PUTTING A PORTFOLIO TOGETHER – SOME GUIDELINES

Introduction

The concept of *"*portfolio*"* is not unfamiliar to the arts, architecture, languages and such. Likewise, portfolio assessment in education is not a new concept in countries such as the United States and Britain, and quite extensive research has been done in the field. Educators in these countries have written extensively on the use of portfolios in schools and colleges.

In South Africa, government documentation on the transformation of education refers to portfolios as a possible instrument for ongoing assessment and recognition of prior learning. This article attempts to explore the use of portfolios as a means of authentic assessment in distance education. I will also attempt to provide some guidelines for the implementation of portfolios as part of the assessment strategy for a course.

What is a portfolio?

The following definition that was developed by Paulson, Paulson and Meyer (1991:60) will be used as a point of departure for this article:

A portfolio is a purposeful collection of student work that exhibits the student*'*s efforts, progress, and achievements in one or more areas. The collection must include student participation in selecting contents, the criteria for selection, the criteria for judging merit, and evidence of student self-reflection. A portfolio ... provides a complex and comprehensive view of student performance in context. It is a portfolio when the student is a participant in, rather than the object of assessment ... it provides a forum that encourages students to develop the abilities needed to become independent, self-directed learners.

The key concepts in this definition are purposeful collection; student work; showing efforts, progress and achievement; participation; criteria for selection and judging merit; evidence of self-reflection; comprehensive view of performance; a forum for independent, self-directed learners. If the *"*claims*"* made in the definition are true, the portfolio experience should provide students with an opportunity to become actively involved in their studies and to become *"*independent, self-directed learners*"*.

Why portfolio assessment?

With portfolio assessment it is possible to move towards a more authentic assessment model, as opposed to ordinary examinations, which do not, on the whole, test students' ability to apply what they have learnt in realistic settings. According to Wolf (1989:35) the emphasis on objective knowledge and the one-time nature of most tests, exams and assignments convey the wrong messages to learners, that is:

- Assessment comes from without; it is not a personal responsibility. Instead, assessment (especially for adult learners) should be more self-directed and reflective.
- What matters most is not the full range of students' intuitions and knowledge, but their performance in tests or exams. What if they had a *"*bad day*"*? What if they were ill? Is the three-hour exam an accurate assessment of what they know? A portfolio is a broad picture of their learning and development through the whole of a course – not just during exams at the end of the year.
- First-draft work is not good enough. In the real world the most important work will involve revision, change, and negotiation with colleagues or the clients, improvement. Students need to practise these skills and the portfolio gives them that opportunity.
- Achievement is more important than development. It is not only the final exam that is important. Their individual development during a course is very important, especially in a course where every student may have different experience and background in the topic. Also, how they individually apply the course material to their specific job will be crucial.
- What they learn about the course that is NOT asked is as important as what they know about the exam topics. What they come to know about themselves and their relationship to the course is even more important.

The portfolio as an authentic assessment tool provides us with the opportunity to assess students' performance in context more like that encountered in real life, which would include basic skills such as their ability to:

- frame problems
- find information
- evaluate alternatives
- create ideas and products
- invent new answers
- plan cooperatively
- analyse
- solve problems

Therefore, the focus in the portfolio will be on assessing their performance and development rather than merely their ability to recall and recognise facts. They are given the opportunity to provide evidence of reflection and self-assessment. Student participation is crucial.

Experiential learning and portfolios

I believe, like many pioneers in the field of experiential learning (e.g. Dewey, Boud, Kolb, Fry, Knowles, Jarvis & Morris Keeton), that most communicative and transformative learning occurs outside the formal traditional educational context. These researchers have contributed extensively to the field of experiential learning. The following statements represent some of these contributions.

- Learners bring a great deal of prior learning and experience to any situation (Boud 1981:26).
- One of the most universal needs of adults is to learn how to take responsibility for their learning (Knowles 1970:44-45).
- A need of adult learners is to learn collaboratively with the help of others (Knowles 1970:44-45).
- In experiential learning the learner is directly in contact with the realities being studied, rather than merely thinking about it (Keeton, in Evans 1992:139).
- Experience is an integral part of learning (Hamilton 1994:6).
- The task of integrating and reconciling old and new learning is likely to be more effective where learners are actively engaged in doing so for themselves (a cognitive standpoint, in Thorpe 1995:365).
- To construct meaning and the ability to reflect on this experience, not simply react to it, is a vital process for the learner (a constructivist standpoint, in Thorpe 1995:366).
- Systematic reflection on experience can contribute to significant learning (Evans 1992:147).

