The use of portfolios in university pedagogy: a experience in nursing courses

O uso de portfolios na pedagogia universitaria: uma experiencia em cursos de enfermagem

El uso de portafolios en la pedagogia universidad: una experiencia en cursos de enfermeria

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\textbf{ABSTRACT}

The experience of building a matrix for analysing portfolios in a course of study with a Bachelor's Degree in Nursing is described, highlighting multiple and mutual learnings of the process. One of the challenges is to potentiate the portfolios use, avoiding that it suffers from a subjectivism that hampers the existence of a dialogue between student and teacher which needs evidence, as without which the educational dimension of assessment is weakened. The study systematizes principles which guarantee a logic of innovative assessment constituting itself as an educational resource for both teachers and students involved in the process, thus contributing to the exercise of reflection upon the compiled and produced material in the portfolio.

\textbf{Keywords:} evaluation; portfolio; pedagogical work in health; docent background.

\textbf{RESUMO}

Descreve-se experiência de construção de matriz para análise de portfólios em um curso de licenciatura em enfermagem com destaque para as aprendizagens mútuas e múltiplas do processo. Um dos desafios é potencializar o uso de portfólios evitando que este padeça de um subjetivismo que dificulte a sustentação do diálogo que se trava entre aluno/professor que não pode prescindir de evidências sem as quais se enfraquece a dimensão educativa da avaliação. O estudo sistematiza princípios que garantem uma lógica de avaliação inovadora constituindo-se recurso de formação tanto para docente como discentes envolvidos contribuindo para o exercício da reflexão sobre o material produzido e compilado no portfólio.

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Palavras-chave: avaliação; portfólio; trabalho pedagógico em saúde; formação de professores.

RESUMEN
Se describe la experiencia de la construcción de una Matriz de análisis de los portfólios en el curso de Licenciatura en Enfermería enfatizando los múltiples aprendizajes del proceso. Uno de los desafíos el potencializar el uso del portfólio evitando que éste padezca de un subjetivismo que dificulte la manutención del diálogo entre alumno/profesor, que no puede prescindir de evidencias sin las cuales se debilita la dimensión educativa de la evaluación. El estudio sistematiza los principios que garantizan una lógica del recurso compuesto de la evaluación innovadora de la formación para el profesor como para los estudiantes en contribuir para el ejercicio de la reflexión del material producido y compilado en el portfólio.

Palabras-clave: evaluación; portfólio; trabajo pedagógico en la salud; formación docente.

INTRODUCTION
Criticism of the ineffectiveness of the university learning assessment processes has increased and the effort to offer more consistent and fruitful alternatives from a pedagogical point of view has led educators to try new assessment forms which can produce and entice the students’ progress, considering them as quality translators of the pedagogical work performed.

Freitas, Sordi and Malavazi (2004) regained the necessary understanding of assessment as an important category, even though insufficient to produce learning, and they reinforced the emphasis on pedagogical work. It is time to withdraw centrality from assessment as the first goal of students’ and teachers’ effort, what has distorted the importance of the pedagogical setting in its completeness. The assessment crowns the work developed by the actors in different educational settings that favor meaningful learning. This is its place within a broader context, that is, the one of the university pedagogy.

The challenges of contemporaneity have magnified in complexity the university education and exposed the fragility of the traditional classroom setting and, consequently, of assessment. Being artificially conceived, assessment seems to reign paramount at school and, inadvertently, we help to perpetuate that reality.

Las políticas educativas de los últimos años, tomando nota de esa necesidad de romper con el modelo hegemónico homogéneo típico del momento fundacional de los sistemas educativos modernos, reconocen que es preciso encontrar soluciones pedagógicas diversas y adecuadas (en este sentido "racionales", es decir, adecuadas al fin que se persigue); y con ese objetivo se han explorado diversas estrategias: diversificación de la oferta (multiplicación de modalidades, recorridos, secuencias y métodos pedagógicos, etc.); fortalecimiento de las iniciativas de las instituciones para adecuarse a las particularidades (aliento a proyectos institucionales, autonomía pedagógica de los agentes y las instituciones etc.) y despliegue de políticas compensatorias para darle más a quienes más las necesitan y que pretenden romper con los clásicos criterios "igualitaristas" (los mismos recursos para todos y en igual proporción) de asignación de recursos escolares y extraescolares.

