### Introduction

he richness of the portfolio as a valuable assessment tool in schooling has become evident to educators in the United States and throughout the world. As academic portfolios have been introduced, implemented, and modified in classrooms, they have been defined and redefined as a container of evidence about and for student achievement. Increasingly, they are viewed as a platform or scaffolding for analysis, reflection, and—most important—conversation about students' work. Few educators would dismiss the power of portfolios to produce compelling evidence of student achievement and learning dispositions. But the reality is that implementing an effective portfolio system is very complex, and can be time consuming for many, especially at the outset.

This book will address the importance of portfolios and e-portfolios in the academic life of students and teachers. It will provide the reader with an understanding of the various definitions of print and e-portfolios, and it will promote understanding of the location of portfolios at the intersection of student evaluation and assessment. Each chapter will provide a number of strategies and tools for effectively involving the stakeholders of assessment—students, parents, teachers, and administrators—and will illustrate the ways in which portfolio assessment can inform policy makers about significant student achievement. This edition of *The Portfolio Connection* will specifically focus on how the portfolio process can result in increased student voice, self-reflection, goal setting, and academic motivation. Each chapter will integrate perspectives and points for teachers to consider as they create a portfolio process that involves students and celebrates their learning accomplishments.

Academic portfolios have been defined in numerous ways. Most commonly, they are regarded as containers or "compendiums" of specifically selected student work that meets the stated purposes of the assessment process—notably, student work representing a selection of performances. Hebert (1998) describes her school's experience with portfolios as one of discovery in which students, faculty, and parents recognize that "the real contents of a portfolio are the child's thoughts and his or her reasons for selecting a particular entry. That selection process reflects the interests and metacognitive maturity of the child and the inspiration and influence offered by the teachers" (p. 583). Some educators assert that portfolios promote "evidence and dialogue to identify where pupils are in their learning, where they need to go and how best to get there" (Black &

William, 2004, p. 7; emphasis in original). Black and William believe that portfolios work best when they are seen as a principal means of assessing *for* learning rather than simply evaluation *of* learning. But portfolios can achieve both assessment and evaluation, as stressed by other educators. Black and William believe that educators who use portfolios provide "clear evidence about how to drive up individual attainment; clear feedback for and from pupils so there is clarity on what they need to improve and how best they can do so" (p. 8).

While portfolios and e-portfolios are considered a form of alternative assessment that includes samples of student performance, they also can be a form of evaluation: They can include scores on formal tests on which students reflect, and then set goals for future academic attainment. The key function of portfolios is promoting ongoing assessment: The teacher and student are continually reviewing the contents of the portfolio; there are clear standards and criteria for selection of the most representative artifacts at predetermined times of the year; and student voice, self-reflection, and self-evaluation are always present.

Portfolios promote interaction between students and teachers, students and peers, and students and parents or significant others. The Latin verb *assidere*, from which the word *assess* is derived, is defined as "to sit beside." A well-designed, purposeful, and student-centered portfolio assessment process ensures that teachers and students "sit beside" each other. Teachers find that students who have achieved voice in the portfolio process become active participants in the portfolio assessment process, inviting others to "sit beside them" as they evaluate the outcome and products of their educational experiences.

The notion of a portfolio as a systematic process of students' self-assessment and reflection on what they know, as well as their learning achievement, has gained increasing agreement in recent years. Largely owing to the arrival of the e-portfolio, many educators have developed an interest in student "voice" and self-reflection at the core of the portfolio (Barrett, 2004a). One teacher who has developed expertise in using e-portfolios recognizes that they promote a new, "basic literacy that incorporates technological knowledge, skill and self-reliance and requires that learners are able to demonstrate their knowledge and abilities rather than conform to prescribed evaluation procedures" (Bergmann, 2004, p. 2). Stefanakis (2006) advocates the use of the e-portfolio because students prefer using technology to document what they know. She contends, "[It] enables teachers to work with students at all levels as they place their work into the portfolios throughout the year. In writing, math homework, science lab reports and multimedia work such as music and digital photography [a portfolio] gives a wider range of evidence of their capabilities" (p. 1).

