

FORMATIVE-CONSTRUCTIVIST VALENCES OF THE TEACHING PORTFOLIO*

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Abstract

The portfolio represents a complex assessment tool that includes the relevant outcomes of the students during a learning program. Starting from its role in the academic activity of the students, we aimed in this study to identify the specific aspects of this longitudinal method of assessment and to record, in a constative research, the way the students relate to the elaboration of the portfolio for the graduation of the psycho-pedagogical module specific to level I, License. The interpretation of their answers to the items of the questionnaire about the relevance and importance of the graduation portfolio is, in our opinion, a starting point in improving the subsequent instructive-educational approaches.

Key words: Assessment; Portfolio; Students.

1. Introduction

We start from the idea that the approach of the classical summative-certifying assessment has evolved, moving from assessment based on measuring certain acquisitions (knowledge, skills, abilities) to the integrative one (competencies – knowledge, abilities, attitudes). This transformation involves a different way of designing, different ways of checking, related to competencies. Thus, the educated person does not only display his knowledge, but also the quality of the training, demonstrating how he assembles them, contextualizes them, integrates them. The future teacher, having the landmarks of the competency to qualitatively build the portfolio of his own pedagogical training, will be able to support the students in using this tool of formative essence.

A teaching portfolio is a personal collection of documents/products and reflections on the students' motivation and interests, learning power, ability to systematize knowledge and the best school results. Understood as a "business card" of the student, the portfolio involves a personal approach, based on key competencies, which presents the most important and representative academic products for each student. Representing a kind of biography of the student's work,

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the portfolio aims at planning and developing the important parts of the academic activity, as a center of learning or research. Preparing a portfolio is time consuming and involves a lot of effort. Therefore, we specify that students need the support of teachers in the planning and organization of documents, the selection of the most relevant or representative materials, as well as counseling in motivation (general and personal) and self-assessment.

We believe that the e-portfolio increases the visibility of the presentation and the objectivity of the assessment of the student's professional skills. In order to create an e-portfolio, it is necessary to have a continuous, complete information related to the students' questions/ ambiguities, as well as to organize common activities in which students share (synchronously and asynchronously) the experiences gained during the training program. We believe that the students' attitudes towards the e-portfolio are an important criterion in the choice to use technology in instruction and that there are positive attitudes of the students towards the use of e-portfolios. However, if the students do not accept the e-portfolio as a holistic means of documenting their learning in different contexts and do not want to use the e-portfolio as an integral part of their educational experience, then the potential impact that the e-portfolio could have on learning will not be accomplished (Tosh *et al.*, 2005).

It is estimated that “most authors argue that when planned and implemented adequately, the portfolio-based assessment may foster personal and professional development” (Popescu-Mitroia *et al.*, 2014). We argue that portfolios can thus help future teachers to understand complicated phenomena of their own learning process and to develop a reflective, interrogative attitude.

2. The specifics of the teaching portfolio

2.1. The formative and constructivist value of the teaching portfolio

Being a tool in demonstrating the learning expertise, the portfolio is a collection that shows the intention of the efforts, the progress in the learning activity and the research products made by the students. We believe that, first of all, a portfolio can demonstrate what students are able to do, providing tangible evidence of their skills in planning, organizing, decision-making, problem-solving. Because it takes over, through some of its elements, functions of other evaluation tools that “melt” in the whole of this method, it has an obvious formative value (Cucuș, 2002). Secondly, it can create an atmosphere of self-reflection and can be a pretext for self-assessment. In this sense, it is stated that “an important function of the portfolio is to help students build their own knowledge and then discover their own strengths and weaknesses” (Brawn & Adams, 2001, p. 189).

The use of the portfolio in education is strengthened by the constructivist vision of learning. We state this under the conditions when the reporting to the portfolio can be done either in connection with its construction (material data, products that were collected and elaborated in time, during the training program), or in connection with its presentation (seen as a photograph showing a certain moment during its realization).

In essence, “portfolio building provides a balance between formative and summative assessment and student progress throughout the phase can be monitored through the portfolio. It particularly supports the curriculum outcome relating to aptitude for personal development and the reflective process necessary for this outcome” (Davis *et al.*, 2001, p. 364). From a constructivist perspective, students build their own knowledge and skills by interacting with the environment. They acquire new knowledge cumulatively, that is, on the basis of what they already know and in relation to the actions they are capable of. Their learning is self-regulated because they manage their own learning process and head it towards the goals.