(Fanfani, 2008 p.189)

It seems comprehensible that, acknowledging the criticism of these limits, teachers call in question the assessment processes that they put into practice and that reflect the educational values which are at stake. That has generated fertile field for assessment processes innovation effort and point towards the portfolio as an interesting alternative, as it implies assessment ownership as an integrant part of a pedagogical work which aims at being reflexive and participatory.

Hernández (1998, p.100) refers to portfolio as a
Villas Boas (2005, p.295) highlights some characteristics that assess the use of such resource:

[...] the teacher and the student himself assess all activities carried out over a long period of work, taking into account the path thoroughly followed. It is neither a classificatory nor a punitive assessment, but rather the student’s progress which is being analysed. The entire student’s production is analysed: his last productions are analysed in contrast to his first ones, so that his progress may be perceived. This requires the portfolio construction to be founded on purposes whose formulation the student can be a participant of in order to develop the sense of "belonging."

According to Klenowski (2005), the self-assessment, the reflection and the student’s opportunity to unfold the process by which the work was built are expressed in the portfolio and they constitute the portfolio centrality. This means that the students are able to internalize more critically this new learning verification form, therefore learning to analyze the experienced process as well as its actions and contexts with greater responsibility (self-correction). They also learn to judge their own thinking, redefining it (metacognition), besides accurating the creativity, as the experienced process requires self-overcoming (self-transcendence). These joined characteristics may increase the subjects’ potential to a higher reflection level and to a more meaningful work production level. Due to its potential ability of producing in the future professionals new ways of thinking, enabling them to insert themselves into the labor world with social quality, this feature may contribute to a socially competent education (Sordi and Silva, 2008).

In accordance with Sordi and Silva (2008), "[...] the university education we have is affected by micro-decisions we make that show the coherence and the commitment to the collective project of which we are part." Is the faculty member aware of the entire work he helps to build?

Based on these ideas, it will be presented part of the lived experience in a course of study with a Bachelor’s Degree in Nursing whose learning assessment involved the portfolio production by students. The aim is to examine the power of the evaluation matrix provided by the teacher who subsidized the material construction process, explaining the adopted criteria in the course of study in order to ensure greater transparency of the desired values in the pedagogical work proposed. In the end, it will be highlighted some learnings and considerations from the experience.

**An assessment view at students’ portfolios: necessary learnings for a competent pedagogical mediation**

The increasing interest in the utilization of portfolios, used in courses of all areas and at all educational levels, exposes management weaknesses both of the students and of the teachers, who admit some uncertainty either in the process guiding and monitoring and in its production, what takes away the possibility of drawing out good results arising from that process. But after all, what characterizes a good portfolio? How to assess its quality? How to respect, interpret and judge the different ways of students’ production, which are an expression of creativity and authenticity that should be enhanced? How to avoid subjectivism delegitimize the learning assessment, culturally thought under a positivist optics?

According to our understanding, critic education needs to overcome complaining about what it seems to be dysfunctional in order to reach another level, without which the transformation action cannot take place. This reasoning is repeated in the use of portfolios. It is not enough to indicate the problems related to the portfolios: it is necessary an action which is able to provide subsidies that qualify their use. Therefore, it makes sense to examine how the portfolio assessment has been carried out.
This tough assignment got started from a reflection about a pedagogical action that culminated in a small research with university teachers from different areas, MA students in education enrolled in our course of study. We questioned them about the difficulties they felt in preparing their portfolios. This study involved the analysis of 24 portfolios created from 2005 to 2007. In the students’ productions, it was observed the preponderance of descriptive approaches, theoretically underpinned or based on common-sense, to the detriment of reflexive and contextualized traces. The study revealed both communication (difficulty in understanding the proposal and in meanings expression through alternative languages) and organizational (discipline in recording impressions and in time management) weaknesses, as well as the existence of an assessment culture regulated by a right/wrong pattern which interfered with the students’ free speech, who were worried to meet teacher’s casual expectations that were taken for granted.

