

## Portfolios as an Assessment Tool of Learning and Competences from Students with SEN<sup>1 2</sup>

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The new paradigm for education focalised on knowledge and competences require adequate methodologies of evaluation of the acquisition of knowledge and of the development of personal, social and technical competences. The portfolios are systematic collections of work by students with guidance and support of the teachers and may serve as a basis to analyze the continuity learning process in terms of effort and performance improvement. Through reflections on the learning process, students with SEN and teachers can understand the motivations, abilities, needs and competences developed in the course of learning.

This study was developed in the context of the identification of good practices of assessment that improves inclusion of students with SEN. The aim of the present study was to investigate how portefolio could be a useful tool of assessment and intervention in continuity, as a way to improve a continuous comprehension from student's needs and strength, in order to organize more specific and efficient interventions based in dynamic, funtional and continuous assessment.

This study presents a case study based in the analysis of the scholar portfolio from a student with SEN. Content analysis shows the importance of the portfolio as an assessment tool that improves more efficient intervencion with SEN students. Portfolios' dynamic, funtional, continuous and descriptive characteristics allows a more profound understanding from learning process and competences development, facilitates instructional decision making and contributes to better understand teacher's role on the assessment-intervention-assessment approach.

**Keywords:** Assessment; Portfolios, Learning Process, Competences, Special Educational Needs.

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## Definition and Objectives of Portfolio

The portfolios are systematic collections of work by students with guidance and support of the teachers and may serve as a basis to analyze the continuity learning process in terms of effort and performance improvement.

In this work we adopt a definition of portfolios as a compendium of materials that document and demonstrate a person's accomplishments and career readiness so this tool is a collection of work that are used to document, monitor and evaluate performances. In this sense "portfolios embody an organized, purposeful, longitudinal collection of student work that tells a story of the student's efforts, progress, or achievement in a given area. They may also assess the achievement of program objectives" (Swigonsky, Ward, Mama, Rodgers, Belicose, 2006, p. 813). So these longitudinal characteristics of the portfolios bring the possibility to follow the process of learning and development, step by step with learning disabilities students.

So by one way portfolios represent a collection of student work done over time. By other way portfolios are flexible tools to support inclusive assessment and intervention because they could be used as nonselective or selective tools, as Swigonski et al. (2006, pp. 815-816), propose:

i) "Nonselective portfolios collect all of the student's work in a given course, chronologically dated and clearly labeled." So they provide assess to a complete perspective of the student's work and progress and students have the opportunity to look at and reflect on everything they have been doing.

ii) Selective Portfolios include "materials chosen from a more comprehensive collection of student materials". Thus this type of tool contains work samples that represent student growth over time, or representational portfolios which contain examples of best work without the inclusion of successive drafts."

Specifically, the portfolio is in special education as a tool that can be by the student throughout their teaching-learning (Student Portfolio) or the teacher as part of his speech or his educational training and/or professional development (Teacher Portfolio).

The objectives of the use of Portfolio and the key concepts of assessment that should be taken into account are described in Figure 1, where there are also some theoretical constructs that underpin the development process of the Portfolio as a tool for assessment and training and its relationship with purposes of formative and summative (Klenowski, Askew & Carnell 2006).