We have also Dewey's (1938:19) assumption that noted "there is an intimate and necessary relation between the processes of actual experience and education".

As educationalists we know that students bring a great deal of experience to the learning situation and that they are in the best position to know what their own learning needs and learning styles are. Portfolio work will enable students to use their own experience, while exploring ideas in depth, and to evaluate the process they go through and the product they create. Portfolio work will provide an opportunity for authentic assessment – that is, a sample of their performance in a context more like that encountered in real life.

How can students benefit as learners?

Listed here are some advantages of using portfolios.

Portfolios are purposeful and provide the opportunity for learners to:

• learn collaboratively with their lecturers and actively participate with lecturers in the evaluation process
• make experience an integral part of their learning
• reflect on their prior learning and the development of their strengths and weaknesses as learners
• keep track of their progress, as it is a cumulative process in that it charts growth and interests
• learn about learning, as it facilitates learners' understanding of the relationship that exists between reading, writing and thinking
• assume responsibility for their own learning as a dynamic, continuing process to become more independent
• take risks while developing creative solutions
• demonstrate their ability to work meaningfully with the concepts and content of learning material
• develop their ability to incorporate that material with other knowledge
• reflect on their learning and construct meaning
• value their own work
• have direct personal access to the lecturers, as portfolios often reduce the traditional barriers between learner and instructor
• make practical applications of theory
• include other evidence of learning, not otherwise assessed or accredited

For what purposes can portfolios be used?

Some ideas:

• Portfolios can be used to demonstrate professional development and learning.
• Portfolios can help students determine areas of strengths and weaknesses with respect to employment potential as well as continued training and further educational opportunities.
• Portfolio work provides a representation of students' personal growth; it offers a foundation for future goal setting and introspection.
• Items can be developed for use in their own practice. For example, a student could develop a prototype study unit to demonstrate his/her instructional design skills.

Putting it together

Although students will work towards a final product, the process is of equal importance. Students will be able to investigate how their skills have changed over time, rather than just evaluate the final product.

Very often in a traditional teaching/learning environment learning takes place where the task or goal is determined by the lecturer, the plan of action for reaching the goal is often prescribed and so are the assessment strategies. The learner is only involved in carrying out the plan.

With the portfolio the ideal is to involve students in all of the following activities:

• deciding on tasks or goals
• planning the stages of various tasks
• carrying out plans and adjusting them as necessary
• assessing the success of tasks

Portfolio work unfolds, starting with ideas and plans, changing into drafts, undergoing revision, settling into its near-final form and zigzagging between these different moments as well. The process of refinement and improvement will, therefore, be a crucial aspect of the development of a portfolio.

Students are asked to reflect critically on specific aspects of learning as they work through the course. By asking them to critically reflect on what they have learnt, the role of reflection in learning is promoted when they are asked to answer questions about why and what they are learning. This is a process-oriented approach which is part of any portfolio development.

Learning is a rather *"messy"* process because of refinements and revisions in the processes of comprehension and understanding. Similarly, a portfolio is not a neatly typed document from beginning to end. The final product should tell the *"story"* of what and how they have learnt during the course (including the *"messy"* parts).

Selecting a framework

Students need to spend time thinking about how to organise and sequence the inclusions in their portfolio. However, before selecting a framework they need to have a clear understanding of the focus of their portfolio based on their goals and objectives, as the structure is sensitive to the context of the goals and objectives. The following organising frameworks could serve as a starting point for developing a framework:

• Chronological
The portfolio is organised by date, keeping track of what they include in the portfolio by dating the items. This will give an indication of how their thinking changed over the course of the year. In many cases, this is the easiest way to organise a portfolio.

• Thematic
This means that the portfolio is arranged around themes or functions. For example, they may want to have a section called *"revised assignments"* and another section called *"personal reflections on my learning"*. Alternatively,

they may want to divide the portfolio into *"compulsory portfolio activities"* and *"optional portfolio inclusions"* or according to specific themes in the curriculum, such as *"open learning".*

This method often makes more sense to learners, although it may not seem as easy as the chronological framework.

- Problem-oriented

The portfolio is organised around problems or issues. As students work through the study material and activities, and they always have a list of problems in mind. Each problem would have a section in the portfolio and their reflections, answers, guesses, subsidiary problems, related questions et cetera, will be filed in the same section.

- Their own organising principle

This means that they organise their portfolio in a combination of any or all of the above ways – or in a new way of their own.

Everyone's portfolio is a unique picture of that person's learning, reflection and development in a course, so no two portfolios will be exactly alike.