We find that the views on assessment have changed, moving from “test culture” to “assessment culture” – an innovative one, used in constructivist learning environments (Birenbaum, 2016). In recent years, special attention has been paid to the implementation of technology in the development of the teaching portfolio. We are referring to e-portfolios, which are gaining more and more ground in evaluation. E-portfolios allow information to be stored, accessed, updated, and presented in various electronic formats as a record or evidence of student learning and achievement (Chau & Cheng, 2010; Gaide, 2006).

The e-portfolio has a number of advantages: it promotes reflective practice because it becomes a tool for participants to reflect on their teaching experience (Liu *et al.*, 2017); it increases student motivation and responsibility (Davies & LeMahieu, 2003); it helps students find connections between the disparate things they have done or learned, creating a coherent sense of their own learning experiences (Kimball, 2005). We believe that they encourage the creation of connections between the process and the product, focusing on what happens in learning and how learning manifests itself (through the products made).

The electronic portfolio is a type of portfolio, as useful as the paper one. The hybrid portfolio is added to them. In a comparative analysis, S. Nastea (2013) states their specificity, through the answers to the questions: What? (description), How much? (volume), How? (accessibility of materials/ access restrictions), When? (time) and Where? (storage and security).

There are different types of portfolios, according to different criteria. For example, P. Jalbert (1998, pp. 37-38) makes the following classification:

a) The portfolio as a continuous support for learning (students regularly add documents to their collection, write observations about texts or books read, rearrange the content, all these activities giving rise to discussions with the teacher or other colleagues);

b) The portfolio as a presentation file (serves to show the best works, having an effect on the students' motivation and self-assessment skills);

c) The portfolio as a way of assessing learning (it is used to review learning at the end of a stage or at the end of the school year).

We can talk about the portfolio as a process (it demonstrates the evolution over time, from a plan to the final stage of the paper) and the portfolio as a product (focused on the best products of the student).

In other words, we can identify the following types of portfolio:

a) Depending on the moment when it is being drawn up: of presentation or introductory ones (they include the most important works, documents, normative documents that are required to be known by the students), of progress or of work (what they underline more is the constructive intervention of the students consisting of the elements used during the activity) and of evaluation (they include objectives, strategies, evaluation tools etc.);

b) Depending on the purpose: of celebration/ ceremony (they are only meant for actual evaluation with a very broad meaning; they prove the collections), of development (they actually invite to evaluation, since they have as a goal the study of a skill development), of skill (they prove in a more emphatic manner the level of development of a skill);

c) Depending on the theme that forms the object of the portfolio: of the class, of the teacher, of the students etc.

The advantages of the teaching portfolio are connected to the essence of constructivism: emphasis on the student who learns; the inclusion of knowledge in the direct action of exploration through individual and social knowledge; learning based on understanding, search, construction, self-interpretation, non-linear; emphasis on mental operations of processing, organization, schematization, balancing; emphasis on concepts-constructs, on wide, varied interpretations, suitable for the formulation of hypotheses, questions; focus on internal motivation, intellectual satisfaction; the use of self-knowledge, critical self-analysis; reporting to how much students are interested in research, etc. (Joița, 2006, pp. 81-86).

From a formative and constructivist perspective, the portfolio has a series of advantages, among which we remind:

- It proves what the students know and what they are able to do;
- It offers the students the possibility to self evaluate;
- It engages the students in real life situations (they have practical, social, economic significance and implications in the moral education);
- It expresses the school evolution and it stresses out the results of the student's learning;
- It provides tangible proofs of the understanding ability, of the problems setting, of processing and interpreting the school contents;
- It stimulates and develops the student's creativity;
- It allows the identification of possible errors;
- It emphasizes the student's skills;
- It promotes the overall development of the personality, through putting good use to the acquisitions from different study objects;
- It stimulates the student's responsibility, through freedom of choice of the themes and means of achievement.

