1

Defining Portfolios and Their Purposes

Dr. Evans and Dr. Bruce, both integral to the education department's professional education division, are responsible for ensuring that the education students at their university meet the mandate from the state's educational governing body concerning professional portfolios. Their professional education students must prepare and be ready to exhibit these portfolios so that the school can retain its accreditation.

"Exactly what is this 'professional portfolio'?" Dr. Bruce asked.

"Maybe it's some kind of collection of professional papers, such as resumes and letters of recommendation, or maybe it's just a collection of professional items. Isn't that what a portfolio is in most fields? I know that writing classes require their students to develop a portfolio, too. One of my students complained about having to keep up with everything that she had written in her English classes. Perhaps we can get information somewhere on what portfolios are," Dr. Evans replied.

"I know that this is not just a new fad in education because I have seen it in many journals these past few years. I just wonder what we will prove by requiring such a document. We have plenty to do now to get across the methods and pedagogies of education. We are required to do assessments of all that work already. This memo says that this is a part of our new state assessment plan for education," Dr. Bruce said.

S pecial buzzwords have been rampant in educational circles for the past few years. Terms such as "critical thinking," "authenticity," "hands-on," "student-centered," "reflection," and "qualitative assessment" have been right at the head of the list. But perhaps the most provocative among the buzzwords

has been "portfolio." Ironically, a portfolio can easily cover critical thinking, authenticity, hands-on, student-centered, reflection, qualitative assessment, and more.

What Is a Portfolio?

An educational portfolio is a very personal collection of artifacts and reflections about one's accomplishments, learning, strengths, and best works. The collection is dynamic, ever-growing, and ever-changing. It shows a student's growth (developmental portfolio), best works (showcase portfolio), or total output (comprehensive portfolio). It is a tool for reflection on the items collected, and must be approached from the point of view of the compiler (the owner of the materials in the collection), or from the point of view of an assessor (one who looks at and evaluates that compilation of materials). The key concepts in portfolio revolve around collection, organization, reflection, and presentation (CORP).

The materials in a portfolio may be used by the compiler or the assessor as a ready reference, showing in an organized way just what the compiler has done. The portfolio offers an authentic framework for judging the effects of the work done by the compiler. It is a tool for evaluation by the compiler in self-reflection, or by a prospective or current supervisor. It serves as documentation that the compiler has reached a certain standard set for his or her professional area.

A portfolio is not a scrapbook, although it is something like a scrapbook in its presentational style. The selection of items for the portfolio requires some kind of reflection on why those items should be in the collection. If there is no reflection by the owner on the materials collected, the collection is merely a group of artifacts without form and purpose. It is the organization of the materials, with careful reflection on why the items in that collection were included, that make the collection a portfolio. Without the reflection, the material is just a folder or a scrapbook, and though each has its place in collecting and presenting relevant materials, the portfolio has the special capability of being viewed by an observer or an audience, who then can assess the value of the collection.

Some Background About Portfolios

The portfolio is not by any means a new phenomenon. Artists' portfolios, stock portfolios, and real estate portfolios have been around for many years, and they are similar to the portfolios that have recently been adopted in educational arenas as an alternative assessment, a qualitative method of assessing students' work. An educational portfolio has its own unique presentational style, but it is not unlike other kinds of portfolios.

An artist's portfolio is a collection of the artist's work. The artwork may be presented chronologically, showing the artist's progress from beginning work to current work. This type of presentation can be equated to the developmental educational portfolio.

Alternatively, should the artist choose, the work presented in a portfolio may be a showcase of the artist's best works. Often, the artist will arrange the pieces in the portfolio to show what he or she thinks is the ascending order of the best work done. Or, the artist could select only a very few of the works from a full career and then explain to the audience viewing the portfolio why each piece earned its particular place in the portfolio's order. Either of these arrangements would represent something like the showcase portfolio in educational parlance.

Finally, the artist could present everything created since starting in the art field. The items in such a portfolio could be in a logical order, or they could be chaotically stashed in the portfolio folder. This would be similar to the comprehensive educational portfolio.