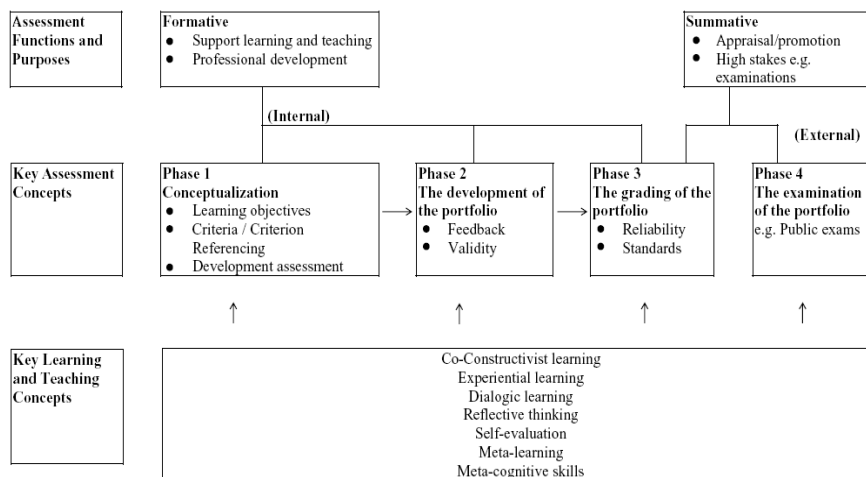


Figure 1. A framework for using portfolios for learning and assessment

Source: Klenowski, Askew & Carnell, (2006, p 268)

In fact, the objectives of the student's portfolio may be multiple. One of these objectives relates to the metacognitive abilities, which can be achieved if we ask students to evaluate themselves, watching their progress as reflected in their achievements, assessing and becoming aware of their strengths and their weaknesses and commenting on their strategies. Another objective is to increase students' motivation involving them in their training by choosing some evidence of their learning, reflecting their successes and can be viewed by others. The Portfolio is also used for the evaluation of students, with the advantage of not being assessed in a given time (static), but a formative assessment, continuous and dynamic, designed to measure student progress throughout the learning phase and allows the teacher to adjust pedagogical interventions along this route. However, the use of the Portfolios as supporting the development of skills and dynamic teaching and learning requires the presence of 'mentors' to help understand some key concepts of this process, as the relationship between learning objectives and success criteria, for example (Klenowski, 2002a; Black & Wiliam, 2003; apud by Klenowski et al., 2006).

If the learning portfolio is being increasingly used in the evaluation process, there must be an explicit and ongoing discussion with users about the reasons for their use and models of learning and skills development in that focus. We will discuss this interrelation in a row.

### **The Use of Portfolios with Students that Experience Barriers to its Development**

In which concerns to Special Education, some educators advocate portfolio assessment and instruction are useful. For Salend (apud by Salvia et al, 2007) portfolios help teachers make decisions and recommendations about instructional and educational programs and mastery of IEP goals.

We may say that portfolios have two general purposes: instruction and assessment, as Swingonski (2006, pp. 814-815) purpose:

1. "Instructional benefits come from the students' close examination of their work, from comparison of changes and growth over time, and from their identification of personal strengths and weakness through the application of criteria that define quality, as well as from goal setting, and identifying best or favourite works" and also encourages personal reflections, one of the most important purposes.
2. "Assessment benefits come from the collection of multiple samples of student work over time. This collection provides a broader, more in-depth look at what students know and can do; bases assessment on more authentic work; provides a supplement to report cards and standardized tests; and provides a better way to communicate student progress.

On the whole, several authors (e.g., Salvia et al., 2007, pp. 252-253) who defend portfolios' assessment point six important elements:

- 1 - "Targets valued outcomes for assessment – include those that require higher levels of understanding (analysis, synthesis and evaluation); those that require applying specific processes or strategies to reach answers and those that are complex and challenging;"
- 2 - "Uses tasks that mirror work in the real world – authentic assessments require students to solve the types of problems found in the real world;"
- 3 - "Encourages cooperation among learners and between teacher and student – outcomes to be assessed should include products or performances created by groups of

students, as well as by individual students;”

4 - “Uses multiple dimensions to evaluate student work” – teachers should evaluate not only content knowledge but also content-specific strategies, methods of inquiry and work processes that are essential components of student learning;

5 - “Encourages student reflection – students should think critically about what they and their peers have created or accomplished and they should strive to improve their products. Teachers should encourage them to revise and polish their work;”

6 - Integrates assessment and instruction – assessment should do more than provide accurate information about student performance on a continuous basis. It should also motivate students and facilitate teaching.”

As we have already said, one of the main purposes of portfolio’s assessment is to encourage personal reflection and also instruction and assessment.