Keeping track of the portfolio

One of the first decisions that students will have to make is to decide on a collection device for the portfolio materials (e.g. file folders, spiral binding, hanging files, boxes). A ring binder is recommended as it will allow them and the lecturer freedom to alter or add to portfolio contents.

The framework they have chosen for the content could then serve as a guideline for organising and keeping track of their portfolio. Students should be advised to date every item they include and to label it clearly, for example, *"Portfolio activity 1.2"* or *"Personal contribution".*

What items to include

One of the first questions may be: *"What items can I include in the portfolio?"* Here is a list of possible items to include:

observations, rough drafts, summaries, mind maps, results from interviews, assignments, feedback from lecturer, final copies of work, action plans, self-edited drafts, self-awareness entries, criteria for assessment, work-in-progress, self-assessment feedback/reports, self-reflective entries, checklists, revised drafts, a survey of your study skills and habits, goals and objectives.

Although students should use their own discretion when deciding what items to include in their portfolio, the lecturer should state the minimum requirements, such as items that are indicative of their active participation and learning throughout the course and which reflect the attainment of their personal objectives and the course's learning outcomes.

Such evidence could

- indicate their *goals and objectives* for the development of the portfolio as well as the course
- indicate their proposed *plan of action* for achieving their objectives for the portfolio as well as the course
- include *self-selected, lecturer-selected* and *collaboratively selected portfolio content*
- include *reactions to our feedback*
- include *elements of self-reflection*
- include *self-assessment activities*
- include *self-generated, lecturer-generated* and *collaboratively generated criteria and performance standards* for evaluating the portfolio, as well as certain assignments they will be asked to evaluate

Goals and objectives

Students should be made aware of the overall goal of portfolio work, that is, to move towards a more authentic assessment model, away from the traditional examination model which may prevent them from becoming thoughtful respondents to and judges of their own work.

Some important aims with portfolio work should be to:

- keep track of students' progress in the course
- determine the extent to which the learning outcomes of the course and their personal objectives have been achieved
- provide them with an opportunity to value and assess their own accomplishments
- provide them with the opportunity to show what and how they have learnt

It is also important that students include their own goals and objectives for the portfolio work.

Plan of action

There are different strategies students can follow when planning a portfolio, for example to:

- use a mind-map, or diagram to draw up a plan
- consult with peers and/or other specialists in the field and then draw up a plan
- make use of any strategy they feel comfortable with

There are a few basic issues they might need to consider before drawing up a plan, such as:

- identification of the *"tasks"* and requirements for the course
- identification of their goals and objectives
- exploration and listing of options that will help them meet goals and objectives

Lecturer-selected content

This could include a number of compulsory portfolio activities, while assignments could also be included in the portfolio.

Self-selected or collaboratively selected content

Apart from the compulsory portfolio activities students may include any evidence of learning and development, accompanied by a written rationale for including it.

Reactions to feedback on assignments and activities

By including lecturer feedback in the portfolio a more complete picture is ensured, as the purpose of the feedback should be to help and support students in their learning. It should be:

- realistic and not make suggestions which will be impossible to adhere to
- specific so that students will know what it means
- sensitive to their goals
- timely
- accurate in the interpretation of their inputs

It is unrealistic to expect students to agree with the feedback all the time. Students should be encouraged to voice their opinion or reactions to the feedback. They should feel free to argue with the lecturer. The only requirement for disagreeing with any contentions or feedback from the lecturer should be that they justify their opinion.

Elements of self-reflection

It is important to include evidence of self-reflection. This reflection refers to those moments when students return to their work, taking the stance of an informed critic, noticing any or all of the following things:

- what they believe is important and why
- what is characteristic about their learning
- what has changed with time
- what still remains to be done
- how different kinds of experiences have contributed to their growth and learning
- what personal insights they have gained from the experience
- what arguments held up in the light of their own evolving standards
- how their opinions and ideas have changed, refined or not changed as they progress through the course

When constructing reflective statements students should be encouraged to ask themselves questions, such as the following:

- What did I do?
- What does this mean?
- Why have I chosen this particular item to be included?
- What have I learnt?
- What have I not learnt?
- What must I unlearn?
- What is the value or purpose of that learning?
- What insights have I had from this learning?
- How has my ability to accomplish new activities or tasks grown from these insights?
- What aspects have I not explored in depth?
- What aspects have I explored in depth?
- How can I do things differently?
- What are the problems that will prevent me from achieving my objectives?
- What can I do to deal with these problems?
- How can I apply this knowledge to my individual situation – in other words: What is in it for me?
- What aspects would I like to pursue for future learning?