The artist chooses pieces according to the audience and the purpose of the portfolio. Both help to determine how to present the artwork in the best possible light. The artist's audience may be a prospective buyer of the art pieces. Perhaps the audience is the owner of a gallery where the artist would like to display the artworks. The artist may be trying to impress an employer who is willing to pay for the artist's creative abilities. Whatever the audience or purpose, usually the artist compiles the items in some kind of presentation folder, but rarely does the artist include written reflections in the portfolio collection. Generally, the portfolio merely shows the artwork. Occasionally the artist may have to reflect in some way on his or her collection in an oral presentation, to justify the order or significance of the work so that it will be acceptable for display or ownership. This type of reflection is comparable to the reflection on artifacts in an educational portfolio. It may be a justification for the format of the entire portfolio or the inclusion of a specific item in the collection.

A stock portfolio also requires choices to be made by the compiler of the portfolio. This collection may be a comprehensive listing of all the stocks owned by the compiler, displayed to tell others what is owned. It may also be nothing more than a list of stocks, to show the owner's ability to select good stocks. The first example would be a comprehensive stock portfolio, and the second may be considered a showcase or a developmental portfolio for stocks. However, if the purpose of the portfolio is to explain the items selected to a first-time stock purchaser, the portfolio could require some very specific explanation, and require reflection on why a particular set of stocks were selected to work together as a business portfolio. These portfolios are similar to the educational portfolio, but the presentation may not be nearly as thorough, because the audience may not need the collector's reflections on which stocks are included in the portfolio.

The real estate portfolio is nothing more than a collection of real estate deeds, to show which pieces of property the owner has acquired. There may

have been some reflection on the owner's part when certain purchases were made, to justify placing that material in a real estate portfolio. This kind of portfolio is akin to the comprehensive educational portfolio. The difference is that the real estate portfolio contains no written reflections on why the pieces of real estate are in the portfolio. The compiler, however, would certainly have some reflections when he tries to sell the properties he has listed in the portfolio.

What About Educational Portfolios?

Whatever the type of portfolio, the compiler must be aware of and be ready to explain why the collection was made and why it is presented in a particular way. The educational portfolio is not too different from the previously described portfolios. In education, portfolios have also become tools for assessment. Since teachers have to meet standards set by state mandates or accrediting agencies, they have to prepare portfolios as their avenue to meet those standards. The portfolio may be used as an assessment to move the compiler to a new level of education, or it may be used to promote the compiler. It also may be used to show the growth or potential growth of the compiler. Items in the collection must have some kind of value to the compiler and to the portfolio's audience. The compiler knows in advance who the audience is and has a clear-cut purpose in preparing the collection. He or she needs to justify the purpose of each artifact, stating why that artifact is included in the collection for the specific audience to whom the portfolio is addressed.

Historically, portfolios made their entry into education in the art field. Art portfolios in education were like the regular art portfolio in that they had no written reflections; they were merely collections of artifacts. Artists compiled their works in a large carrying case so that they could show their pieces to others or look at their own collected pieces. Later, for assessment purposes, art students who turned in their portfolios for grades had to be very selective about which pieces they included, and they also had to write or narrate some kind of reflection on the reason each of the specific pieces was included in their collections.

Then came educational portfolios in the English and language arts field. Writing teachers had long been experiencing a terrific inundation of paperwork to grade. Students had to prepare a great deal of writing to assure their writing teacher, their parents, and the school districts that they met the writing standards of an educated society—a society that was being goaded by rapidly expanding, sophisticated technological advancements. The writing portfolio was introduced and became a huge success, particularly with the overworked evaluator of the writing: the English teacher. Proponents of the writing portfolio system touted it as relieving teachers from having to read and mark carefully every paper their students wrote. These teachers began to see some light at the end of the overwhelming grading tunnel.

The writing teacher had, for several years before the development of the writing portfolio, organized peer writing groups in which members had input into each other's writing pieces. The writing process had already gained prominence in writing classes. This writing process generally consisted of a five-stage program for students to follow, in which they helped each other polish their work before the teacher saw the pieces for grading. This alleviated some of the reading and grading problems, but it did not really reduce the load. It just postponed the papers coming into the teacher's hands until the peer group had already done some evaluation and made suggestions for improvement.

Various writing specialists have their own ideas about what constitutes the writing process. Murray (1968) was among the earliest to say that writing was an identifiable process when his book, *A Writer Teaches Writing: A Practical Method of Teaching Composition*, introduced the idea of process. He discussed the following seven skills: discovering a subject, sensing an audience, searching for specifics, creating a design, writing, criticizing, and rewriting.