Swigonski et al., (2006, p. 815) have identified various ways in which portfolios can be used to support those items:

1 - “To provide students with an opportunity to reflect on their performance;

2 - To help students develop their consciousness of the constructive role that various modes of writing play in their own psychological-intellectual development;

3 - To encourage students to choose for them selves what is or is not important in their performance;

4 - To help students see connections across learning experiences and courses;

5 - To provide a concrete basis for open, learner-centered discussions between students and their teachers and advisors, to explore what is being learned;

6 - To help students recognize that learning is a cumulative process;

7 - To identify areas of strength and weakness in students’ performance and to plan ways to optimize strengths and eliminate weaknesses;

8 - To provide students with a concrete, conscious sense of their accomplishments and growth;

9 - To help advisors and students to identify gaps or problems in the students’ preparation.”

Thus, as we have seen, portfolios may include two types of data, as Jensen and Saylor (1994, p. 345) propose:

- instructionally focused product data (the collection of student materials);

- assessment-focused evaluation data (student and instructor assessments of those materials and the progress, growth and development they represent).

Included on those types of data are: artefacts (records of student activities, projects and papers that were evidence of student accomplishment), journal entries (non-reflective descriptions of student activities through out the course), course evaluations (comments that students made in the portfolios which assessed the value of the learning experiences that were part of the course).

### **The Present Study**

The aim of the present study was to investigate how portefolio could be a useful tool of assessment and intervention in continuity, i.e., to assessment-intervention-assessment, as a way to improve a continuous compreenension from student’s needs and strength, in order to organize more specific and efficient interventions based in dynamic, funtional and continuous assessment.

## METHOD

This study presents a case study based in the analysis of the scholar portfolio from a student with SEN. A case study should be used when attempting to observe and describe detailed and deeply a particular phenomenon (Yin, 2003). According to Tesch (Gillham, 2000) our analysis is interpretive, since it aims to analyze in detail all the data in order to organize them and classify them into categories that can explore and explain the phenomenon under study, ie the product concerned. In all case studies is essential to collect enough information, as well as ensuring that draws on multiple sources of information. We describe the stages of the case study.

### *Participant*

A student with 12 years old, with Special Educational Needs characterized by *reading, writing and spatial orientation problems classified as Dislexya and Disortografia, using DSM IV-TR* (American Psychological Association, 2002).

### *Procedures*

Our "case" refers to the analysis of the portfolio of a student with SEN. This way, according to Yin (2003) the case study is constructed by three phases, which should guide the work of investigators:

*Step 1 - Selection of the case and development of protocol for data collection.*

We developed a protocol, which contains the procedures, instruments and general rules to be adopted in the study.

In this phase we have done the prior contact with school and family (by phone), then organized a meeting to outline the ethical standards and ethics on which it would hold a consultation with the student's portfolio. After the reception of permission we had drawn up the guidelines for the collection of information in the documents that make up the portfolio of the student. After a consultation of student portfolio it was found that data should be collected at school evaluation reports (evaluation reports with school cassifications at the end of each academic year), plans and programs of educational intervention, psychological reports, medical reports and records of observations and meetings with the student parents. To organize the collection of data and its analysis we organize a script with two categories *i) School history and ii) Current situation*. Each of these dimensions was structured into three sub-categories Assessment, Intervention, Assessment.

*Step 2 - Collecting and analyzing data*

We proceeded to collect the information through analysis of documents that make up the portfolio of the student. We selected to analyze all the school reports, psychological and medical available. The use of these instruments is one way of obtaining data of different types, which provide the possibility of cross-checking. The analysis of the reports was done by three researchers from the team that carried individually to the written record of information selected.

*Step 3 - Analysis of the data and interpretation of results*

Seeks to make the categorization and classification of data, considering the initial propositions of the study. Develop the conclusions, the recommendations and the implications based on the results. With regard to our study we proceeded to the analysis and discussion of results, more precisely, through analysis of report written by three researchers and the content analysis was conducted a joint registration narrative only as a function of the script content analysis pre- established, i.e., with two categories: 1 -

School history and 2 - Current situation. Each category was structured into three sub-categories: Assessment, Intervention, Assessment.