#### HOW CAN PORTFOLIOS HELP STUDENTS LEARN?

#### Comparing Work to Past Work Fosters Greater Motivation Than Comparison to the Work of Others

Portfolios as the outcome of a continuous, student-centered process help students learn in a variety of ways. One remarkable by-product of the portfolio process in the classroom is increased student awareness of and responsibility for learning objectives. Since the implementation of the No Child Left Behind (NCLB) federal legislation in the United States, standards for learning and teaching have been raised. The results in terms of classroom life—curricula and instructional practices—have made it mandatory for teachers to address and achieve learning standards for their students. When students are brought into the instructional process through communication of the lesson or unit standards and goals, and when they are given the opportunity to use (or even help create) scoring rubrics that reflect the criteria and levels of achievement required of their performances, they become more motivated to achieve.

#### **Learning Progress Over Time Can Be Clearly Shown**

When students know that their portfolio will reflect their growth or skill development over time, they are more focused. They become more rigorous selfevaluators and set goals for their own progress. They value where they have been and how much they have achieved. Because portfolios and e-portfolios include applications of content skills and chronicle students' progress and growth toward meeting curriculum goals and standards, they provide a much richer and more revealing portrait of the student as a learner. Such a picture cannot be captured by a single test score. Within the portfolio process, students become active agents in the acquisition and exposition of their knowledge across the content area of the grade levels.

#### **Portfolios Provide for Clear Communication** of Learning Progress to Students, Parents, and Others

If students receive continuous and constructive feedback on the quality of their artifacts, they become more able to self-assess critically. They recognize the power of peer support and become comfortable in inviting peer review. They become able to think flexibly and provide helpful comments to their peers. They grow to appreciate the shared time they spend when their teachers "sit beside" them to share their reflections on the organization and design of their portfolio, as well as the selection of artifacts to be included.

An example of the potential impact and benefits that portfolios and e-portfolios add to student learning is found in the statement of the director of an online portfolio project for high school students in New York state. The project addressed the issue of "student complacency" in a curriculum without authentic assessment and portfolios. "[Students] don't see how their work in school is connected to anything in their lives...but collaborating with teachers to build a portfolio gets students involved and leaves them with a product they can be proud of. What's exciting for us is the level of interaction that is happening between teachers and students. Not only are the teachers excited, but also the students are excited about the work. It even helps get parents involved in the process and that's always a good thing" (Teachers College, 2006).

#### Self-Assessment Skills Are Increased When Students Select the Best Samples of Their Work and Justify Their Choices

Students learn about themselves and the subject they study, "when they are asked to select artifacts for a particular purpose, justify their choices, and make connections across multiple examples, instances, or realms of experience" (Catalyst, 2007). When students actively participate in the portfolio process, it is natural for them to want to know more about how assignments will be structured and graded so they can do their best work. When it comes to problem solving that requires the use of higher-order thinking skills, students who have developed more responsibility in self-assessment are likely to use synthesis and reflection to solve problems, and they are more likely to use their critical and creative thinking skills to select artifacts that best illustrate how a difficult problem was solved.

## Focusing on Students' Best Work Provides a Positive Influence on Learning

Portfolios give students the "green light" to do what they seem to do naturally—to save their work. But the process of reflection on goals and standards helps students to become more selective about which pieces of their work will actually become showcased in the portfolio. Sweet (1993) asserts that "portfolios become an effective way to get them to take a second look and think about how they could improve future work. As any teacher or student can confirm, this method is a clear departure from the old write, hand in, and forget mentality, where first drafts were considered final products" (p. 1).

Finally, students' learning is enhanced when they are given opportunities to showcase their portfolios during student-led portfolio conferences for paper portfolios, or to publish their portfolios on school-secured Web sites if they are e-portfolios. When students recognize the audience of "stakeholders" who share their satisfaction and pride in achievement, they become intrinsically motivated to succeed. The advantages of using classroom portfolios are shown in Figure 0.1.