Later, in the 1980s, writing teachers generally agreed that all writers, whether professional or amateur, proceeded through five stages:

1. Prewriting (the stage in which the student collects and gathers material for a written paper on a chosen topic)

2. Drafting (a rough-draft document written after the student has collected sufficient data necessary for putting together the given piece)

3. Revising (a stage that requires the writer to examine the data and its first written presentation, changing anything that is erroneous or just does not sound good to the writer)

4. Editing (a stage after the writer has made desirable content changes that allows editorial corrections, such as spelling and sentence construction, to be made)

5. Sharing/publishing (the time when the writer of the piece is willing to allow others to read the written work)

Whatever the stages, English teachers were happy to see some pattern evolve because that allowed them to set up a system for assessing the written work by having a peer writing group help with the revising and editing stages. When written pieces came to the teacher for evaluation, they had already undergone some group evaluation, and the peer writers had suggested changes that otherwise would have required many hours of teacher observations. Peer writing groups made the process move smoothly by having students help each other correct writing errors involving both logic and mechanics. Writing improved. Apparently, English teachers were doing something right by having students work together.

But that still did not lighten the writing teachers' grading load enough. They needed further help because society still said that American students were not improving enough to meet the required standards. In the late 1980s, writing portfolios grabbed the attention of writing teachers. This program allowed students to take some responsibility for their own writing pieces by having each student select which pieces the teacher would evaluate. The writing students generally either selected a showcase approach, to show their best works over a given period of time, or they chose a developmental approach, to show their improvement in writing over a given period. Whichever approach the students chose, teachers were thankful for no longer having to read and grade every piece of their students' writing.

In either the showcase or development approach, once students gathered the materials, teachers could do a heuristic or holistic qualitative assessment of those items that the students had selected from their total works. Then, as a further device that allowed the teacher to confirm that the student knew why he or she selected the works presented for evaluation, they began requiring students to reflect on why they had chosen a limited number of pieces out of a large repertory of written work.

In cases where developmental ideals were sought, a student could explain how the selected piece showed growth in skills. This could be done by presenting a progression of materials, and describing why the items chosen showed development and writing progress. Or, the student showcasing written work could offer justification for the selection of showcase pieces for the portfolio.

This assessment technique quickly caught on and proved to be substantially better for the English teacher, easing the grading load tremendously by not requiring teacher examination of students' total writing output. The student writers felt authentic ownership of their own works, whether in a developmental or a showcase approach; they received some input from trusted peers in the peer writing groups, and perhaps let parents in on the final selection process. Even if the teacher (or the school district) required a comprehensive portfolio, the students could be asked to earmark particular pieces to be evaluated by the teacher, and they would still feel ownership of the material.

At present, the assessment portfolio dominates all levels of English education, from early elementary school through higher education. The English student and teacher are much happier with this authentic approach to assessment. Teachers feel that there is a greater sense of purpose in allowing students to choose those pieces with which they are most secure, or of which they are most proud. This pride of ownership seems to have made for better scores on standardized writing tests. Teachers are more satisfied now that their grading loads have been lightened.

Because the English departments of schools have seen the potential of the portfolio, other disciplines have picked up on the process. The portfolio has become a much-praised system of assessment in most educational disciplines. Science has lab portfolios. Mathematics has designed a portfolio approach to math projects. Music students can record their performances on audiotape, to

show their development or showcase their presentational skills. Technology allows students to create interactive multimedia electronic portfolios.

In more recent years, colleges have adopted the portfolio as an alternative method of assessment. Many colleges now require that a general education portfolio be submitted as an exit requirement, prior to focusing on a specific discipline. Most of the disciplines, spurred on by assessment research or by the actions of various educational governing boards, also require some kind of portfolio. In some states (Oklahoma, for example), students seeking certification in teaching, at all levels and in all disciplines, are required to present a portfolio to complete their education degree. In many colleges, portfolios are required at both the undergraduate and graduate levels. Furthermore, some districts require a portfolio for promotional and tenure purposes. Portfolios offer an organized approach to showing student output, and they offer some proof that work has been done in given environments.

