A TEACHER JOINED SEVERAL FRIENDS WAITING FOR CLASS TO BEGIN. ON HER way over from school to campus she had squeezed in some grocery shopping. “There I was, halfway down my list, when I realized that my portfolio was on the car seat. I left my cart in the middle of the aisle and ran out to the parking lot. What a relief! I had remembered to lock the doors.” She seemed surprised by the intensity of her concern for her portfolio. The others were amused but empathetic. After all, they, too, were making portfolios, and their journals revealed similar levels of investment:

It seemed I never left my portfolio far behind; it was always with me. I found myself thinking about it as I drifted off to sleep, as I drove to school, and as I was talking to my son.

Another confessed:

I love my portfolio, and I'm glad I have it. . . . It is an emotional time because of the reflections—you DO put yourself into it. You really do celebrate yourself while learning—and that's sweet.

As their instructors, we were pleased with their reactions. We had similar feelings as we constructed our own portfolios. One of our goals in teaching this portfolio class was for the teachers to discover that portfolios are a personal learning environment, not an assessment add-on. And sure enough, one of the teachers made this final entry in her journal:
You have asked us to reflect upon the value of making portfolios as a requirement of this class. I would say that the actual making of the portfolio is essential. . . . Without applying what we are learning, we lose a valuable opportunity to create it in a way that is meaningful for ourselves. As with anything it is the application that is relevant. I don't know who said the following but I have always found it to be true:

I hear— I forget
I see— I remember
I do— I understand.

Without [having made our own portfolios] whole sections of understanding would be lost.

Our course strategy was to create conditions in which the teachers would discover that each decision about a portfolio has both instructional and assessment implications. At the same time, we wanted them to see how what they believed about learning, instruction, and assessment would influence the way they did portfolios with their own students. We had them keep journals so that they would have a place to record their reflections, particularly on the instructional and assessment implications of each procedural decision.

This chapter is the teachers' story of what happened. The first section describes the class; the last section presents our notions about what transpired. However, the central part of the story is told in the teachers' own voices, extracted from pages of their class journals.

The Setting

Our account is based on the self-reflections of twenty-three teachers. Twelve were in a portfolio class offered through Lewis and Clark College, and eleven were in a similar class offered through Portland State University. The Lewis and Clark class was part of a master's program, the Portland State class was part of the school's general graduate offerings. Collectively, class members taught the entire range from kindergarten through high school, and their specialties included math, science, drama, business, and language arts. About half were pursuing master's degrees. Teaching experience ranged from a few months to over twenty years.

Our curriculum presented portfolios as a means of looking at process as well as product, and especially as an opportunity to engage students in
assessing themselves from their own and others' perspectives. Our goals were for teachers to prepare themselves to:

- get started, i.e., know how to establish portfolio activities in their own classrooms,
- facilitate self-direction, i.e., help students to organize their own portfolios, and
- use portfolios to tell a story, i.e., have students' portfolios portray their own learning.

The class was built on our Cognitive Model for Assessing Portfolios (CMAP) (Paulson and Paulson 1990; Paulson, Paulson, and Frazier, in press), which is also a graphic description of portfolio development. The CMAP framework, which was influenced by Guba and Lincoln (1989) as well as by Stake (1967), depicts evaluation as responsive to many stakeholders. As each stakeholder copes with constructions posed by others, individual constructions alter by virtue of becoming better informed and more sophisticated.