#### A COMPREHENSIVE ASSESSMENT SYSTEM

Portfolios and e-portfolios can become excellent tools for using the data from both formative (assessment *for*) and summative (assessment *of*) assessment (Catalyst, 2007). A "balanced" or comprehensive assessment system (Figure 0.2) is developed when the portfolio includes three types of assessment in order to arrive at an accurate portrait of a student as a learner: knowledge, processes, and performances. These assessments were asserted by the American Educational Research Association's (AERA's) *Position Statement Concerning High-Stakes Testing*, adopted in July 2000.

The first type of assessment that teachers can include in portfolios and e-portfolios consists of scores from traditional or standardized tests and quizzes.

### Advantages of Using Classroom Portfolios

- 1. Learning progress over time can be clearly shown (e.g., changes in writing skills).
- 2. Focusing on students' best work provides a positive influence on learning (e.g., best writing samples).
- 3. Comparing current work to past work fosters greater motivation than comparing one student's work to others' work (e.g., growth in writing skills).
- 4. Self-assessment skills are increased when students select the best samples of their work and justify their choices (e.g., focus is on criteria of good writing).
- 5. Portfolios provide for adjustment to individual differences (e.g., students write at their own level but work toward common goals).
- 6. Portfolios provide for clear communication of learning progress to students, parents, and others (e.g., writing samples obtained at different times can be shown and compared).

Figure 0.1

Balanced Assessment			
Type of Assessment	Focus	Features	
Traditional	Knowledge     Curriculum     Skills	Classroom assessments	
Portfolio	Process     Product     Growth	<ul><li> Growth and development</li><li> Reflection</li><li> Goal setting</li><li> Self-evaluation</li></ul>	
Performance	Standards     Application     Transfer	<ul> <li>Collaboration</li> <li>Tasks</li> <li>Criteria</li> <li>Rubrics</li> <li>Examination of student work</li> </ul>	

Figure 0.2

Each of these formal, evaluative measures focuses on mastery of students' *knowledge* of the content of curricula. Obviously, this type of assessment is necessary and appropriate, but according to the AERA, the nation's largest professional organization devoted to the scientific study of education, high-stakes testing should not be the sole means of determining a student's success, promotion, or graduation. With respect to the narrow application of test scores in these high-stakes situation, AERA (2007) stresses that

decisions that affect individual students' life chances or educational opportunities should not be made on the basis of test scores alone. Other relevant information should be taken into account to enhance the overall validity of such decisions. As a minimum assurance of fairness, when tests are used as part of making high-stakes decisions for individual students such as promotion to the next grade or high school graduation, students must be afforded multiple opportunities to pass the test. More importantly, when there is credible evidence that a test score may not adequately reflect a student's true proficiency, alternative acceptable means should be provided by which to demonstrate attainment of the tested standards. (AERA 2007)

The reality for U.S. schools under the federal Elementary and Secondary Education Act—NCLB Title I is that test scores have become the principal criteria by which students, teachers, and school administrators are judged. The use of portfolios and e-portfolios that provide not only qualitative evidence of achievement but also evidence of reflective-statement attachments by students, is important and necessary. Whereas one standardized test score is a single-shot measurement, portfolios and e-portfolios chronicle students' growth and development in a variety of their multiple intelligences, as indicated in the other two types of assessment.

The second type of assessment focuses on the *processes* the student uses to achieve the academic goals. Process assessments tend to provide formative feedback to students and teachers as well as parents while students are learning concepts, knowledge, and skills. Because of this, rough drafts of writing or initial problem-solving strategies should be dated and should include student reflections on how the new piece has improved, and what new ideas, strategies, or concepts have been acquired since the former draft. At the time that the final products are completed, these earlier drafts and reflections are often attached to show growth over time. Portfolios and e-portfolios are highly effective in process assessment because they require students to reflect on their learning, set new goals, and self-evaluate their progress according to known standards.