In some cases, school districts ask that candidates bring in a portfolio so that administrators and personnel directors may assess their work before they are interviewed. These employment portfolios are usually of the showcase type (because some border on scrapbook presentations, especially those that are commercially presented in a scrapbook format). But however the document looks, the point is that now the teacher (or teacher prospect) as well as the student must build a portfolio for assessment purposes, and the common education teacher must prepare one for job retention, promotion, or tenure. Even in higher education, professors have to present a portfolio in order to be promoted or to gain tenure in most colleges and universities.

The portfolio process is dynamic; that is, it is ever-growing and ongoing. The key to the process is not creativity, although creativity plays an important role in putting together a more palatable presentation. The real factor for assessment is the reflection. Reflection is a superior tool for presenting individuals and their work most effectively.

Is There a Process Approach to Portfolios?

The writing teacher spends time teaching the writing process. Though the stages of development vary, improved writing results from application of the process. Each writing teacher adapts the process to his or her own philosophy of teaching. As long as the teacher and the student realize that the process is not linear but recursive, it will work. Linearity simply means that one step logically follows another, and the second step cannot be taken until the first step is complete. In this instance, recursive means that from any stage in the process, the writer can jump back to a previous step or move forward to any step in the process as progress is made toward the presentation stage. Most creative work is by nature recursive and does not have a specific hierarchy for development.

We have developed a process approach to portfolios that should help the teacher and the student to understand the items that must be present for the

portfolio to be complete, effective, and successful. The acronym CORP describes our approach to portfolios, our process approach. The letters in CORP represent the following operations in the portfolio process: *collection* of data, *organization* of data, *reflection* on the selected data, and *presentation* of the product. Just as in the writing process, the portfolio process is recursive. At any stage in the development up to the presentation stage, the data may be changed, rethought, and adjusted. These changes are what makes the portfolio dynamic rather than static. A scrapbook, on the other hand, is static. The photographs and items in a scrapbook would likely all be chosen for the scrapbook for a specific purpose, and though they could be altered to change the mode of presentation without reflection, they are virtually unchanging and sit still, without growth.

When students work on portfolios, however, they know that the material can and should be changed with the growth and reflection of the owner of the material. This approach does not, of course, mean that the compiler of a portfolio with a specific purpose and audience in mind can chaotically jump around with the data. The very idea of a portfolio suggests an organized presentation of the compiler's works, thoughts, plans, and so forth. The document must be made with a clear-cut purpose and a definite audience in mind, just as is required in a writing portfolio. Some universities have ignored these facts in setting very rigid, prescriptive guidelines in portfolio development. One can still have organization without the direct linear approach that says, "I must include this, then I must do this, then I must show this." A portfolio cannot be prescribed that meticulously, or the compiler loses ownership, and the purpose of the presentation is not clear to the compiler or the observer. One can choose any number of data, then limit the number from that expansive list, as long as each piece chosen has a reflection to make it an authentic part of assessment. Or, the compiler may throw out all of the many pieces of data previously chosen and gather an altogether new set of data for the presentation, making new reflections on the choices. One may repeat that process several times in the first stage of CORP, the collection stage. The portfolio can progress in that changeable manner all the way to the presentation stage, but the compiler might think of something else that should have been included to make the portfolio closer to completion. A recursive act can occur. The compiler can jump back and begin collecting new data even at that stage in the process. There is no need for linearity when one may recursively look again at the document and make changes at any stage of the CORP process. On the other hand, the compiler may have a plan so well mapped out that the process approaches linearity (some people are that meticulous in their own organizational techniques and can set their own prescriptions), but he or she will still use a great deal of creativity to present the items, so that their inclusion is justifiable to the audience and to the purpose of the specific portfolio.

What About Creativity?

Creativity is a very important part of any educational or life-enhancing pursuit. Creativity is definitely a part of portfolio preparation and presentation, regardless

of the portfolio's purpose or its compiler's teaching discipline. In order to appropriately train a student in the creative processes, one should be aware of the stages of creativity. Goleman, Kaufman, and Ray (1992) list the five stages of creativity as preparation, frustration, incubation, illumination, and translation. Their approach to creativity is expanded linearity, also. The last stage must have all the other preceding stages in it, but otherwise the stages are somewhat flexible. Once the creative being experiences the illumination stage—the "Eureka!" moment, when the light comes on in the darkness—there is less recursiveness because a definite end is in sight, but the illumination may cause one to become totally recursive to clarify his or her idea. Goleman et al. further state that the "act of creation is a long series of acts, with multiple and cascading preparations, frustrations, incubations, illuminations, and translations into action" (p. 23).