We used a variety of instructional approaches. We did a small amount of lecturing (for example, contrasting constructivism and epistemology in respect to the temporal versus fixed nature of knowledge and multiple perspectives versus one, thereby opening discussion to the implications of these philosophies for assessment), but mostly we engaged students in discussion. Approximately two-thirds of the time was devoted to presenting and discussing articles, sample portfolios (or slides of actual portfolios), and videos on portfolio assessment. Assigned readings (especially, Frazier and Paulson 1992; Short and Kauffman 1992; F.L. Paulson and P.R. Paulson 1991; Valencia and Calfee 1991; and Tierney et al. 1991) exposed teachers to differing views of portfolio assessment. Videos, both commercially produced (ASCD 1992; Van Buren ISD, undated) and some we made ourselves, demonstrated how different teachers used different strategies to stimulate self-reflection, support students' self-assessment, and prepare parents and other stakeholders to review portfolios. For example, we showed a video of how one kindergarten teacher preorganized folders so that children could easily compare similar pieces, talk about their differences, and choose ones to show parents. Another demonstrated how a second grade teacher (Paulson and Paulson 1992) gave students a scaffold of five questions (e.g., What did you use?) to help them write short paragraphs describing their math selections. We showed how a fifth grade teacher engaged
her students and their parents in weekly assessment and goal-setting conversations at home, preparing both parties for student-led portfolio conferences. In another videotape seventh graders wrote and presented a play at the beginning of “Portfolio Night.” It was the students’ way of helping the parents view the portfolios from their children’s perspectives.

We also used a variety of support materials collected from many teachers across the country. We showed rubrics developed by cooperative groups of fourth graders that they used to rate their own and each other’s work and rubrics developed by fifth graders to judge their own writing. We distributed a variety of worksheets purported to stimulate reflection, choosing to do so because so many districts use them. (The teachers’ reflections on these appear later.)

We also used simulations to encourage teachers to examine procedures from a number of perspectives. For example, we assigned Linda Vavrus’s “Put Portfolios to the Test” (1990) and Linda Rief’s “Find the Value in Evaluation” (1990). The teachers in our class simulated a district committee deciding whether portfolios would be introduced in the manner of Vavrus or Rief, and the “committee members” variously argued from the perspectives of students, teachers, parents, and board members. On first reading, the two authors appear to have similar philosophies. However, in preparing for the simulation, the teachers discovered that the two authors hold quite different views about the role of the teacher in a portfolio program.

The remaining class time was spent in small groups sharing portfolios and giving each other feedback. This afforded regular opportunities to share learning and receive the benefit of the others’ perspectives.

The teachers worked on their portfolios between classes with minimal direction from us. We asked them to set the purpose for their portfolios, establish the criteria for selecting the contents, make their selections, and organize their portfolio any way that made sense. We let our students struggle through the difficult decisions, recommending only that each time they made a selection they should explain its significance and how it fit in with their overall purpose. Our goal was for each student to create a portfolio that was a personal, integrated story, not just a collection of pieces, or worse, compliance with a formula.

At the end of the term we asked each to present his or her portfolio to the rest of the class. This proved to be a particularly worthwhile activity. We assigned it as a catalyst for relating the portfolio’s separate pieces of self-knowledge into one integrated, personal story. The presentation gave the
teachers further reason to fully understand and communicate their choices of purpose, selection, organization, and insight.

One of the most important class requirements was the keeping of journals. We told the teachers that reflection was an essential part of portfolio development, and their portfolios would provide many occasions for reflection. We suggested that they make entries in their journals at each decision point, explaining why they chose a particular purpose and audience for their portfolios, how they went about selecting exhibits as well as the meaning of individual selections, and how they organized these into a portfolio. Equally important, they should take time to reflect whenever they changed an earlier decision. We collected the teachers' most recent journal pages weekly, acknowledging but not making judgments, sometimes asking them to clarify a point, and occasionally suggesting they talk with a classmate who was struggling with a similar issue. We learned that journal writing between classes engendered much more reflection on the part of students than the quick-writes and oral discussion we had relied on in other classes.

At the last class we collected copies of the teachers' journals (as pre-announced) in order to review them in their entirety. What follows is a synthesis of the self-reflections in the journals—a story of what happens when teachers make their own portfolios.

Purposes of Portfolios

The earliest journal entries were about how each class member decided what kind of portfolio to put together. In addition to asking them to brainstorm types of portfolios, we had shown them many examples including portfolios by young adults for job hunting or college application, artists' portfolios, portfolios by children celebrating the transition from writing pictures to writing words, and portfolios that reveal "who am I." The teachers in our classes could make a portfolio for any purpose they chose.

