, as well as reacting with sensitivity to the various needs and feelings of students, families, colleagues, and others (Scholar 2).

This connection is made clear to students at the very beginning of portfolio development so that the "living" component to e-portfolios can easily be maintained by changing standards as one progresses throughout one's educational career. Of course, new reflection opportunities are presented as well as the selection of new artifacts.

This alignment with the INTASC standards facilitates preservice teachers with the option to modify their e-portfolio to incorporate the INTASC standards if they so choose before interviews.

With passage of the No Child Left Behind Act of 2002 (see U.S. Department of Education, 2002), Congress reauthorized the Elementary and Secondary Education Act (ESEA), the principal federal law affecting education from kindergarten through high school. In amending the ESEA, the new No Child Left Behind Act represents a sweeping overhaul of federal efforts to support elementary and secondary education in the United States. A key component of this law is ensuring that there are "highly qualified" teachers in the nation's schools. National Board certified teachers (NBCTs) use the NBPTS to earn national certification (see www.nbpts.org). The No Child Left Behind Act recognizes NBCTs as meeting the law's requirements of being highly qualified. Given this, it is a logical assumption that more states will encourage teachers to become National Board certified, which includes portfolio assessment as a major element of earning such certification. The times are changing in American education, and standards are leading the way.

NBPTS Early Adolescence/Generalist Standards

Figure 3.5

	The National Board for Professional Teaching Standards (NBPTS) Early Adolescence/Generalist Standards (for teachers of students ages 11–15) These standards serve as the basis for National Board Certification in this field	al Teac neralis ents ag tional	ching Standards (NBPTS) st Standards ges 11–15) Board Certification in this field.
-	Knowledge of Young Adolescents Accomplished generalists draw on their knowledge of early adolescent development and their relationships with students to understand and foster their students' knowledge, skills, interests, aspirations, and values.	₹	Multiple Paths to Knowledge Accomplished generalists use a variety of approaches to help students build knowledge and strengthen understanding.
≡	Knowledge of Subject Matter Accomplished generalists draw on their knowledge of subject matter to establish goals and to facilitate student learning within and across the disciplines of the middle-grades curriculum.	ji k	Social Development Accomplished generalists foster students' self-awareness, character, civic responsibility, and respect for diverse individuals and groups.
≡	Instructional Resources Accomplished generalists select, adapt, create, and use rich and varied resources.	×	Assessment Accomplished generalists employ a variety of assessment methods to obtain useful information about student learning and development, to inform instructional strategies, and to assist students in reflecting on their own progress.
≥.	Learning Environment Accomplished generalists establish a caring, stimulating, inclusive, and safe community for learning where students take intellectual risks and work independently and collaboratively.	×	Reflective Practice Accomplished generalists regularly analyze, evaluate, and strengthen the effectiveness and quality of their practice.
>	Meaningful Learning Accomplished generalists require students to confront, explore, and understand important and challenging concepts, topics, and issues and to improve skills in purposeful ways.	XI.	Family Partnerships Accomplished generalists work with families to achieve common goals for the education of their children.
<u> </u>	Respect for Diversity Accomplished generalists model and promote behavior appropriate in a diverse society by showing respect for and valuing all members of their learning communities and by expecting students to treat one another fairly and with dignity.	X II.	Collaboration With Colleagues Accomplished generalists work with colleagues to improve schools and to advance knowledge and practice in their field.

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RESOURCES FOR STANDARDS

The following Web sites will assist all portfolio authors in selecting standards to guide portfolio development. Above and beyond simply listing the standards, each of the organizations listed below discusses the instructional and assessment practices deemed appropriate for each field of study. The rationale and background for the standards are also presented.

Science standards (http://search.nap.edu/readingroom/books/ nses/html/). The National Science Education Standards presents a vision of a scientifically literate populace. These standards outline what students need to know, understand, and be able to do to be scientifically literate at different grade levels.

Language arts standards (www.ncte.org). This is the homepage of the National Council of Teachers of English (NCTE). A joint effort between the NCTE and the International Reading Association (IRA) yielded English-language arts standards for K-12 that define what students know and are able to do. These standards encourage the development of curriculum and instruction that make productive use of the emerging literacy abilities that children bring to school. In addition, the standards provide ample room for the innovation and creativity essential to teaching and learning.