When the data was problematized, multiple and mutual learnings were generated. The aim was to incorporate them in planning the Teaching Practice in Nursing course of study, delivered in 2007. It was decided to build a monitoring matrix of the students’ work related to portfolio in order to avoid spontaneity in the material correction or production, as that would hinder the objectivity of the assessment process. The establishment of an assessment matrix was negotiated and then applied to 13 students enrolled in the course.

In a meta-assessment experience of the teacher’s work, this study depicts the matrix contributions in the portfolio use by means of reflection upon the pedagogical mediation form carried out in the students’ production assessment process. The experience was guided by understanding assessment as a communication act targeting the production of new meanings for both students and teachers; in short, for the group involved in the teaching and learning process (Hadji, 2001). It was still assumed the knowledge conception as a social, collective construction, taking away the individualistic bias that is present in the assessment activities. Another reference point taken in leading the process was to decharacterize the portfolio as an assessment resource and enhance its formative potential, incorporating the portfolio in the pedagogical work.

The evaluation matrix was planned focusing on different dimensions: 1 ability of describing educational events selected to integrate the portfolio (power) and the explanatory reasons, which were pointed out by the student, reflecting expectations towards learning; 2 reflexive ability towards material; 3 student’s articulation ability in handling the material, correlating it with the theoretical bases indicated in the course of study and/or incorporated by active search for additional information and professional connections accomplished.

A material analysis on formal aspects (clarity and pertinence of the languages used, meeting deadlines and responsible acceptance of protocol improvement) was also prioritized. Likewise, it was valued the student's ability to socialize the work he had done and publicly defend his presuppositions. The matrix use helped the group to stay tuned to the innovation purposes and, divided into distinct phases, named learning stations, it allowed the dialogical praxis to be present, including, and above all, in the formal assessment processes. It was observed that the existence of these referentials led to the firmation of some teaching process organizing principles that constituted itself in complementary learning, apparently underlying the process.

Some results: new and multiple learnings
Exploring a little further the experience meanings, this part aimed to explain the emphasis of management matrix and portfolio assessment phases. Furthermore, by means of a dialogue with some theorists and with the reality of a praxis under construction, it was intended to make evident the contributions that this matrix has brought to the work developed in the course of study, making clearer the pedagogical agreement terms. In this manner, it was closed a deal of quality negotiated with the students (Bondioli, 2005), potentiating their involvement with the intended innovation and allowing them to situate themselves in the process.

In Phase 1, there is an invitation for explaining the professional and personal paths and their connections, as shown:
Management matrix and portfolio assessment

Phase 1 - Input memorandum - 0.5 points
- Explanation of the professional and personal paths and their connections
- Feelings/Values exposure ability
- Extrapolation of the personal presentation formal aspects
- Use of alternative languages
- Willingness to accept the proposal

The intention is in demanding for the student the possibility of sharing his trajectory, explaining and materializing through writing what makes him a subject in the labor world. At the same time, the activity provokes him to transfer to reality the visible and invisible interfaces among what he used to be, what he currently is and what he intends to be.

In other words, he himself realizes that his current and past actions are not disconnected from each other, neither from his surrounding contexts. Writing about his actions means translating their manifold meanings. This phase has a locating interest of the student in the course of study and allows him, in contrast, to recover in the end the progresses obtained, acting as a subsidy for retaking of both the student and the teacher.

As one thing is related to another concerning feelings and values exposure ability, it is understood that the core activity lies on the subject recognition of himself and of the other with regard to his performance in the world, that is, what gives meaning to his existence. Concerning this issue, Marx teaches that “Every time I look at what I did as not being me, or not belonging to me, I alienate myself. And alienation leads us to keep away from everything that is movement, that is dynamic, that is alive” (Marx, 1974, p.28). In the same direction, Cortella (2008, p.21) adds: "Every time that what you do hinders you to recognize yourself, your work becomes strange to you. People use to say: 'I'm not finding myself in what I do' because the work requires recognition - knowing again."

In this sense, exposing feelings and values with the freedom that writing allows will give the subject, when reading his writing, conditions to know himself or to wonder at himself with the possibility of rebuilding the writing. At the same time, it will give the reader the opportunity to understand his initial point of view and how much subjectivity exists in the words objectivity.