The third assessment type focuses on student *performances*. Here, students' abilities to apply the knowledge, content, and skills they have learned become evident. Performances allow students to demonstrate that they can transfer the knowledge and skills inherent in the subjects studied into action. These performances often require students to collaborate with

peers to create products, projects, or demonstrations according to specific criteria listed in curriculum objectives or learning standards. When students know their performances will be evaluated according to rubrics or scoring guides that provide descriptors for quality work, they become highly engaged in the work. They will take responsibility for the level of achievement in the subject areas, and they and their peers will become interdependent for both feedback and cooperative teamwork to achieve the highest levels of success.

When teachers design portfolio and e-portfolio processes that integrate these three types of assessments, they help meet the individual needs of the students, honor their learning styles, and provide a more accurate evaluation picture of a student's strengths and weaknesses. Portfolios and e-portfolios blend all three types of assessment to attain a developmentally appropriate portrait of a student as a learner. When this is accomplished, teachers attain the goal of implementing the most effective and authentic assessment program for their students.

#### PORTFOLIOS AND E-PORTFOLIOS CAN BECOME TOOLS FOR CLASSROOM ASSESSMENT OF INDIVIDUAL LEARNERS

One of the most important questions teachers can have regarding portfolios or e-portfolios is how they can authentically assess and reflect on the individual characteristics and achievement of each student. With the growing number of children with special needs who are welcomed into full-inclusion classrooms, there is an increasing need for an assessment system that provides fair, accurate, and helpful information about student progress versus one-dimensional evaluative measures. The Council for Exceptional Children (2007) has recently expressed concerns that we are now "over-emphasizing standardized testing; narrowing curriculum and instruction to focus on test preparation rather than richer academic learning . . . inappropriately excluding low scoring children in order to boost test results; and [providing] inadequate funding. CEC suggest that systems be adopted in order to "make the systemic changes that sustain improved student achievement". Portfolios and e-portfolios have great promise to accomplish this mandate.

Portfolios help diverse students develop deeper insight into and understanding of what they are studying. They also allow teachers to assess the individual students' level of understanding of key concepts because they foster more depth and breadth in the learning process. According to Wiggins and McTighe (1998), going into depth on a topic suggests getting below the surface, and breadth implies the extensions, variety, and connections needed to relate all the separate ideas. Achieving depth and breadth leads students to deeper understanding—and takes more time. This concept will be addressed as we move into Chapters 1 and 2.

#### PORTFOLIO PROCESSES AND PRODUCTS PROMOTE DIFFERENTIATION

Another important advantage of portfolios and e-portfolios is that they help teachers to differentiate both their teaching process and the products that students create to demonstrate evidence of achievement. If the expression "You get what you assess; and you don't get what you don't assess" is true, then portfolios are imperative in the overall assessment program within the academically diverse classroom. Tomlinson and McTighe (2006) note that

many educators sense that both teaching and learning have been redirected in ways that are potentially impoverishing for those who teach and those who learn.... Educators need a model that acknowledges the centrality of standards but that also demonstrates how meaning and understanding can both emanate from and frame content standards so that young people develop powers of mind. (p. 1)

Portfolios and e-portfolios can assist teachers in creating these models while also engaging students in both critical and creative thinking. Portfolios provide students with multiple strategies for constructing meaning from information and experiences, and for demonstrating their mastery of standards. Teachers acquire a viable method for differentiating learning and assessment to meet the diverse needs of their students when portfolios and e-portfolios are used.

#### AUTHENTIC LEARNING AND ASSESSMENT

One of the keys to a successful portfolio system includes using a variety of authentic assessments. The portfolio would be no different from a working folder if it included only tests, quizzes, work sheets, and homework assignments. Authentic assessment focuses on each student's ability to produce quality products and performances. It also places the student at the heart of assessment as a critic and evaluator of the work completed.

As previously shown, portfolios and e-portfolios become effective tools for classroom assessment of individual learners, including those with learning needs or challenges. They also can be used by groups or teams of learners who seek to compare their performance or academic tasks to the standards or benchmarks placed before them. Authentic assessments provide the context for portfolio process development when they highlight the criteria for what should be included.

