

EDUCATIONAL POTENTIAL OF E-PORTFOLIOS

CHAPTER 1

FROM STUDENT LEARNING TO TEACHER PROFESSIONAL DEVELOPMENT

MARIA JOÃO GOMES

Institute of Education and Psychology
University of Minho, Portugal

INTRODUCTION

The construction of a portfolio may be based on a variety of aims. It can, for example, act as a strategy for encouraging learning, serve as a professional or academic evaluation instrument, be an “argument” in the search for employment, a means for promoting or marketing a product or company or a record of personal or professional development. In an educational context, most portfolios fit into the following three categories: “student e-portfolios, teaching e-portfolios and institutional e-portfolios” (see Lorenzo & Ittelson, 2005, p. 1), however other categories that are not solely related to the creation of portfolios may also be considered.

A diversity of contexts and aims underlying the implementation of portfolios, namely in educational and school contexts, have led Helen Barret (2005) to state that the term portfolio should always be accompanied by an adjective or modifying term to describe the purpose for which it is being or has been created. Nevertheless, one should always be aware of the fact that the construction of a portfolio can frequently come under more than one aim at the same time:

[a] student e-portfolio, for example, can be used to showcase accomplishments. It may be shared with a prospective employer or used to document specific learning outcomes in a course and can include description, rationale and discussion of digitized artefacts, resulting in a powerful tool for representation, reflection, and revision.

CHAPTER 1 · 13

A teaching can be used in a similar fashion, to showcase a faculty member's accomplishments for career-related purposes. It can also be a collection of course — or discipline — related plans, strategies, and artefacts to be shared with colleagues, which often encourage improved teaching and learning (Lorenzo & Ittelson, 2005, pp. 2-3).

In educational and school contexts, portfolios can be used to focus on distinct contexts:

- the school, by adopting itself as the school's means of presentation and publicity
- the pupils, by acting as a strategy to encourage learning and/or evaluation
- the teachers, by acting as an instrument/process of personal development and/or performance assessment.

In this text we will focus on some aspects regarding the portfolios of teachers and students with particular emphasis on *webfolios*, taken here to mean online versions of *e-portfolios*, which, by the same token are taken to mean

... a digitized collection of artefacts including demonstrations, resources, and accomplishments that represent an individual, group, or institution. This collection can be comprised of text-based, graphic, or multimedia elements archived on a Web site or on other electronic media such as a CD-ROM or DVD. An e-portfolio is more than a simple collection — it can also serve as an administrative tool to manage and organize work created with different applications and to control who can see the work. E-portfolios encourage personal reflection and often involve the exchange of ideas and feedback (Lorenzo & Ittelson, 2005, p.1).

PORTFOLIOS: FROM STUDENTS TO TEACHERS

We may identify two main areas of portfolio use/adoption in an educational context. On the one hand, we have a large number of references to portfolios in contexts of basic and continued training, frequently regarded as an instrument to assess performance, but also as a process of professional development. On the other hand, in the case of students from various educational

levels, portfolios often take on the role of presentation portfolios, but also, and more importantly from a pedagogical perspective, they are often learning portfolios and/or assessment portfolios, since it is not always possible to establish clear boundaries between these categories, as far as the aims and roles at the root of the creation of a portfolio are concerned. A portfolio constructed on the basis of being an assessment instrument should display both “products” and “processes”. Thus, it also becomes a learning portfolio by including aspects of the students’ learning processes, by highlighting its evolution in a variety of domains and its reflections on the actual process itself and is able to be used as a strategy for promoting metacognition. This same idea is defended by Scallon (2003, referred to in Alves, 2007) for whom portfolios are learning and assessment instruments grounded on this capacity to get the student involved in his/her assessment (self-assessment), reflecting on his/her learning (metacognition) with a view to carrying out actions so as to improve (self-regulation). These principles are equally pertinent to pupils/students in the various levels of schooling, teachers in the process of basic training and active professionals with an outlook based on life-long training and professional development. “E-portfolios have the potential to enhance teaching, learning, and assessment practices” (Lorenzo & Ittelson, 2005, p. 1).

REGULATING TEACHING AND LEARNING ACTIVITIES

By constantly examining portfolio content, both teachers and pupils can regulate their teaching and learning activities, introducing adjustments when necessary (Asturias, 1994, p. 698). Indeed, it is possible for teachers to detect what pupils think and feel, how their reasoning is processed, what kind of attitudes they display towards a theme and many other aspects in their writing (reflections, reports, diaries, etc.) Teachers can detect erroneous ideas, requests for help or indicators of success regarding certain areas taught. Garrison (1999, p. 94) refers to the fact that even when applied over a relatively short space of time, portfolios have an important role, for example, in the identification of pupils with needs in terms of learning opportunities and even in the identification of pupils requiring extra help.

Monitoring, on the part of the teacher, of the developmental processes of students’ portfolios, may serve as a source of reflection on his/her

actual practices, leading him/her to question principles, strategies and teaching methodologies and to be encouraged to look for new approaches, thus, promoting his/her professional awareness.

ENCOURAGING COMMUNICATION AMONG TEACHERS, PUPILS AND PARENTS

Developing portfolios may be a way of bringing families and schools together, promoting better family access to and knowledge of pupil performance and productions. In their search for greater parent involvement and awareness regarding student activities and learning, teachers may initially explain to parents what the aims of the portfolio are, how it will be developed and what kind of impact it will have on the assessment of students. Crowley (1993, p. 102) points out that each example set out in the portfolio reflects actual student effort and can display students' performance to both teachers and parents in more detail, "much more than an abstract classification figure". Koelper and Messerges (2003) describe a study in which the portfolio enabled parents to acquire greater knowledge about their children's progress and learning:

The portfolios were also a success with the parents. (...) A set of parents were impressed how their child had grown from the first artefact to the last artefact in their portfolio. (...) The final product helped aid the parents in understanding the academic growth of their child in mathematics (Koelper & Messerges, 2003, p.37).