Not surprisingly, some participants found the lack of structure difficult ("just tell us what you want"); others seemed appreciative. At the second class session, when each teacher announced the purpose of his or her portfolio, it became clear that they had seized the opportunity for individualism. Here are samples:

... showcase my qualifications as an educator more completely than a resume or job application alone.
an overall view of what we accomplish in our class during the year. This could serve as an introduction to a new year and new group of students, or as a memory-filled review as the year draws to a close.

an opportunity to evaluate my own teaching [and] to assimilate, document, and celebrate the changes that I have made in my classroom teaching strategies and curriculum.

a portfolio on how to run a portfolio approach in my classroom.

to provide personal information about me as a person, wife, mother, friend, and teacher [and] to leave an organized collection of personal memorabilia to my daughters.

Not only were the teachers introducing each other to even more kinds of portfolios than we had presented, they discovered the interdependence of purpose and intended audience, the most important being the portfolio's owner.

Owner as Autobiographer

The teachers' experience was that of an author recounting a personal story:

It took a great deal of soul-searching [deciding] what was important in my life. As I put these things together, I have felt every emotion that a person could feel. I feel anger from indecision, joy and sorrow from past memories, and elation when I finally made a perfect choice.

Another explicitly identified the connection between portfolios and storytelling:

Judging from my personal commitment to this project, it is easy to see why and how portfolios are such powerful self-evaluation tools and storytellers.

We have maintained (Paulson and Paulson 1991) that portfolios are stories and that the students, as owners of the portfolios, deserve the decision-making rights of authorship; their teachers take the roles of publisher, editor, and agent, alerting the authors to the perspectives of their readers, supporting them in their efforts to communicate with their audience, and opening up alternatives rather than closing them off. In the next series of quotations four teachers concur that the right of decision-making is as important for their students as it is for themselves:
It was a very personal experience and I wouldn't have been comfortable with someone else dictating the pieces that I needed to include. The choice was mine and my students deserve that same opportunity.

I certainly see the importance of each child selecting the material to be included in his/her portfolio. Who can be a better judge as to the most meaningful items to select? No one else could have chosen the most meaningful items for me.

Surely a child can see the growth made over a period of time as I have seen the growth and changes that I have made.

I can see how having children make a portfolio will help them to feel successful because I have felt that way doing mine. I have learned how important it is to feel ownership in what you are doing, especially if it is a reflection of yourself.

Reflection and Integration

Portfolios are holistic and integrative in nature, allowing their owners to build relationships between learning and construct schema of themselves as learners, not just accumulate knowledge.

One of the most beneficial pieces of developing an individual portfolio for me was writing a reflection for each of my portfolio pieces. I began seeing a common thread to my work and/or my individual portfolio selections.

Portfolios press their owners not just to understand what they have already learned and have yet to learn, but to come to know themselves as learners.

It was extremely helpful . . . reflecting on independent progress and making goals for future growth. I certainly know what an impact it had on me. I learned a lot about who I am and what is important to me as a learner and as a teacher.

Self-reflection, in the last two quotations, occurred as a natural adjunct to selecting and explaining exhibits. Many other occasions for self-reflection reside within the portfolio process. However, before discussing the variety of natural contexts for reflection, we will describe the teachers' experience with external prompts, forms and worksheets intended to elicit self-reflection.

The Use of Prompts and Worksheets

We ourselves do not use forms and worksheets in conjunction with portfolios. However, the teachers were almost certain to come across ready-
made "reflection sheets" since they are in such wide distribution. We decided they should make independent judgments about their value but not until they had used them in connection with their own portfolios. Accordingly we gave out packets of checklists, rating scales, and questionnaires, asking them to use a variety and reflect on the experience in their journals.

One example of a checklist invites the owner to mark one of seven generic reasons for choosing an exhibit (e.g., "It shows I have great ideas"). Another checklist of more than twenty words (e.g., "good," "hopeless," "careless," and "wonderful") allows the portfolio owner to select ten that describe his or her feelings about the portfolio as a body of work. One example of a rating scale includes semantic opposites such as "heavy/light" and "skilled/awkward" with a thermometer between so that the portfolio owner can gauge his or her response to the portfolio process. An example of an open-ended question is, "If you had to make changes, what would you change and why?" (in this case, with two lines provided for an answer). Alternatively, an open-ended prompt (in this case, followed by several lines) reads, "Things I have learned about myself from my portfolio are . . . ."