Approached as a longitudinal method, the portfolio contains the materials that the students consider necessary, important in relation to the interest for a particular field, an information sphere. Being relevant for the student's creativity, it can include additional elements introduced in its structure: "at the teacher's recommendation or

at the student's choice, they can become composing elements of the portfolio, elements that had been previously evaluated" (Cucos, 2002, p. 387).

2.2. Particularities of the graduation portfolio for the psycho-pedagogical module

The presentation of the final portfolio by the students who go through the psycho-pedagogical training module is a performance, a criterion of appreciating the quality of the initial professionalization. Therefore, we consider that the whole approach of the gradual composition of the portfolio involves solving a real complex situation, in which the student-future teacher is placed. This means that the portfolio can include not only significant materials, but also their own interpretations, reflections on the procedures used, on obstacles and limitations, critical analyzes, hypothesis formulations, outlined projects, self-assessments, training expectations.

The structure or the elements of the portfolio are, generally, defined by the teacher. But the student has the freedom to include in the portfolio the materials that he considers necessary or that represent him the best. Although some elements of the portfolio were evaluated separately, at a certain point, by the teacher, an overall appreciation of the portfolio can be made. In these circumstances, the teacher established clear, holistic criteria that he communicates from the very beginning to the students.

The final evaluation portfolio of the initial professionalization for the teaching career of the students at the University of Craiova (who attend the psycho-pedagogical module) includes the following parts (Joița, 2007):

1. Part I. Criteria in accomplishing the initial training for the teaching profession

Part I opens the presentation of the portfolio. This includes:

- 1.1. The motivation to participate in the teaching professionalization module;
- 1.2. Own goals and expectations in training as a teacher;
- 1.3. Self-appreciation of one's own experience gained in achieving teaching professionalism;
- 1.4. Self-assessment of the final teaching portfolio, as a tool for initial training and summative assessment.

The way of completion should illustrate the professional motivation of the teacher, the objectives pursued, the elimination of prejudices regarding the teaching profession, the overcoming of inappropriate experiences, as well as other preparatory reflections.

2. Part II. Content and organization of materials

In part II, the student will include materials considered representative of the previous activity, through the educational subjects included in the specific curriculum. After reviewing the categories and examples of materials that can illustrate the achievement of the requirements of teaching professionalism, the students will select some of them.

In addition to the specific general normative documents (documents regarding the status of the teaching staff, extracts from the regulations for students or from those regarding the educational partnership, etc.), the important ones are:

a) The illustrative materials for one's own initial training experience (self-constructed learning tools – diagrams, tables, cognitive maps, graphical representations; study sheets, thematic bibliographic lists, annotated bibliographies; critical analysis of some curricular documents; lesson attendance sheets, accompanied by comments; materials on extracurricular activities or curriculum-specific ones at the decision of the school, etc.);

b) The materials regarding the professional self-assessment and the reflective training (question formulations, hypotheses, problem situations; critical self-analysis of presented projects; personal reflections on teacher roles, relationships with students, parents and community; own proposals for a student-future teacher journal; folder with free or argumentative essays, etc.).

3. Part III. Criteria self-assessment of key professional competencies

By self-assessing professional skills, the graduate becomes aware of the strengths and weaknesses of initial teacher training. By reporting to key competencies, the student can complete a self-assessment scale, based on four levels of assessment (Very Good, Good, Enough, and Insufficient).

4. Part IV. Portfolio presentation

The students present their portfolio to an evaluation committee. For a good presentation, it is recommended to prepare a presentation plan and a short argumentative speech. The requirements for the presentation include:

- Motivational aspects regarding the participation in the didactic professionalization module;
- Clear and concise specification of their own objectives and expectations in teacher training;
- Brief presentation of the results of the self-assessments included in the portfolio;
- Brief inventory of the contents of the portfolio.

5. Part V. The summative evaluation through analyzing the portfolio and its presentation.

In presenting the portfolio, the students need the support of the teacher. They do not always objectively evaluate their own performance, and the reasons are diverse. From the educational experience gained in working with students, we noticed that some students tend to underestimate themselves, while others overestimate themselves. But there are other reasons; for example, “when students have no or little experience with self-assessment, they have an incomplete frame of reference to base their decisions on, which may make their assessments less accurate” (Kicken *et al.*, 2009, p. 456).