Evidently, this freedom is built in the work process that starts with the teacher’s pedagogy of caring to create a bond with the group/students and remain coherent with the discourse and with the commitment to use an emancipatory, formative and processual assessment.

The subject, in the writing process evolution, locates himself, finds his place in the group and, by extrapolating the personal presentation formal aspects, he has the opportunity to create links as well as to responsibly be part and take part of the collective work.

The collective work, in turn, does not take place just theoretically. It is necessary to experience it through another conception of work, of respect and of ethical behavior in human relationships. It requires new learnings, such as the one of the collaborative work. Under this perspective, Gramsci (1975, p.37) emphasizes: “[...] collaboration for a good and useful production develops solidarity, multiplies affection bonds and brotherhood. Each of us is essential, each of us is in his place and each of us has a role and a place.”

Thereby, when the subject writes his input material, he is stimulated and he perceives the enlargement of the range of possibilities in the alternative languages use. He can extrapolate his own limits and add games with pictures, poetry and sounds to the end of resignifying the word, the work and himself. In this writing, he has a chance to experience the interlocution with the reader, to express himself creatively. Moreover, by using other communication forms, he adds caution and desire to make himself understood.

[...] the open text receives those who are invited by him, offering them hospitality. [...] text hospitality and readers’ availability. Mutual self-abandon: condition of a double transformation. [...]

[...]
In reading, one does not search for what the text knows, but rather for what the text thinks, that is, what the text makes you think. (Larrosa, 1999, p.139)

At last, and with the same perseverance, the Phase 1 writing of the portfolio implies unconditional willingness to accept the proposal, since the entire work will be compromised if there is no such willingness. In this direction, agreements are not reached, the subjects do not get to know each other and the links are not created, therefore compromising the whole, making unviable the collective work nature and the possibility to recognize themselves as a producer of meanings and a knowledge constructor. Above all, it blocks the emancipation and the autonomy achievement processes, thus confirming Gramsci’s thought (1975) when he says that freedom for all is the only guarantee for having individual freedom.

Some students expressed themselves in the following way:

"Writing the memorandum helped me to rethink my choice for the Licentiate degree and what it means to be a health educator."

"All of a sudden I was forced to stop and to reevaluate my trajectory, and I got scared as I did not even know what to write about me."

In Phase 2 of the assessment matrix, the learning and teaching processes focus on the students’ writing that were deemed as significant for their learnings.

**Phase 2 - Work in progress: the significant writing of the learnings - 6 points**

**material selection**
- a.1 discernment to select events with a strong formative content
- a.2 existence of event articulation focusing on the pedagogical work

**b descriptive and contextualized skill towards the event**
- b.1 presenting evidence that justify material inclusion
- b.2 didactic and clear exposition of ideas
- b.3 macro and micro correlation
- b.4 event articulation with the professional work process

**c interpretative ability**
- c.1 material analysis surmounting the common sense
- c.2 use of a theoretical framework in order to underpin reasoning and argumentations
- c.3 expression in writing of the positioning valorative frame
- c.4 aesthetic skills mobilization to explore and place the experience meaning for himself and for the others
- c.5 comprehension and problematization of the selected event
- c.6 ability to investigate towards the event and its ethical and epistemological implications (formulating questions)

**d ability of reality intervention**
- d.1 action plan formulation to cope with the situation aiming at improving it or finding a solution to it
- d.2 accomplishment of contingent and practical projections with reality
- d.3 indication of necessary alliances to deal with the event
- d.4 social pertinence of reflections

**e text writing quality**
In this phase, the goal is to give concreteness to the work in order that it can be noticed the students’ progress appropriately mediated by reading the portfolio, converted into a teacher/student communication tool. It is not only about examining the student’s ability of carrying out materials compilation, but rather of his sensitivity to select materials with a higher formative potential, which proved to be useful for doing close synthesis of the course of study objectives, being able to reveal their motion by theoretical frameworks as well.

"Teacher ... what exactly do you want us to do? I feel insecure to choose what to put in the folder."