### *Data Analysis and Content Analysis*

#### *1. Scholar history*

##### *i) Assessment*

*Luís was evaluated for the first time when he was 8 years old. The evaluation used the Wechsler Intelligence Scale and several tests for reading, writing and calculations. The results showed that Luís had a high intellectual ability (I.Q >120). However, he showed serious disorders in handwriting, orthography and spatial orientation. His social and emotional behaviour shows difficulties in interacting with his peers as well as showing his feelings. He rejects friendship as a feeling. Luis shows strong interest and investment on Math and has an excellent performance in the activities that use oral expression and logical- mathematical thinking.*

##### *ii) Intervention*

*Even with a high cognitive ability and an excellent logical-mathematical thinking, teachers choose to focus their intervention in the student's reading and writing problems. Luis had even worn glasses with prismatic lenses, special insoles to support his feet and special equipments (table, chair, etc.) to support spacial problems. During 3 years Luis attended an intensive programmer to correct his problems related with reading, writing and spatial orientation.*

##### *iii) Assessment*

*During this period, his social and emotional behaviour became progressively more disadjusted. He lost his interest for school, and his ability of attention and concentration dropped every day. He had slow progresses in writing. There was a strong involvement of time for teachers, parents and extra sessions of work played for the parents outside school. However, his behavior was getting worst. Teachers and the psychologist thought he was hyperactive and had a lack of attention disorder. His parents had done "everything": The difficulties of Louis led to questioning about his ability both at math and other areas, and his behaviour compromised his learning and success.*

#### *2. Present situation*

##### *i) Assessment*

*When Luis was 12 years old, Special Educational Team from His school was changed and Special Educational Teacher from his school, began to questioning the situation from Luís: What should we do? How should we go against the trend 'installed"; to understand the particularly difficult areas of this student? How to help him to overcome them?*

##### *ii) Intervention*

*Special Educational Teacher started with establishing dialogues with this student about*

*those areas which we knew fascinated him very much: the universe and everything inherent. They recorded the conversations and let him write about all that he had spoken about.*

*Luís was in his world, the world of those who treated him seriously and supported him in discovering and learning what he appreciated most. He was very interested in science and the environment. The talks went through politics, religion, sports, nature, among other topics of his interest.*

*Writing became a regular exercise, writing about everything, to fill gaps in the writing, namely handwriting and spelling. His handwriting improved so fast, that we assumed that with some attention the student could write correctly and with less incorrect spelling.*

*What was missing?.... Team work, between, Special Educational teacher, Regular class teachers, Tutor, family and Luís, to improve a whole perspective about needs and strenght from the boy.*

*The teacher of Special Education shared with the class tutor and with the parents her concern about this student's situation, particularly in terms of writing and behavior. From then on the class teachers, specially the science teacher also got involved. The feedback from some teachers about the student's behavior was necessary, highlighting points of difficulty; easy points and the family. The parents went on monitoring the process through telephone conversations and meetings with the teachers directly involved in the project. At first the talks occurred weekly. Later they became quarterly.*

*The Head of the Class, the Science and the Special Education teachers decided, together with the student, to establish a more challenging task – making him organize a study visit by the student for his class:*

- The student established contacts to the destination, arranged the schedules informed his colleagues and prepared the information for parents and their consent.*
- He drew up the leaflet, with the time and relevant information about the trip.*
- He was evaluated in the visit itself by colleagues (criterion level of satisfaction and interest of the visit). His colleagues attributed him “very satisfactory “and applauded at the end.*

### *iii) Assessment*

*The boy grew up, but the difficulty in interacting with his peers continued, he could not look them in the eyes ...emotions were something that had got stuck.*

- ... Then we started dealing with topics like solidarity, human rights, family, the importance of friends, the pain of loss.*
- We read literary works such as the Little Prince*
- ... and little by little Luís awoke gradually to the others and he began to worry about pleasing some teachers and began to help his colleagues.*
- ... a teacher shared her experience and confessed “today Luís touched me: he helped his colleagues, explaining the exercises step by step and very patiently...*
- his parents showed satisfaction with the change, stressing that at home he was different too. And they expressed how they would like him to go on with this type of follow up to complete basic education.*