We consider that for this reason it is necessary to specify some evaluation criteria (quantitative, but especially qualitative). In relation to the mentioned criteria, the students must offer from ahead of time the answer to certain questions. Among the criteria there are the following:

- Wholeness (it is about the minimum number of applicative works, materials, tools etc.): “Does the portofolio contain works, materials, tools that are specific to the studied themes?”

- Clarity: “Is the portfolio well organized?”, “Are the arguments brought up easy to understand?”, “Is the portfolio rightfully written from a grammatical point of view?”

- The documentation: “Were the used sources main or secondary?”, “Were the authors and the works where the piece of information was taken from quoted?”, “Is the information accurate?”

- The coordination: “Is each section of the presentation related to what exists in the portfolio?”, “Is there a logical connection between the chapters, the sections, the parts of the portfolio?”, “Does the documentation part support the presentation one?”

- The use of charts, drawings, layouts, maps, graphical representations: “Do the charts correspond to the school contents?”, “Do the graphical representations provide relevant information?”, “Do they help the other understand better the portfolio presentation?”

- Resorting to reflection: “What is the importance of the information included in the portfolio works?”, “What can be said about the student’s own activity, about the work performed in order to draw up and present the portfolio?”

- The use of the audio-video teaching means in presenting the portfolio: “By means of which a teaching method can transmit easier and more convincingly the content of the works included in the portfolio?”

- The communication within the portfolio presentation: “On what elements there must be laid emphasis in the introduction, content and conclusion?”, “Is a coherent, logical language used?”.

D. M. Frazier and F. L. Paulson (1992) presented the view that portfolios can be a source of motivation for students, as well as a means of promoting self-assessment and self-understanding. These aspects are better assessed through the portfolio than through other evaluation methods. In relation to these evaluation criteria, we find that the evaluation of the portfolio allows the evaluation of complex and difficult-to-understand constructs, which are sometimes impossible in conventional evaluations.

3. Research methodology

Participants

The sample of our research includes a number of 84 students of the University of Craiova, at the end of their third year (2022), level I (license): girls = 39, boys = 45.

The purpose of the research. Objectives

Being a constative research, we aimed to identify the answers given by the students about the way they relate to the final portfolio. Specifically, we aimed to find out if it is considered effective by the students at the end of the psychopedagogical training at the level of undergraduate studies.

Of a diagnostic type, the research objectives aim at:

- Specifying the formative and constructivist nature of the teaching portfolio;
- Identifying and analyzing the answers of the students who form the sample of this research;

- Outlining future directions for action on developing and presenting the final portfolio.

Procedure

We applied a questionnaire to evaluate the efficiency of the graduation portfolio of the psycho-pedagogical module, level I (license). In relation to the obtained answers, we made critical assessments and identified the strengths and weaknesses.

We used the Lickert scale: 5 = totally agree; 4 = agree; 3 = uncertain; 2 = disagree; 1 = total disagreement.

The questionnaire includes the following items:

Item 1. Building a portfolio is a worthwhile learning experience.

Item 2. Building a portfolio gives me a sense of accomplishment.

Item 3. I understood well how to make the portfolio.

Item 4. Building and presenting the graduation portfolio of the psycho-pedagogical module is an important stage in my training as a teacher.

Item 5. The portfolio contains too many documents and requirements.

Item 6. I would have liked more freedom in selecting the materials included in the portfolio.

We must state that the students have been informed of the specific requirements of all the stages or parts of the portfolio. In order to simplify the requirements and better systematize them, the training on developing and presenting the final portfolio focused on the following issues:

A. Carrying out the initial training:

- Motivation to participate;
- Own objectives and expectations;
- Self-appreciation of one's own experience;
- Portfolio self-assessment.

B. Types of application works included in the portfolio:

- Argumentative essay on a topic in the field of psycho-pedagogy;
- Review of a work in the field of psycho-pedagogy, according to a given structure;

- A didactic project (lesson project);
- Psycho-pedagogical characterization sheet of a student;
- Case study on student class management issues.