Several authors mention that during the development of a portfolio program, there is a higher possibility of communication among teachers, students, parents and other educational agents regarding student learning and expectations (Asturias, 1994; Crowley, 1993; Lambdin & Walker, 1994; Stenmark, 1991).

The moments for selecting material for the portfolio are privileged opportunities for developing the interaction process between the teacher and student (Leal, 1997, p. 11). Jean Stenmark (1991) also refers to the dialogue among students, teachers and parents. Dialogues between parents and children are made easier with the portfolios, especially when the students take the portfolio home, when parents can take a look and talk about their children's

learning and progress. On the other hand, and in the sense that the portfolios of pupils also highlight the practices of teachers, parents can also have a better idea about the kind of work carried out by their children's teachers.

PROMOTING A CHANGE IN EDUCATIONAL PRAXIS

Not only are portfolios proof of curriculum and student involvement in activities, they also indirectly record the educational activities promoted and presented by teachers. Furthermore, they highlight, albeit partially, the aspects to which the teacher attributes most value and, thus, provide stimulation. Such content may be analysed by the parents of pupils, school teachers and all those who look at the portfolios. In this context, pupil portfolios are potentially excellent starting documents for a critical reflection on teacher practices, leading teachers, themselves, to reflect on what is most important in terms of student learning or to discuss their teaching approaches and strategies.

Many of the authors who have experimented with portfolios in the classroom with their pupils refer to the change in educational praxis as something inherent to the actual use of portfolios. In his text Stenmark (1999, p. 35), for example, recalls a classroom situation in which portfolios were used and where the teacher's "style of teaching" actually changed. Diana Lambdin and Vicki Walker (1994) also mention how the decision to adopt the use of portfolios led to a change in their way of teaching and assessing.

The potential portfolios have in bringing about a change in pedagogical practices and school assessment has led us to the conclusion that its adoption may not only benefit students but also construct an excellent opportunity for the professional development of teachers, since they are subsequently guided by their reflection on their own educational *praxis*. Kuhs has even said "perhaps the most important argument favouring the use of portfolios is its power to bring about change" (1994, p. 335).

Portfolios have been used in basic teacher training as an evaluation instrument but also as an instrument for the development of reflection practices. In the case of professionally active teachers, portfolios have served as instruments for evaluating professional performance. Indeed, this practice has been reinforced over recent years (see Milman, 2007) and has proved to be indicative of professional development.

FROM PAPER TO THE WEB

As well as a broadening of contexts and aims associated with the development of portfolios, from their initial adoption in professional fields more related to image, art and graphic design up to their adoption in other areas such as education, the portfolios themselves, as well as the entire spectrum of contexts in which they have developed, have become diversified.

Technological evolution has come to create alternative forms of constructing portfolios, such as digital development. However, this does not simply amount to an updated or enriched technological version of the paper portfolios. Nor does it merely refer to overcoming limitations associated with the "paper" version which, since they are not of a pedagogical nature, restrict the full use of some of the most important characteristics of portfolios, in educational terms. Digital versions provide an entire range of new possibilities which, up to not so long ago, were unavailable in more conventional formats and versions for implementation contexts.

Digital portfolios facilitate the incorporation of multimedia characteristics which are common to digital portfolios constructed and made available offline (in cd-rom, for example) or online (available on the Web). Still, digital portfolios constructed and made available online are frequently found to have features that maximize some of the potentialities that are normally attributed to portfolios. Online digital portfolios have improved and optimised visibility, enabling teachers, pupils and families to have simultaneous access, facilitating and providing conditions for more frequent and rapid feedback on the development and content included, thus being more efficient. The creation of digital portfolios, particularly the online version, implies the development of a wide range of digital competencies on the part of both pupils and teachers, thus, representing an additional advantage to its adoption:

[i]n general, e-portfolios are helping students become critical thinkers and aiding in the development of their writing and multimedia communications skills.

E-portfolios can help students learn information and technology literacy skills and how to use digital media (Lorenzo & Ittelson, 2005, p. 3).

Furthermore, the fact that there are several online communication services available on the web enables the online portfolio to be developed in a more

collaborative manner, bringing benefit to its authors by means of feedback from all those who were given access to it. Such benefits are directly related to the digital and online dimensions of web-folios: “[t]he benefits of an e-portfolio typically derive from the exchange of ideas and feedback between the author and those who interact with the e-portfolio” (Lorenzo & Ittelson, 2005, p. 2).

TO SUM UP...

The adoption of the portfolio in educational/school contexts has become increasingly more frequent and diversified. Its construction by pupils is mainly conveyed as a strategy based on learning promotion and as an assessment instrument/technique of such learning, while, in some cases, it consists of real metacognitive exercises. As far as teachers are concerned, the construction of portfolios may correspond to a need for reflection on their professional convictions and practices. In these cases, portfolio construction is associated with effort put into professional development. In other contexts, teacher portfolios follow a logic based on the evaluation of performance or professional presentation. Whether developed by students or teachers, portfolios have come to adopt digital and frequently online versions, thus, broadening conditions so as to take on a multi(hiper)media dimension, to acquire greater visibility and improved technological competencies so that they may be developed in a more interactive manner and become a real collective and collaborative dimension.

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