#### REPERTOIRE OF ASSESSMENTS

The portfolio provides a fully realized portrait of the student as a learner because it utilizes a rich palette of assessment tools. A standardized test or teacher-made test, by contrast, will likely emphasize only verbal/linguistic and logical/mathematical skills. A portfolio and e-portfolio can showcase students' multiple intelligences by including artifacts that also reflect their visual/spatial, musical/rhythmic, interpersonal, intrapersonal, bodily/kinesthetic, and naturalist intelligences (Gardner 1983, 1993). The well-designed academic portfolio will contain assessment tools that have engaged students in multiple media and multiple opportunities to showcase their academic learning (Figure 0.3).

Assessm	nent Tools
Assessment  Ongoing Collection of data Formative	Evaluation  • Final judgment  • End result  • Summative
Authentic Assessment  • Meaningful tasks  • Self-assessment  • Application	Portfolio  Collection of evidence Growth and development Framework for learning

Figure 0.3

#### **Self-Assessment—The Power of Reflection**

The genuine power of the portfolio emerges when students analyze and describe the work they include, discuss the key concepts they have learned, and, most important, reflect on how this learning has affected them. A portfolio is really a multisensory and multidimensional personification of a student's entire learning process and learning dispositions. Without the engagement of students in self-reflection, self-assessment, and evaluation of their work against known standards, the emergence of student voice is limited. If students merely collect and store work in a paper or electronic folder, the effectiveness of using the work as evidence of achievement is minimized. It is the critical element of reflection that fosters the higher-order critical thinking and decision-making skills necessary for continuous learning and improvement. Self-assessment describes the entire process by which students develop judgments and perception of what has been learned. While self-assessing, students analyze products and the outcomes of performances and compare them to the known standards or criteria, or both. The student, like the artist, will use a palette of media and processes that showcase his or her individuality, achievement, and uniqueness (Figure 0.4).

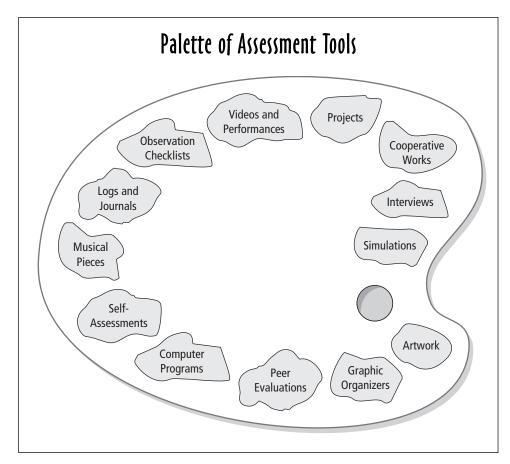


Figure 0.4

Figure 0.5 illustrates the variety of performance and product assessments that a student would likely include in the portfolio or e-portfolio. The self-evaluation promoted by the portfolio process engages students in acquiring an understanding of

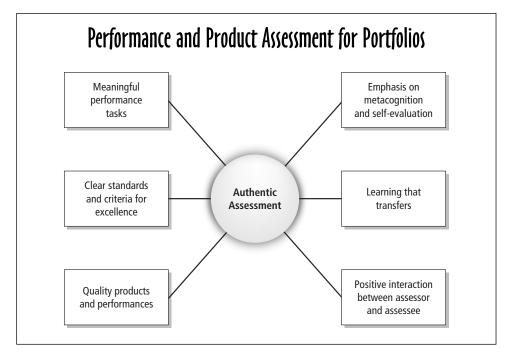


Figure 0.5

how they are learning, as opposed to what they are learning. It is the means for the students to make significant strides in understanding themselves as learners.

Regular opportunity to engage in self-reflection becomes the heart and soul of the portfolio process because it enhances learners' ability to assess their work and analyze strengths and weaknesses. From this process, they are able to set new goals for growth. It has been noted that strength in self-reflection leads to "voice," and that this is a prerequisite to the development of human agency. Schools striving to meet the challenge of preparing students to become active participants in democracy must develop *human agency*—the capacity for human beings to make choices and apply them in the world for the good of all. In his book *Motivation and Agency*, Mele (2005) draws a correlation between human agency and motivation. Portfolio and e-portfolio reflective processes that promote student voice also address this important development of agency.