Based on the specific topics of the educational disciplines covered in the three years of bachelor's degree and the recommended bibliography, as well as in relation to the structure and models offered to the students in these applied works, they were able to develop their portfolios in optimal conditions. Because they were done over time, at the end of the training program, the students were encouraged to systematize and improve them. They were able to capitalize on the feedback provided by the teachers during the three years of study, as much as they took into account the suggestions and comments of the evaluators.

The students were encouraged to give the portfolio a personal touch, including suggestive images, quotes representative for each subject. In order to strengthen their

personal contribution, they had the opportunity to add a series of personal comments and reflections after each paper.

After completing the portfolio, each student uploaded the portfolio in electronic format to the Student Record (online). The evaluation of the portfolios is done by a commission established at the level of the Department for the training of the Teaching Staff, according to the above mentioned criteria.

4. Results and discussions

We further present the centralization of the answers given by the students.

Item 1. Building a portfolio is a worthwhile learning experience.

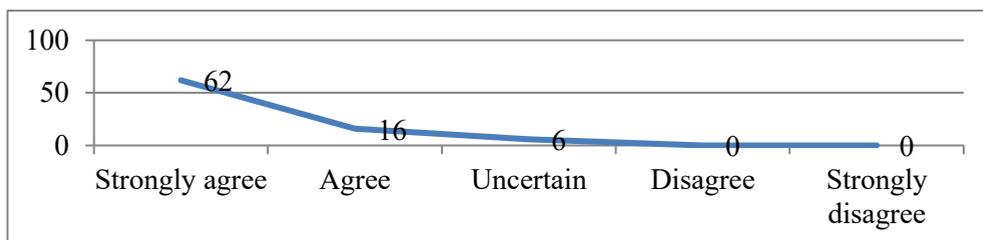


Figure 1. The usefulness of creating the final portfolio

To a large extent, the students consider the development of the graduation portfolio to be a useful learning experience. Among them, 73.81% strongly agree on the usefulness of this learning experience. We believe that if students find it useful, then they will use the portfolio in the future (as master students and future teachers). The value given to utility can predict the performance. In the CANE model (Clark, 1998), in which commitment includes personal agency, emotion, and task values, utility is an aspect of the third factor (along with interest and importance).

Item 2. Building a portfolio gives me a sense of accomplishment.

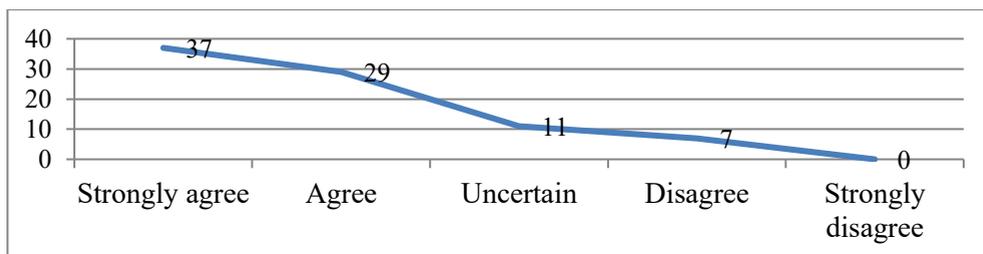


Figure 2. The presence of the feeling of accomplishment

The perception of the feeling of accomplishment enters the sphere of personal efficiency, of academic satisfaction. 66 students (78.57%) agree and totally agree that this portfolio gives them a sense of accomplishment. The number of those who

do not agree with this aspect is small (8.33%), which entitles us to say that the inclusion of the graduation portfolio, as a method of final evaluation, provides support for obtaining academic satisfaction. The feeling of accomplishment is an element of job satisfaction (along with autonomy, impact on the others, lifelong learning, the opportunity to use skills) and falls into the category of inner rewards (Busch, 1998, p. 140).

Item 3. I understood well how to make the portfolio.