After using several of these, some of the teachers reported that the forms made the task look easier, others suggested that checklists might serve as a quick way to get an overall impression, and a number wondered if open-ended questions might support reflection on the part of beginners. However, the teachers' personal reactions to the forms were largely ones of dissatisfaction, and even resistance:

I tried finding a form that would apply to the item I was including in my portfolio. I felt no ownership toward the form and no real involvement.

I did not feel that I was able to reflect back over the entire learning process, instead I became focused with what the question was on top of the box to be filled in. . . . I kept thinking that I was trying to please the creator of the forms, rather than reflecting upon my learning!!!!

It was as if someone else had set up the criteria for me and I didn’t really need to get too involved in the process. So a little stubborn part of me decided I wasn’t going to fill out a form. Perhaps there are students out there who have the same rebellious thoughts!

By way of contrast we also asked teachers to write their reflections on blank sheets of paper. A teacher compared the two experiences:
As I began writing my personal reflections, I was amazed at how much I had to say. Thoughts came pouring to the surface. Many times I cried as I typed. I realized that checklists would never work for me, not if the exhibit was truly a meaningful one.

These teachers, already deeply engaged with their own portfolios, reported that the very forms purported to stimulate introspection and self-assessment actually restricted both the quantity and quality of their self-reflection. In contrast, blank pieces of paper permitted them to freely express what was on their minds. The limitations of the forms, as perceived by the teachers, stem from their external source, the fact that they are not an inherent part of the portfolio's creation, and they do not invite unlimited expression of unique experience. In short, the forms usurped ownership. If the teachers give their own students forms at all, they will be selective in their use. Most said they believed that they could conduct their portfolio programs in a way that would support reflection in natural ways and make forms unnecessary.

Natural Contexts for Reflection

Throughout the process, I was making mental reflections about the purpose of the portfolio, items to be included, and issues surrounding both the purpose and selections.

Portfolio development offers multiple contexts for reflection. These include setting the purpose, selecting content, organizing that content, and preparing the portfolio for others' review (Paulson and Paulson, in press). The complexity of the decision seems only to enhance the quality of the reflection, but even seemingly mundane problems prove worthy of introspection:

The next problem to solve was that of the container since many of my exhibits were not flat two-dimensional. I wanted the container to be large enough to allow further growth. I felt the container should be an integral part of my portfolio adding to the meaning held inside.

Many of the reflective statements in the teachers' journals seem to have been written while they were organizing and reorganizing the contents of their portfolios. The "work" of doing a portfolio may have more to do with
organizing selections than choosing them in the first place. For some of the teachers, the task of organizing their portfolios was a turning point in recognizing the value of self-directed learning:

I was somewhat dubious concerning the notion that students should make all decisions regarding their portfolios. When we reached class sessions four and five I became a total convert. I had begun to make some organizational decisions about my own portfolio. I became immersed in the process and began to understand personally the notion of ownership.

A few teachers described how they started the organization task by identifying issues and then grouping things that pertained to those issues. For most, organization evolved by virtue of repeated attempts. Relationships between exhibits became apparent during successive approximations:

The information gathering process was relatively quick and easy—until I sat down to organize the mass of "stuff" that I had collected. The organizing was one of the most difficult steps in assembling my portfolio. I must have redone the order of my contents six times!

Despite their own frustration with the process, the teachers did not think their students, in turn, should be spared the challenge.

I found myself reorganizing the contents again(!) [making] new connections to other learnings. I think students need also to feel this sense of freedom to experiment until they reach the right combination and order of contents to tell their story exactly the way they want.

One teacher discovered that organization came more easily once she reexamined her original purpose, clarified it for herself, and weeded out whatever portfolio contents no longer pertained:

The difficulty of organizing my portfolio was in creating a cohesive story where all the pieces fit together. At first I was planning to tell a life story in chronological order, but after trying, I realized I was choosing events for the wrong reason. I was choosing events that told my life in an orderly way, rather than choosing events because of their meaning to me then and now. I decided to try organizing my portfolio another way. I concentrated on events that stood out in my mind because of their special meaning to me. I was much more comfortable with this format.
Another borrowed a strategy from her language arts curriculum:

I decided to make a web of items to be included in the portfolio. This was a way to help me organize my thoughts and the material.