The process known as metacognition, or "thinking about one's thinking," is the mental skill required of students for a successful portfolio or e-portfolio. Through this process, the students take control of their learning by becoming informed critics of their own work. Teachers and parents often serve as "guides on the side," but the students themselves are supported in the portfolio process. While assisting students in refining their work, the process of metacognition also builds within them the capacity to self-assess and redirect their efforts. Costa and Kallick (1992) suggest that "we must constantly remind ourselves that the ultimate purpose of evaluation is to have students become self-evaluating. If students graduate from our schools still dependent upon others to tell them when they are adequate, good, or excellent, then we have missed the whole point of what education is about" (p. 280).

#### THE PORTFOLIO PROCESS

The richness of the portfolio and e-portfolio as a container of valuable assessment tools is often evident to educators, but the reality is that implementing an effective portfolio system is very time consuming. The collection of student work, the selection of key items, and periodic reviews that engage students in evaluation of their progress all require considerable time and effort by students and teachers. It is no wonder that there are several questions raised by educators before considering the use of portfolio and e-portfolio processes. The following are questions that will be addressed in *The Portfolio Connection:* 

- 1. What is a portfolio? What is an e-portfolio? What is a portfolio for?
- 2. How does it a portfolio or e-portfolio work? How do you "do" it?
- 3. Where do you start?
- 4. How do you adapt the portfolio to different ages and stages of learners?
- 5. What do you need to know before, during, and at the conclusion of the portfolio process?
- 6. How do you tie a portfolio to standards or local and state curricula?
- 7. How do you make sure that students are connected to the purpose of the portfolio? How do you make sure portfolios showcase their achievements?

- 8. What are the teaching and assessment tools you need to know about before beginning the portfolio process?
- 9. What are the procedures you need to follow in order to have successful student-led conferences and showcases?

These are just some of the organizational questions that must be answered before and during the process of the portfolio journey. But as with any journey, it is important to understand that it is the *process* and the *viewpoint* along the way—and not simply the end product—that provide the wonderment, learning, and recall that are intrinsic to life. This book will serve as a guide to the teachers, students, school administrators, and parents embarking on portfolio and e-portfolio assessment. It will become clear as the chapters progress that there are no right answers to these questions, since each teaching and learning situation is different. This book will help each reader explore the ideas and activities to be considered in order to create a workable portfolio or e-portfolio system that is intrinsically satisfying and motivating to all students. Each chapter will provide helpful tips and ideas for developing portfolios as accurate accountability processes for teachers and school administrators, while also enhancing diverse students' motivation, performance, and voice. An outline of the chapters in *The Portfolio Connection* appears below followed by a brief summary of each section.

Chapter 1: Connect Portfolio
Purpose to Audience

Chapter 2: Connect Portfolio Design to Developmental Stages

Chapter 3: Connect Portfolio Content to Local and State Standards and Curricula

Chapter 4: Connect to Portfolio Purpose Through Students' Collections, Reflections, and Selections

Chapter 5: Connect Students' Reflection and Self-Assessment to Criteria, Rubrics, and Standards

Chapter 6: Connect Students' Voices Through Web Conferences and Showcases

- 1. What is a portfolio? What is an e-portfolio? What is it used for? Who is it for? Does it promote differentiation in the curriculum and classroom instruction?
- 2. How does it work? How do you do it? Where do you start? How do you adapt the portfolio to different ages and stages of learners? How do you adapt the e-portfolio to students' emergent through proficient technology levels?
- 3. What do you need to know in order to tie student portfolios to local and state standards or curricula? What is the difference between assessment *of* and assessment *for* learning? What are the assessment tools that motivate students and promote accountability for learners and evidence of achievement for teachers?
- 4. How do you ensure that students become "connected" to the purpose of the portfolio and can self-assess the work to be selected and included? How are portfolios and e-portfolios organized?
- 5. What are the tools needed to prepare students to effectively self-assess and use benchmarks of achievements? How have different states and countries succeeded in using portfolios to promote student success?
- 6. What are the procedures needed to prepare students for final portfolio events—peer portfolio conferences, academic conferences, and showcases? What are the procedures needed to prepare students for online e-portfolio events—peer portfolio conferences or Web showcases?