Every person has certain thought processes that involve creativity. Gardner (1993) divides the various thought processes into nine categories that he refers to as "multiple intelligences." He has spent a great deal of time in written discussions and documentations of these various intelligences, and he ties creativity into each of them. He certainly advocates the importance of creativity as other authors have delineated it, but he himself has also written a book on creativity and the development of creative processes. Gardner suggests that one can work in his or her own way to build a creative piece, and that when each works at an individual speed and thought process, though there is variety in the created pieces, there is a final creative piece that has some appeal across the thought patterns.

I may have one idea for the organization of my portfolio, and I may approach that idea with very creative, artistic artifacts because I am a writer and a visual artist. That would not mean that mathematically or scientifically oriented persons could not have the same quality of portfolio, using that which appeals to them in pulling together their ideas for presentation. The difference would be, perhaps, in the portfolio's appearance, not in the kind of material presented. The way one sees and reflects on the artifacts would constitute the main difference in the portfolio's appearance. The artist would, perhaps, have an artistic flare in the artifactual presentation; the mathematician would, on the other hand, have a more logical approach in presenting the materials and reflecting on them. Both approaches would be acceptable, with neither presenter being right nor wrong. As long as a plan and the basic CORP approach is followed, the compiler is right because that compiler has to decide which artifacts best support the premise that the portfolio is trying to articulate.

Because the portfolio is now required in many educational settings, some teachers or schools are making the portfolio, and what is to appear in it, very prescriptive and somewhat mechanical. For instance, some state that all portfolios must be presented in a specific folder or binder. Some are giving the students a list of artifacts that must be included in the portfolio (transcript, letters of recommendation, videotapes, CD-ROMs, etc.; see Resource F). There would appear to be little creativity in this type of mandatory format and material, but the fact is that the creativity is in the student's reflection on the reason a specific piece of documentation is included.

Questions occur to the compiler during reflection: Why did I choose the specific artifacts I have finally decided on for the portfolio? How does the artifact substantiate what I am setting out to prove or support? Where does this piece fit into the overall picture I am trying to present? Will my audience understand my choice of an artifact and my reflection on it? All of these questions are pertinent and all should be answered, but once the compiler is satisfied that the material is correctly done and adequately represents him or her, the portfolio becomes a documentary as well as a personal assessment tool.

Looking at the Portfolio as an Assessment Tool

Once the portfolio is agreed upon as an assessment device, those involved with the portfolio need to reach agreement as to what should be examined for the presentation. They need to decide whether the portfolio will be seen by peers, a teacher, a committee, or by a supervisor—in other words, who the audience will be. The audience is perhaps the single most important factor in setting up the prescription for a portfolio. When a teacher sees that a student needs to improve in a discipline, perhaps the best kind of portfolio would be a developmental portfolio. The teacher and the student would have a portfolio conference to determine the kinds of materials that would be of greatest benefit for evaluation. Though they would not select pieces together to use as artifacts in a specific portfolio, they would discuss the kinds of items that perhaps could be used in the portfolio. The preparer still feels ownership, yet the observer/assessor also has a responsibility in the process.

The co-working approach leads the compiler to know what the assessor would like to see in a portfolio, and also helps the compiler understand the process of evaluation and thus engage in self-evaluation. The reflection part of portfolio preparation is really nothing more than a written self-evaluation. Students evaluate artifacts they want in their individual portfolios based on what the teacher has articulated for the assignment. The student still maintains authority and ownership over the work presented, but knows more or less what is expected from the portfolio conference.

The portfolio conference may be worked through in a simulation in peer groups, so that students may discuss among themselves what they think their instructors want. However, one of the important factors in portfolio preparation is that each of the students may be preparing a different kind of portfolio based on that individual's specific needs. That is one of the important factors in using portfolio assessment. Some students need to show progress, whereas others need to showcase best works. The portfolio is a very individualistic assessment tool that would be similar to a special education teacher's writing an Individualized Education Program (IEP) for each student in the special education classroom. That is one of most important factors in individualized assessments. Each student is evaluated based on that student's individual need. A teacher who uses that tool will find the successes and self-esteem building from making each portfolio an important project. This will indirectly cause the student to make more rapid progress toward an individualized goal.