Reflective statements are essential components of any portfolio as they allow students to "examine" the thinking behind their decisions and accomplishments. Critical reflection should become an automatic activity in the learning process. Portfolio work allows an excellent opportunity to exercise this skill.

Self-assessment activities

Some of the activities to be included should be self-assessed. Self-assessment asks learners to give feedback to themselves.

The rationale for including self-assessment in a course concerns improved learning and developing of the student's self-assessment skills and could be used as a supplement to other assessment methods in the course. Reflecting on and assessing their own learning is, therefore, an important process in the development of any portfolio. Students should be assisted in developing the ability to be a realistic judge of their own performance and to monitor their learning effectively. Boud (1981:8) indicates that learners who develop the skill of self-assessment are more likely to:

- wish to continue their learning
- know how to do so
- monitor their own performance without constant reference to fellow professionals
- expect to take full responsibility for their actions and judgements

Self-assessment needs practising, as does any other skill. According to Toiler and Broadfoot (in Paris & Ayres 1994:54) students need to be able to:

- understand why they have done a task in a particular manner
- make a judgement about the quality of their work
- construct plausible explanations for their assessment
- organise newly acquired knowledge with past experience
- fit assessment into a larger context
- set future objectives

Criteria for performance

Identifying criteria and performance standards to apply to their work is one of the defining characteristics of assessment, but also one of the most difficult tasks. There are usually general criteria and unique criteria for a specific task. Satisfactory criteria (Boud 1981:16) should include information about the following:

- area to be assessed
- aims to be pursued
- standards to be reached

Criteria should also be spelt out clearly and in such detail that it will enable the assessors (whether the lecturer or students) to know the extent to which the criteria have been met.

Criteria to be included in the portfolio should be twofold: criteria for the development of the portfolio; and criteria pertaining to the different tasks which will be set during the course. (See **Appendix A** for examples.)

Clearly stated criteria such as the following could serve as a guideline for including portfolio items. Items included should:

- be a continuous record of development and learning
- be adequate
- be credible
- provide evidence of having worked through a particular section of the curriculum
- support knowledge of the course content
- be clear as to how the knowledge was acquired
- be authentic
- be indicative of their ability to assess themselves

Apart from considering goal achievement and growth the lecturer should also consider issues such as the following:

- structural considerations (logical structure, length, headings and organisation)
- technical considerations (grammar, spelling, handwriting or typing)
- research done (selecting sources and making notes)

Students might find setting their own criteria unfamiliar and difficult. The following questions could serve as guidelines to assist them in doing so:

- What are the factors I would take into account in assessing my work?
- What evidence will be adequate proof of my growth and learning?
- What will be acceptable as proof that I have achieved my goals?
- What would make my portfolio/work very good? (What factors are characteristic of good ...?)
- What would make my portfolio poor? (How would I distinguish good work from poor work?)
- What would be acceptable?
- What would be unacceptable?

Other items to include

Students should be encouraged to choose any other related/applicable work. Apart from the above suggested items they may select items to show something they did that:

- shows evidence of learning
- they found interesting
- shows work-in-progress with written plans for revision
- they found especially difficult
- shows their ability to apply particular principles
- shows their problem-solving ability
- they enjoyed doing

It is also important that students develop a rationale for selecting any of the above materials. Answering the following questions may help them develop this rationale (Shackelford 1996:32):

• Why have I decided to include this particular item?
• Does it show growth? How and what?
• What skills or abilities do I wish to document?
• Do these abilities match identified needs?
• What evidence can I include to substantiate these abilities?
• Do materials adequately and accurately demonstrate my abilities?
• Does the item match or reflect my goal(s) and objectives?
• Does the portfolio reflect what I have learnt and my ability to transfer, integrate and use it to solve problems?

One way to start is to collect *everything* that they do and think about the course in a file, box or a drawer of a desk. Also, they may want to start keeping a *"course diary"* where they write down their self-reflections on activities, assignments and so on for possible inclusion in the portfolio. The portfolio then evolves from this into a final product that contains only the selected documents that display appropriate evidence of learning and growth. The careful selection of the final items to be included is part of the learning process.

Conclusion

Portfolio work could and should be an enjoyable experience to the student. It is therefore important to provide students with as many guidelines (not rules!) as possible on how to go about compiling a portfolio. Do not assume that students will know how to deal with it. Be explicit in guiding them through the process and the result could be as delightful for the lecturer!

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