#### CHAPTER 1: CONNECT PORTFOLIO PURPOSE TO AUDIENCE

Before embarking on the design of a portfolio or e-portfolio process, it is critical to know what the portfolio can do, and for whom. Understanding what portfolios are and how they work as either print collections or electronic compendia of student work is necessary in order to plan for a process that truly connects students to their work, their learning standards, and the audience(s) who are invested in the students' success. As we have said earlier, portfolios and e-portfolios exist at the intersection of student evaluation and self-assessment. This means that the student becomes the principal voice of the portfolio process while teachers, parents, and local school administrators contribute to its construction. State—and now federal (under NCLB)—policymakers are also included as important audiences or stakeholders in the evidence and outcomes of student achievement that can be found in academic portfolios. This chapter will focus on establishing a basic knowledge of portfolios and e-portfolios, defining their purposes, and discussing how they can be used. It will also discuss why they need to be designed and implemented in ways that meet the diverse needs and abilities of students, while also serving to inform the various audiences concerned with the education of children.

# CHAPTER 2: CONNECT PORTFOLIO DESIGN TO DEVELOPMENTAL STAGES

Before designing an effective portfolio or e-portfolio process that will be comprehensible as well as satisfying to students, teachers need to consider the developmental stages of the students they teach. For e-portfolios, it is additionally important for teachers to consider the technological ability of their students and determine what skills they may need to develop before proceeding. Understanding that an effective portfolio process is one in which students (and their parents or guardians) are highly involved from the outset will also enable the teacher to determine what knowledge, skills, and dispositions students will need to possess or develop along the way.

After the portfolio or e-portfolio purposes are developed, the next step is to clearly communicate them to students and parents. Although working with teams of teachers by grade level or with schoolwide staff and administrators is more efficacious, teachers themselves can establish a developmentally appropriate portfolio process (and the authentic assessment procedures that support it) on their own. As with teaching, considering the learning needs of the students and the best ways in which they acquire knowledge is vital to the successful design and implementation of portfolios and e-portfolios. This chapter will provide guidelines on how to get started and what decisions to make in order to communicate effectively what will need to be accomplished to students and parents. It will also provide suggestions and tools for adapting the portfolio to different ages and stages of learners.

#### CHAPTER 3: CONNECT PORTFOLIO CONTENT TO LOCAL AND STATE STANDARDS AND CURRICULA

Standards-based portfolios provide evidence of teacher and student accountability. When portfolio artifacts are correlated to district or state curricular content and performance standards, teachers assist students in submitting documentation that the standards have been addressed, met, or exceeded, and that provide evidence of students' progress toward meeting or exceeding the standards.

When considering the use of portfolios and e-portfolios that align with standards, teachers often need to consult their school's or district's policies regarding assessment. Since portfolios can play an effective part in a comprehensive assessment system for districts or for individual public or private schools, the processes found in this book regarding design, student voice, self-assessment, and evaluation are critically important considerations to be made.

This chapter will address issues of how schools can begin to develop portfolio or e-portfolio systems that show evidence of student learning over time. Ideas from different states in the United States that have linked portfolios to standards and curricular goals will be provided. In addition, this chapter will discuss what needs to be done by principals, teachers, and students if portfolios are to support student achievement and promote parent involvement. Discussion of the portfolio's shift toward the student in "assessment for" learning will be provided. Finally, this chapter will include some insights from the international community's development of model portfolio systems.