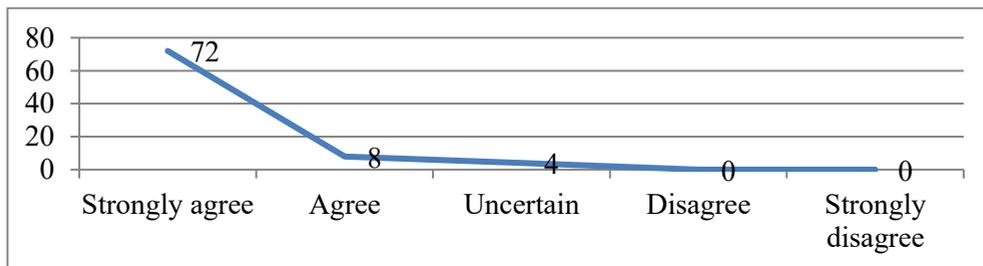


Figure 3. Understanding the training done in order to develop the portfolio

The fact that 95.24% of the students stated that they understood how to make the portfolio, it results that the teacher's instruction is effective, and the teacher's answers and explanations clarified the students' questions or ambiguities in time.

Item 4: Building and presenting the graduation portfolio of the psychopedagogical module is an important stage in my training as a teacher.

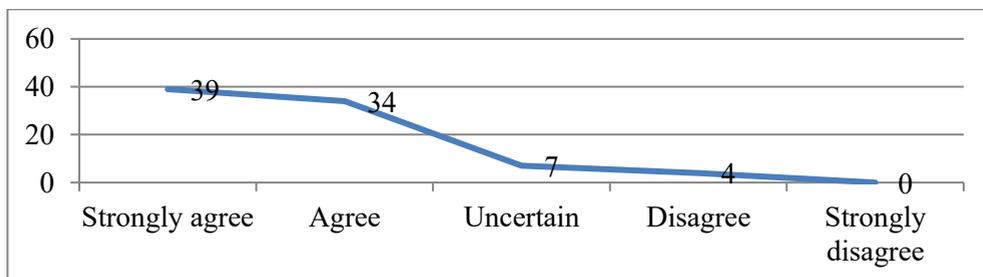


Figure 4. The importance of the graduation portfolio in teacher training

The analysis of Figure 4 shows that not all students consider the final portfolio to be an important step in their training as teachers. Among them, 8.33% express uncertainty, and 4.76% have a different opinion. We agree with M. Imhof and C. Picard, who state that: "Individuals with a strong proactive attitude tend to find the portfolio more important and more useful than individuals with a weak proactive attitude" (2009, p. 152).

Item 5. The portfolio contains too many documents and requirements.

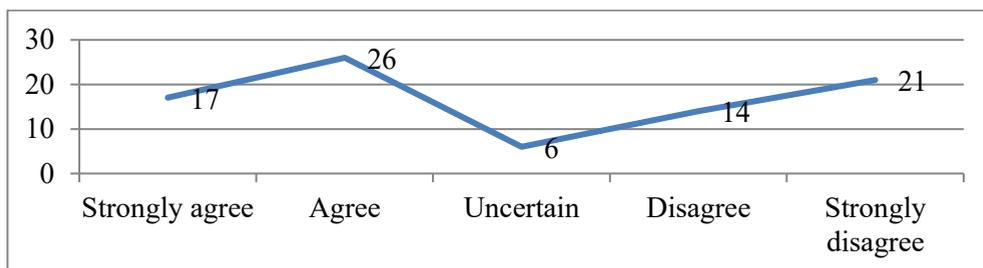


Figure 5. Reporting students to the number of documents and requirements

As shown in Figure 5, the students relate differently to the number of documents and requirements. Some of them (54.76%) consider that the number of required documents and requirements formulated by the teachers are too many, and another part (41.67%) consider that the number of requirements and products of their activity is balanced. We agree with B. McDonald's observation that "if students consider that portfolio assessment is another way of decreasing teacher work and simultaneously burdening them, they are less likely to benefit from portfolio assessment" (2012, p. 343). Even if the specifics of the portfolio involve the inclusion of the products of their activity carried out over a longer period of time, this does not mean that the quantity must predominate.

Item 6. I would have liked more freedom in selecting the materials included in the portfolio.