Foreign-language standards (www.actfl.org). This is the homepage of the American Council of Teachers of Foreign Language (ACTFL). Standards for Foreign Language Learning in the 21st Century, which includes information applying the standards to specific languages, was released in 1999. These standards represent a consensus among educators, business leaders, government, and the community on the definition and role of foreign-language instruction in American education.

Mathematics standards (www.nctm.org). This is the homepage of the National Council of Teachers of Mathematics (NCTM). The Principles and Standards for School Mathematics of 2000 addresses content, teaching, and assessment. These standards are guidelines for teachers, schools, districts, states, and provinces to use in planning, implementing, and evaluating high-quality mathematics programs for kindergarten through Grade 12.

Social studies standards (www.ncss.org). This is the homepage of the National Council for the Social Studies. Expectations of Excellence: Curriculum Standards for Social Studies and Standards

for the Preparation of Social Studies Teachers consist of 10 themes incorporating fields of study that roughly correspond with one or more relevant disciplines. These 10 themes span the educational levels from early to middle grades to high school. Student performance expectations within these themes are then specified, and examples of classroom activities are provided as illustrations of how to design learning experiences to help students meet the performance expectations.

Physical education standards (www.aahperd.org). This is the homepage of the American Alliance for Health, Physical Education, Recreation and Dance. The *Outcomes of Quality Physical Education* outlines the outcomes for physical education in kindergarten through Grade 12. Content standards and assessment material based on the outcomes document were developed and can be found at this site.

Standards for the fine arts (www.artsedge.kennedycenter .org/professional_resources/standards/nat_standards_main.html). Developed by the Consortium of National Arts Education Associations (under the guidance of the National Committee for Standards in the Arts), the *National Standards for Arts Education* is a document that outlines basic arts learning outcomes integral to the comprehensive K–12 education of every American student.

Technology standards (www.cnets.iste.org). This is the homepage of the National Education Technology Standards (NETS). *Curriculum and Content Area Standards* and the *Technology Foundation Standards for All Students* consist of categories that provide a framework for performance indicators for students learning to use technology in all content areas. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills. Technology standards for teachers are also included at this site. There are many useful lesson plans that indicate how teachers can effectively use technology with students.

Standards for music education (www.menc.org). This is the homepage of the National Association for Music Education. The *National Standards for Arts Education* is a statement of what every young American should know and be able to do in four arts disciplines—dance, music, theater, and the visual arts. The scope of these standards is from kindergarten through Grade 12, and they speak to both content and achievement.

Teaching standards for beginning teachers (www.ccsso.org/ intascst.html). This is the homepage of the Council of Chief State School Officers (CCSSO). The INTASC is a project of the CCSSO. The INTASC standards represent a common core of teaching knowledge and skills that are designed to help all students acquire 21st-century knowledge and skills. The standards were developed to be compatible with the advanced certification standards of the new NBPTS. The INTASC standards address the knowledge, dispositions, and performances deemed essential for all teachers regardless of their specialty area.

Teaching standards for veteran teachers (www.nbpts.org). This is the homepage of the National Board for Professional Teaching Standards, which has developed standards in 27 fields. All NBPTS standards are based on the National Board's Five Core Propositions for what accomplished teachers should know and be able to do. The standards serve as the basis for National Board certification, which some states have adopted for promotion or for additional financial compensation for teachers.

Technology, innovation, design, and engineering educators (www .iteaconnect.org). This is the homepage of the International Technology Education Association. The *Technological Literacy Standards* promotes technological literacy for all students, teachers, and administrators.

SUMMARY

Standards are important in every aspect of education because they create common ground for learning at all levels. Long gone are the days when teachers did what they thought was best and hoped that it indeed was the best. Standards help to guide teachers in what their students should learn and present a framework for teachers' own professional growth and development as well. In the next chapter, the role of reflection and self-assessment in portfolios will be discussed along with the use of rubrics to guide self-assessment.

QUESTIONS TO GUIDE E-PORTFOLIO PREPARATION

- 1. Of what importance are standards in e-portfolio development?
- 2. Discuss which standards best serve your purpose in e-portfolio development. Why do you think as you do?
- 3. Who authored the standards you will be using in your e-portfolio? Are the NETS•T represented in these standards? If so, how?