# CHAPTER 4: CONNECT PORTFOLIO PURPOSE THROUGH STUDENTS' COLLECTIONS, REFLECTIONS, AND SELECTIONS

Teachers are responsible for covering the content and processes in their curriculum. Sometimes the curriculum uses a scope and sequence organization, and other times it lists the content pieces to be addressed in each grade level or course. Knowledge of content can become a principal purpose of the portfolio. Using content to demonstrate processes such as writing, speaking, and problem solving could be another purpose. In most cases, teachers integrate content and process to provide evidence of knowledge and application of knowledge.

This chapter will address the important question of making sure that students and their parents feel connected to the purpose of the portfolio and have regular opportunities to self-assess and evaluate the work that is selected and included. It will provide insight on how portfolios and e-portfolios can be organized to achieve their purposes.

# CHAPTER 5: CONNECT STUDENTS' REFLECTION AND SELF-ASSESSMENT TO CRITERIA, RUBRICS, AND STANDARDS

Pieces or artifacts in the portfolio or e-portfolio will show how students meet the predetermined goals and purposes. Because students need to know these purposes before engaging in the portfolio process, criteria and procedures must be developed to help them determine what should be selected from what is often referred to as the working folder. The portfolio and e-portfolio will include only the items that provide evidence of meeting the goals and addressing the purpose of the portfolio. Here, the "less is more" philosophy guides the portfolio development. This chapter will present the tools needed to engage students in both learning and assessment, and will discuss how to continually develop and clarify the portfolio or e-portfolio purpose. Experience has told us that when purpose is clearly and coherently known by the students (and their parents), students are empowered to "selectively abandon" any work that does not measure up or adequately address the goals and purposes.

Many of the portfolio or e-portfolio entries will include products from projects and performances. Therefore, teachers will need to become skillful in creating criteria checklists and scoring rubrics that provide the specific indicators that students need to master in order to perform successfully on each assignment. With criteria checklists and rubrics, students can assess their own work as well as assist peers in determining if they meet the benchmarks and criteria. Parents, too, can review work their students have completed while using the authentic assessments that accompany them. Teachers can also use checklists to monitor student work and provide assistance throughout the process. This ongoing, formative feedback during the inspection stage can lead to marked improvement in the quality of student work.

Since students' reflection is the heart and soul of portfolios, they need to be encouraged to write reflections about what they have learned, how they have learned it, and what insight they have gained about their learning and themselves. These self-authored descriptions of their work help teachers and parents get a better understanding of whether or not they have grasped the important concepts of the learning. More important, the reflections reveal how students have internalized the learning and connected it with their lives. In addition to providing ideas about introducing and norming various tools for authentic assessment, this chapter presents the procedures needed to prepare students for culminating portfolio events—online Web showcase, peer portfolio conferences, and academic showcases.

# CHAPTER 6: CONNECT STUDENTS' VOICES THROUGH WEB CONFERENCES AND SHOWCASES

Through regular and ongoing reflection and self-evaluation, students come to value their work as representing who they are and what they can do. Even though the students may have done their very best work, they still need to

#### XXVIII THE PORTFOLIO CONNECTION

prepare for the essence of portfolios—the communication and acknowledgment of who they are as learners. At the last stage of the portfolio development process, students are given the opportunity to showcase or give voice to who they have become as learners. They are given the opportunity to show how they have met or exceeded standards and how they have achieved the purposes of the portfolio. Artifacts showing "clear and compelling " evidence of achieving standards in the subject areas are enhanced when students take another reflective stance and reveal their perceptions and attitudes about the effort expended and the outcomes derived from learning. Parents and others are invited to view evidence in the portfolio or e-portfolio that tells the story of how and why students have met curriculum goals and standards.

This chapter describes how the portfolio conference or online showcase helps teachers, parents, and students talk about the learning context and content. The conversations related to student work provide valuable insights into the students' understanding. They also invite discussions about alternative strategies for meeting academic goals. Portfolio exhibitions and showcases celebrate learning by allowing people other than the teacher and parent to view and respond to the story of each student's learning. The procedures, tools, and reflections that comprise this important part of portfolios will be provided throughout the chapter.