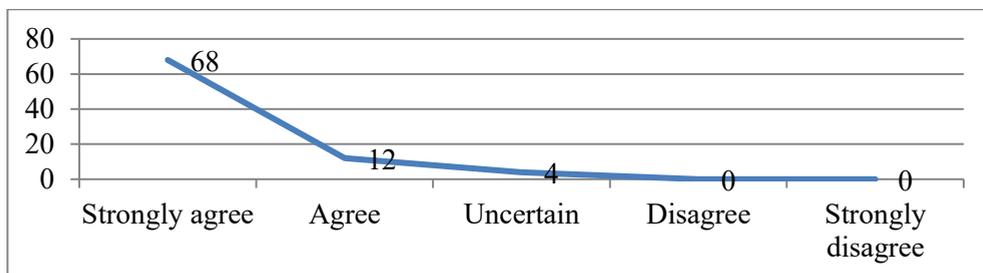


Figure 6. The students' freedom to choose the materials included in the portfolio

To a large extent (80.95%), students strongly agree with the idea that they do not have enough freedom in selecting the materials included in the graduation portfolio, which should lead to the elimination of some rigid rules for the content and format of the portfolio. It is appreciated that, "fortunately, there is an excellent remedy: an open structure as well as clear guidelines. The signs from research are

that students need to be at liberty to select topics that are meaningful to them” (Driessen, 2009, p. 280).

As we aimed to identify strengths and weaknesses, the students' responses were the starting point in making these assessments related to the efficiency of the graduation portfolio. Strengths include capitalizing on personal contributions, highlighting original application papers, and building the capacity for reflection and self-assessment. Among the weaknesses, we specify the prevalence of quantitative aspects and the emphasis on dirigisme in choosing the products of the the students' activity.

Regarding to the directions we are aiming for, we believe that the following should be given priority:

- The implementation of the hybrid portfolio;
- Including in the portfolio the notes of the teachers, colleagues, tutors of pedagogical practice;
- The insertion of current control sheets containing various comments related to the frequency, participation in teaching activities, but also the quality of the work assignments;
- Reporting to the references and reviews of other teachers, of the tutors of the application school, of the representatives of some organizations or associations in which the student was involved during the completion of the psycho-pedagogical module.

5. Limits and recommendations

According to the feedback received from the students included in our research sample, the teaching portfolio is an effective assessment tool which contributes to the initial professionalization of the future teachers.

Among the limits of this study are: putting into the background the aspects related to the presentation of the students' portfolios; the absence of a follow-up in time of the process of elaboration of the graduation portfolios; lack of correlation or association indicators between development and presentation, between interest in work tasks and results, between motivation and performance. A comparative analysis of the paper portfolio, the e-portfolio and the hybrid portfolio could provide not only theoretical details but also practical aspects regarding the advantages and disadvantages of these portfolio types.

Although the requested information materials are the very application papers that students develop during the training program, we suggest a selection of them, depending on the preferences and interests of the students. We recommend that they be given more freedom in choosing the products of their activity, so that they can present only very good works, relevant from their point of view (which have brought them great satisfaction or which contain a personal approach, original contribution - theoretical or practical, etc.). We also believe that the portfolio should include group or team work, products of previous teaching activities, as well as results of non-formal activities, important in the initial vocational training approach.

6. Conclusions

Based on the findings in pedagogical practice and in relation to the theoretical studies that address the teaching portfolio, we mention that among the most important conditions for its effective achievement is the attitude of the students towards this assessment tool. If we refer to the final evaluation portfolio, such as the one for graduating the psycho-pedagogical training module, we state that the attitude of the students towards it is formed over time, during the three years of bachelor degree, and depends on a number of factors. As J. Lombardi states, “attitudes toward portfolios depend on stance, history, and perceived value” (2008, p. 8). We add the previous experience in developing portfolios, as well as the freedom given to students in developing and presenting.

The portfolio remains a modern evaluation tool. In order to be effective for the students, it is necessary to be aware of its importance, to clearly establish the purpose of the portfolio, the requirements and materials included. On the other hand, the real impact of the use of the portfolio on the approach to learning and teaching, as well as on professional development, through the changes brought in the pedagogical practice, as a result of meaningful learning, counts. The constructivist adopted approach is reflected both in the self-appreciation of one's own experience gained in the achievement of didactic professionalization, and in the self-appreciation of the final didactic portfolio. What matters is the construction of the products of the activity, the apprenticeship in elaboration, but also their systematization, essentialization and presentation at a professional level.

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