Although this learning station is divided into 6 parts and they correspond to the student's/group’s six-points grading scale, these parts cannot be dissociated interpreted. The student’s intellectual work process is gradually settled by the web of relations that he establishes in the methodic but non-mechanical compliance of this itinerary. It is worth highlighting that, in this movement, knowledge appropriation cannot move itself away from values and affections that make the experience significant, leading it to "touch" students in a special way. "What matters is not to expose or to explain the contents well: what matters is how they are understood, organized and integrated into a significant set of new skills and knowledge" (Zabalza, 2004, p.156). At last, there is an attempt to shift the axis of "education focused on teaching" to "education focused on learning." From this change can undoubtedly originate others, among which a new students and teachers relationship with assessment, understanding assessment as a mediation resource between their knowledge and their "not knowing yet" aspects, duly enriched by the intersubjective exchanges favored by the agreed pedagogical work form (Sordi, 2008).

“I was surprised when I start to think about what I had seen on the internship and the way I was learning how to work in a team in the the Baccalaureate. Intrinsically, I felt the precariousness of the nursing staff education due to the way the nurses think their team role. I myself had a way of looking at them that disdained their ability to think.”

Driven by the concern that this experience in the course of study teaches the students, through the portfolio production, how to produce meaningful learning and, as much as possible, strengthens the collaboration spirit among students with the work in progress, the pedagogical mediation that is carried out gradually fosters in students a reasoning towards the compiled material in an effort to articulate theory and practice, reason and sensitivity as well as micro and macro levels of analysis. It is understood that some instrumentation is necessary so that students can operate in another paradigm overcoming the school culture, which has been a culture of fragmentation and the utilitarian basis of knowledge. Inspired by Merhy (2002), it is considered of primary importance to subsidize students to the collective and individual learning process management they experience. The author teaches that it may be at one’s disposal at least three tools: work process network
analyzer, critical nodes and problem explanatory network, and decisory process co-management network for facing problems.

The network analyzer seeks to explore the purpose of the work meaning, explaining its addressees, the operation forms and the obtained results. It allows identifying the driving and the restraining forces to social actions and to work development based on the exposure of the motivations and positions among the involved actors. Taking part of a reflexive situation, the students, based on their own working practice, learn problematizing the nature of the problems, understanding the critical nodes as constraints, building explanations broadened by group contribution that help to circulate information, knowledge and values, helping building agreements that organize more professional actions towards reality. It is built an explanatory network of the problems that legitimate the priorities selection and uphold strategies formulation which consider that each actor knows himself and recognizes himself in the collective action, taking into account the interaction among allied, opponents and/or indifferent actors.

As placing the action in motion does not rely on a single actor, it is crucial knowing how to analyze governability. Thus, the collective discussion tends to broaden the success of the action, giving it more concreteness, with capacity of producing a positive effect positive for reducing the priority aspects of discomfort.

“I had not expected the teacher's feedback and that helped me to think better and deal better with my conflicts. The classroom debate showed me that various problems are common and that there are a variety of solutions for them.”

These articulated movements provide mobilizing accumulated practices and knowledge, negotiating conflicts and noticing uncontrollable factors associated with the problem but which are relevant to work. The third tool is triggered, implying that the co-management network, which involves a scenario construction where it is possible to develop collective references that raise the possibilities of intellectual supportive understanding, qualifying intervention upon social reality. It can be noticed, in conformity with Santos (2006), the commitment to a mediation guided by the edifying use of knowledge, overcoming the technical bias that conceals the choices impacts in people's lives. It is noticeable that the portfolio construction adds collateral learning to the course of study and that this potentiates students' ethical-political actions as well, giving social quality to their university education. It is emphasized the search to develop and to formatively assess the students' ability to perform contingent and feasible projections with reality, so that their critical ability to problems can uphold concrete actions and can draw closer to the unprecedented feasibility described by Freire, respecting the historicity principle which allows living the Pedagogy of Hope.

Carrying on the matrix explanation, it is observed that it indicates the learning station called "work exposure": shared syntheses that arouse and challenge students towards public socialization of their learning process, broadening their horizons through the incorporation of other views and reactions when confronted to what is exposed. This stage ends with the insertion of the course of study assessment, what, in turn, implies the use of any resources, except the one of the conventional oral presentation, in order to make evident the course of study impact on the students. Somehow, it sends them back to the input memorandum, revealing the aggregated values.