*The results were generally positive, and the student is integrated and he is more responsible; the others began to have a relevant role in his life. Monitoring and cooperation of the parents was an added value in the whole process.*

To conclude, the documents that composed the portfolio seem to be crucial to improve assessment in continuity, teachers could combine a retrospective view with a prospective view of needs and strengths. Intervention based in continuous assessment improves a holistic, dynamic and functional comprehension of the student and its potential. This profound understanding of students' needs improves teachers' dialogue and teamwork, as well as cooperation between teachers, family and student, what was effective and crucial for the success of the intervention.

## **DISCUSSION AND CONCLUSIONS**

This analysis shows the importance of the portfolio as an assessment tool that improves more efficient intervention with SEN students. Portfolios' dynamic, functional, continuous and descriptive characteristics allow a more profound understanding from learning process and competences development, facilitates instructional decision making and contributes to better understand teacher's role on the assessment-intervention-assessment approach. Another important issue that is pointed up in this study is the possibilities that portfolio offers to illustrate the development of thought processes and how it will gradually diminish in order to increase student's autonomy to recognize and consciously reflect critically on theoretical knowledge and its applications.

But, there are some concerns regarding assessment-intervention-assessment based in portfolios for students with disabilities. In fact, we do agree with Salvia et al. (2007) when they point some questions about this issue:

- How are portfolio contents related to the criterion used to decide whether a student is making satisfactory progress?
- How are portfolio contents related to the criterion used to decide whether a student should be referred to ascertain eligibility for special education?
- How can a student's portfolio be used to make decisions about inclusion?
- How can a student's portfolio be used to determine current instructional levels?
- How can a student's portfolio be used to determine rates of acquisition and retention?

As Salvia et al. (2007, p. 262) propose, "insensitivity to change" and "infrequency of assessment" are two other important issues concerning portfolio assessment. Assessment must be sufficiently sensitive to small but important changes. However, it is difficult to show empirical evidence for the ability of portfolio scoring systems to detect important changes in student development. Thus, this kind of difficulties with portfolio scoring systems have as consequence limitations to detect important changes, then teachers cannot gauge the effectiveness of their instruction over relatively short periods of time.

The frequency with which assessments can be conducted is also an important issue. As portfolios frequently contain extended projects, teachers may find it difficult to use them to adjust instruction on a daily or weekly basis. It is not possible to detect who is making progress and who doesn't. Teachers can not understand the progress and the failures of their students.

Other limitations of portfolios' assessment are their efficiency about time and money and additional training needs. Due the type of materials included, assessment based on portfolio is hard and requires lots of teacher's time. And time involves money. Teachers also need additional training in portfolio assessment (Candeias, Silva, Rosário, Grácio, Rebocho & Saragoça, in press).

Although all the presented limitations, portfolio assessment is useful in children and young students with disabilities as Salvia et al. (2007) already propose. This kind of assessment promotes autonomy, self-regulation and reflection. The permanent dialogue established between teacher and their students in all instruction and assessment process, allows to reflect on what have changed in their work; what the students have learned; the reasons of chosen one or other sample from the portfolio to reflection; what could be added, deleted or changed. Traditional assessments are focused on what students are not learning. Portfolios' assessment values each one of the students and their own characteristics.

In practice, this approach to assessment and intervention improve a new look about how to make more inclusive education, for all children. New methods to assess and intervene improve the creation of inclusive classrooms and go through a change in teachers' beliefs and for their willingness and ability to teach children who traditionally would not be under his care and guardianship. In addition, it is also important to teach teachers how to design inclusive classrooms and improve inclusive practices of assessment and intervention that promotes the type of strategies to increase the development of all students. The school course only makes sense as a concrete step, which serves as an instrument to promote the personal and social development of all children.

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