As teachers discovered more and more connections between the things contained in their portfolios, themes shifted or whole new themes emerged.

Learning is experienced because there is a pulling together of facts and a new level of consciousness is realized. You become aware of the total picture of what you're presenting. You integrate parts with a whole—or into a whole. You often see yourself in some new way—that's you and how you feel about something.

The secret seems to be to have a framework within which to collect appropriate data, and to be flexible enough to change.

One teacher had little success with finding connections, themes or organization, right up until the last class session. He struggled late into the night trying to pull everything together so that he could present his portfolio to us the following day. Here is how he described the experience.

Putting together the portfolio was kind of like building a house without any real blueprints. I put it together one way, saw a better way, took it apart, tried, didn't like that, went back to the first way, got frustrated, watched *Northern Exposure*, thought of another way, and was too confused to be able to worry about it much more, so I compromised with myself and left it that way for now.

I then wrote an introductory letter, and guess what I found? That's right! My missing blueprints. The only trouble was, I found that they were still incomplete and I had to fill in a lot of blanks as I went along. There are seven copies of my introductory letter in the recycle bin at this instant.

Writing the introductory letter helped this teacher organize, and organizing helped him discover what thinking was still required.

For all of our students, the physical act of organizing seemed very tied up with the cognitive task of constructing schema. The relationships between exhibits in their portfolios changed each time they moved exhibits. Conversely, each time they conceptualized the portfolio a new way, they scrambled to reorganize the contents. When they started with the pieces, a new whole took shape, and when they started with a new whole, the pieces reordered themselves. Organization and integration went hand in hand.
Audience Influence and Personal Risk

Several teachers described how constraints they place on themselves affect the portfolio as a learning environment. For example, one recounted how limiting portfolios to "best work" curtailed understanding.

I completed a portfolio for another class but did so with the philosophy of only exhibiting my best work. A larger, more comprehensive model will show more of my thought processes and perhaps be more useful in developing future ideas. I would like to [show] not just my successes but maybe things that either only partially worked or didn't work at all.

Who would see their portfolios also affected what the teachers chose to include and what they chose to say about those choices. One who planned to use her portfolio when job-hunting wrote:

I knew a prospective employer would not be interested in reading lengthy reflections. I had to "tell my story" in a direct manner. I could only reflect on the qualities that would make me a qualified applicant. But this was restrictive because it didn't give me the opportunity to focus on my weaknesses.

Another teacher described a different kind of audience impact:

I felt a bit confined because I knew someone would be looking at it. Instead of being relaxed about what went inside I wanted only those things that would be meaningful for others as well as myself. We are always striving to do what will please others even though it might have to be fudged to feel successful.

The teachers recognized their need to tailor a portfolio for a specific audience (or multiple audiences) was a matter of how similar or dissimilar their perspectives were. They also discovered that the need to tailor a portfolio was influenced by how much personal risk could result were they to bare their own perspectives.

Reflections, even more than selections, tend to be personal. The teachers became acutely aware of this as the day approached for them to show their portfolios to their peers. A teacher who developed a family history for her children found this solution:

I have selected some items that have a true meaning for me and I have written a few reflections. Some are very personal and I am not sure that I really want
to share them with the class. As I was writing the reflections I realized that what I intended to put in the portfolio for my daughters to read was not really intended for other people to read. Since I felt unwilling to share many of my very personal thoughts with people other than my children, I have created two different versions—one for the class, and one for my daughters.

Another teacher handled the situation differently:

As I prepared to share my portfolio with you and the class, I nearly became paralyzed. There was no way I could let all of you read my reflections. They were too personal and private. But since I talked so much [in my portfolio] about my struggles to develop self-confidence, I decided that this was just one more opportunity for personal growth. Therefore I included all my reflections intact. I know you are kindhearted souls who will read these reflections in a friendly way.