**Phase 3 – Work exhibition: shared syntheses - 2 points**

- a.1 presentation resources
- a.2 creativity of outline
- a.3 syntheses property
- a.4 commitment towards collective learning

**Phase 4 - Assessment session insertion - 1.5 points**
The process vulnerabilities are faced as an object of group reflection, constituted by students and teacher, giving them information and equipping them for the necessary qualitative changes. In this direction, the formativeness of assessment is equally revealed at the time of the somative process which demands the materialization of grading for fulfillment of the certification requirements. Given the fruitfulness of the reframed and experienced process through the students’ reflexive recordings in the portfolio, properly worked over time through the teacher’s mediation, there is a greater possibility to affect the subjects’ relationship with the assessment, removing it from the pedagogical setting centrality. Hence, it is built an assessment culture committed to learning, rather than just to getting a grade. From this care comes a good part of the success of the assessment innovation task which, as a rule, is recognized as a merely control activity over the subjects, targeting classification and ranking. The valuation transparency, which should be the relationship trace between the educational subjects, safeguards the possibility of a different look to assessment, recovering its educational dimension.

It is emphasized that this experience of offering a matrix which is able to translate the teacher’s intentions to the student, anticipating the values and the expectations which underlie the proposal, brought more clarity and safety to the students. At the beginning, they insisted on wanting to know which way they should do, inquiring on the right way to carry on the job. However, surprised by the lightness of the pedagogical work, the students gradually felt safe and gained free space in the process, exposing their ideas, coloring discussions and reflections with a rich blend of colors that enriched the results.

The teacher’s work was also optimized with the matrix use because, by simultaneously making intelligible the educational intentions, it allowed the teacher to monitor and assess his own work development, besides making possible its social control by the group/students.

It is time to acknowledge that learning is the result of a process in which the student participates and that pedagogical innovations are important. Nevertheless, besides the school conditions, it is necessary to rely on social conditions. And these interdependencies which exist among the educational development, the social development and the economic development of societies oblige reviewing the students’ reflection forms and reflection forms which can be presented mediated by the portfolios the students produce. Students need to reflect and, based on what they record in their portfolio, they can learn to read other dimensions which involve their personal reality as well as the social reality. Only a complete strategy of development (why not returning to the idea of a comprehensive development strategic plan with the necessary appropriateness of the current time?) may favor the development of a richer, more equal and more free society as well (Fanfani, 2008). Changing the assessment process also implies recognizing which political and economic reasons are responsible for a so positivist and exclusionary assessment culture. Democratizing the process implies explaining to the students, especially to university students, the historical contradictions which undergo this practice presented as neutral and that cannot be carried on in this manner.

Final remarks
Freire (1998, p.71) says: "the ideal is that, sooner or later, it is invented a way by which the students can take part in assessment.” Sharing his thought, the teacher’s work is the teacher's work with the students, rather than the teacher’s work with himself.

The matrix use helped the pedagogical mediation to remain coherent and objectified. It allowed planned interventions and intentionally guided by the commitment to generate students’ learning. It created a concrete basis so that the communication act between teacher and student remained guided by evidences. The assessment guided in this manner could be carried out with accuracy, incorporating the qualitative aspects richness, but yet without giving up the concrete base which
underpins rigorous assessment processes. In the same way it reinforced the idea that the portfolio use has the power to help students become autonomous and reach a higher-order thinking, as it triggers the characteristics of critical thinking (self-correction), of creative thinking (self-transcendence), and further of complex thinking (metacognition), providing the management basis and the portfolio assessment.

It is believed that these critical thinking characteristics were constituted in learnings for the teacher as well, giving him additional knowledge to develop a different view of assessment, the one which is qualifier of the pedagogical mediation aimed to be socially competent.

Without a new assessment culture, there will barely be triumph over fear to run the risk of getting out of the already known places - places which are so well known that take us to the same destinations. It is crossing time and that implies purging fear of making mistakes. It implies the ability to reexamine the innovation mapping in order to avoid taking it as something so simple that does not recognize the complexity of reality, or even as something so difficult that justifies the socialconformism which seems to be deeply introjected in a great number of teachers, impelling them to underestimate their possibility as social actors of producing changes able to improve the society in which we live.

COLLABORATORS
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