The Role of Goal Setting in the Portfolio Process

Once students know that they will be evaluated on the artifacts and their reflections on each individual artifact, they will begin to realize that in order to reflect on a piece for presentation, they must have a goal in mind. If a teacher can point out the value of goal setting before the artifacts are accumulated, the students will more effectively search for or prepare their artifacts for their portfolios. They must be instructed as to the purpose that a piece is to achieve, whether the piece is a found piece of documentation for a specific competency, or whether it is a document or problem that the students themselves prepare. They must be aware of the "why" of an assignment. What teacher has not been asked, "Why do I have to do this assignment?" Using the portfolio approach will also help teachers assess the value of their assignments, because they will need to know themselves why they assign a specific project, research paper, article, problem, physical activity, and so forth. The teacher's introspection about student assignments becomes valuable to both parties. Reflections make for better students. They also make for better teachers who are more aware of students' needs while they are collecting data for the first stage of the portfolio process.

Another important factor is that this approach to collecting data can be used for students at every capability or maturity level. The process and the assessment cause different goals to be set for each student preparing a portfolio. This has been effectively demonstrated at the secondary special education level, where students become exuberant in their collections and selections of the proper materials to substantiate their reaching specific goals that they, with the teacher's and parents' help, have set. They can feel the same satisfaction in their presentations as those at the upward end of the capability stage. That is why the process is valuable for all to know and use.

It is beneficial to engage in assessment regularly. Once a goal has been set, gathering data to help show that the goal has been achieved becomes important. But when one reflects on an artifact for substantiation of achieving that goal, then the reflection is the most creative and important part of the assessment, not the collection of the artifact. However, one has to have a goal and an audience in mind when the process begins. If you know your audience and your goal, you will not stumble around in trying to achieve it.

Planning a trip is analogous to reaching goals in the portfolio process, and the analogy is one that can be effectively used in planning and presenting a portfolio conference. When planning a trip to a distant city, for instance, the traveler has to know the purpose of the trip and the amount of money and time that is available for the trip. If I were going to travel to New York City from Oklahoma City so that I could see three specific Broadway plays, and I knew that I had only two evenings and one matinee time set aside to see these three shows, I would not plan to go to New York City via the leisurely route in an automobile. I would likely travel the most direct route. I also would set aside a specific amount of money for the tickets, lodging, and meals for the limited amount of time I would be in the city, and I would decide what I would wear and how I would move from place to place within the city. I also might have

to justify to myself (reflect on) why I chose to do the trip in such a short time, how I would spend my money, and where I would stay to be near the various theaters showing the plays. I would set goals (making the trip with its special limitations), reflect on those goals, and accomplish them for a presentation to my friends upon my return. This kind of goal-setting activity is similar to what needs to be done in the preparation of a portfolio.

Summary

A portfolio is an evaluative tool (whose parameters are decided on in advance) for presenting a person's developmental growth works, best works, or comprehensive works. The artifacts presented in a scrapbook fashion are each reflected on in written or verbal documentation, showing how the compiler has reached a specific goal with the presentation of the portfolio. Portfolios concentrate a student's work, giving the teacher or evaluator a chance to focus on what the student wants that evaluator to see.

Questions

1. What is the CORP plan and how does one use it in portfolio preparation?

2. How does the writing process enter into this preparation?

3. What are the steps to creativity and what are their roles in portfolio making?

4. How would one differentiate between developmental, showcase, and comprehensive portfolios?

Topics for Consideration

1. Find two artifacts from a collection of data that demonstrate the competency that states "a teacher uses the best methods of motivating students to learn to think critically."

2. Write a reflection justifying each of the artifacts in a portfolio collection of the three types of portfolios.

3. Have a cooperative peer discussion concerning your perceptions at this point of the differences between various artifacts, to decide where they would fit in the developmental, the showcase, and the comprehensive portfolios.

4. Discuss the value of recursiveness in planning, as compared to linearity and prescriptiveness.