Apparently their self-consciousness in our class led to empathy for their students. Environments that nurture risk-taking became an important topic to the teachers:

If I want my second grade children to share their portfolios in much the same way we will be doing, I had better “set the tone” and make sure that there is an attitude of acceptance in my classroom. How willing are the emergent readers or writers going to be to share their portfolios if there is a feeling that someone is going to “put them down” or make fun of their work? I have always worked very hard to create [a safe] atmosphere in my classroom but our last class made me cognizant that children must have the assurance that they can be risk-takers without being threatened.

One of the drawbacks of the course design was that the teachers made final presentations of their portfolios after we had had our last look at their journals. We know from their final entries that they approached the day with trepidation. The constructivist literature recognizes the power of the environment to press for adaptation; multiple selves behave in consonance with the rules of various subcultures. However, the results need not be restrictive since our personal constructions are not only revised but also enhanced when we are cognizant of the perspectives of others. Our observations that day were that each and every portfolio received an enthusiastic reception, and that their owners appeared without exception to thoroughly enjoy sharing them.
Summary Remarks

We believe that as the teachers developed their portfolios they came to share beliefs about learning and assessment not unlike our own. They learned that constructivist philosophy, which many were already applying to classroom instruction, could also apply to classroom assessment.

In many ways a portfolio is analogous to the concept webs or cognitive maps that graphically portray our comprehension of a topic. Portfolios are physical manifestations of covert cognitive constructions. If students are assisted overmuch with the physical construction, we do not know if there are parallel gaps in their understanding. For example, if we tell the students what kinds of things to select, we do not know if they grasp the parameters or scope of their subject; if we tell them what criteria to employ in making their selections, we cannot be certain of their value systems; if we tell them how to organize the work in their portfolio, we do not know if they themselves recognize relationships between the pieces. As teachers in our class struggled to put together their portfolios, we watched each come to a better understanding of whatever subject he or she had chosen as a portfolio focus. More important to us, their journals bore testimony that each had come to a better understanding of their portfolio’s role in that learning.

Portfolio programs that entrust decision-making rights to students are often dismissed as “anything goes.” The portfolios that grew out of this project were anything but that. As teachers in our course developed their own portfolios, they not only bore in mind the announced purpose of the activity, they acquainted themselves with highly regarded portfolio programs based on contrasting philosophies, chose their own course of action only after experimentation with different approaches, and drew on the perspectives of other stakeholders when making their own assessments. Consistent with our CMAP philosophy, throughout the class we did not present one way to “do” portfolios, but rather exposed the class members to many approaches, let them experiment with these in the context of their own portfolios, and let them construct their own approach to “doing” portfolios.

Similarly, we would not expect these teachers to take an “anything goes” philosophy to their classrooms. From their journal entries we anticipate they will expose their students to many perspectives, let their students think through complex issues (e.g., objectives and standards) in a self-assessment context, and encourage them to revise their standards commensurate with
their growing sophistication in understanding the issues. In sum, our intention was not to prepare the teachers to direct portfolio projects, but rather, to prepare the teachers to support student-directed portfolios, each portfolio a personal construction of a student's learning.

Can students be entrusted with self-direction? Adults are used to making decisions for children, either to develop conformity across portfolios or to simplify the task for young learners. Committees of teachers and administrators decide “what our portfolios should look like.” Too often, though, honest attempts at assistance close off natural contexts for reflection and inhibit rather than support learning. Impatient in our preconceived notions of a “good” portfolio, we cut short our students’ opportunity to gather information, experiment, construct, assess, and revise, repeating that cycle again and again. In imposing our adult constructions we limit students’ opportunities to create worthy constructions of their own.

The teachers quoted in this chapter came to appreciate, first, how intimidating self-direction can be, and then how freeing. At the end they found themselves committed to letting their students make decisions not only about what goes into the portfolios but also how they will be organized, presented, and used. By constructing portfolios for themselves, they constructed a personal concept of “portfolio” and its place in learning and assessment. According to one teacher:

I have a totally different understanding of the procedure as I have gone through the experience.

Notes

1. Some words and phrases have been deleted from the teachers’ reflections for the sake of brevity.