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"EDUCATION, REFLECTION, DEVELOPMENT" DOCTORAL SCHOOL

DOCTORAL THESIS

SUMMARY

EDUCATIONAL ASSESSMENT ACTIVITIES MANAGEMENT FOR STUDYING 2ND GRADE MATHEMATICS

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Educational Assessment Activities Management

For Studying 2nd Grade Mathematics

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Key-words: Assessment-Curriculum, Assessment-Learning, Assessment-Monitoring, Assessment Dynamics, Self-Assessment, Formative Assessment, Summative Assessment, The Cumulative Point of Formative and Summative Assessment, Assessment Activity, Process, Value Codes, Competences.

ARGUMENT

The doctoral thesis entitled ***Educational Assessment Activities Management For Studying 2nd Grade Mathematics*** has the purpose of structuring a theoretical and methodical framework of the didactic assessment management in general and the formative assessment in particular, adapted to the specific of the subject.

The essence of the theme derives precisely from the power of harmonizing the management, assessment and assessment management elements, through their relation with the development of competences, with the requirements of the current Curriculum and the preoccupations regarding this field determining numerous studies.

Taking into consideration the multidimensional reform of the Romanian school system which determines changes throughout all structures and compartments, the assessment, being a strategic part in this system, is also undergoing forming and development-related changes. The variety of intervention strategies both at the central level as well as in the professional practice of faculties determines us to fathom the study of the assessment theme in the context of an optimal, applied management in order to discover modalities of influences, facilitation, accessibility of learning, of monitoring the quality of the work tasks performed by students and of registering their progress. The study lays on the bearing of planning, selection and coordinating the didactic actions, and it implies commitment, optimal relation and specific manifestations, adapted to specific educational environments.

The structure of the doctoral thesis ***Educational Assessment Activities Management For Studying 2nd Grade Mathematics*** has five chapters, preceded by an argument and followed by conclusions, a part dedicated to the bibliography, as well as annexes.

Chapter I, *The Management of Evaluation*, follows the theoretical path from the shaping of some defitions and terminological areas concerning management, to the approaching of the general and particular educational management and to the field of formative assessment management, in which every partner, professor, student or parent is equally involved.

Within chapter II, entitled *The Theoretical Framework of the Didactic Assessment*, we deal with the issue of assessment starting from the general aspects of the assessment as defined by various authors and renowned pedagogues to its construction as a well-dimensioned process with varied functions and opportunities, as well as with highlighted successes and errors. The evaluation in itself represents more than the stage of a simple activity, as it can be an empowering, motivating factor, as well as a disrupting one, if its management is imprecise, misguided, general and theoretical. The application of this formative assessment in the field of mathematics is shaped in chapter III, *Mathematics, a Field of Study in the Primary Educational System.* It is a complex field, one which for many students started to be difficult to get through. The field and the period were specially chosen for their complexity and importance in the students' life – Mathematics, due to its basically compulsory nature to the day-to-day practice, and the period of the 2nd grade as it represents the finalization of a decisive stage in the life of the primary student and the cycle of the fundamental knowledge acquisitions.

From this point of view, the chapter entitled ***The Organization and Achievement of the Research Topic "Educational Assessment Activities Management for studying 2nd Grade Mathematics – Developing and Experimenting the Formative Portfolio"*** presents the developing of a pedagogical experiment during the school years of 2014-2015, 2015-2016, after choosing an experimental sample and some control classes. The basis of the research was facilitated by the reflecting upon some important and essential concepts for showing the real value of the formative assessment. Firstly, its relation to the learning process, as *the assessment represents a manner of learning in itself*, an interiorized, conscious and centred learning process, actuated by external, motivating factors. What is more, in the context of learning we re-position the assessment in the forefront; we re-discover the assessment in a more nuanced manner, as integrated in the process of learning, as a procedural construction which dynamites the path of learning. This determines the idea of an instrument which cumulates integrant components, which offers informational acquisitions, which is defined through continuity in the global reflection, but also in the individual reflection of school performance.

The formative portfolio guides the conscious covering of the formative assessment, fundaments the discovery of some beneficial relations to the learning path and to the accomplishment of school performance. This instrument represents the image of the formative

paths embodied in the value level, the symbolic self-assessment, the gained information, a permanent feedback which is exploited for the benefit of the learning process.

The dependable variable, *the level of the educational results*, lays at the core of chapter IV, destined to the research, where, on the basis of the studied thematic units and followed competences, the modalities of awarding value codes during the assessment path is presented in a structured manner, along with the frequency influences, the variety/diversity of formative assessment upon the school progress, the registration of the percentage intervals of students' progress, the influences of the assessment path upon the summative path (students with a positive evolution), the modalities of foundation of the followed competences, in a comparative manner concerning the assessment and summative path.

Chapter V within the doctoral thesis, *The Interpretation of the Research Results and the Verifying of the Validity of the Formative Portfolio*, centralizes from a theoretical, methodical and practical point of view the experimented aspects and validates both the independent variable *(The Formative Portfolio),* as well as the two dependent variables (the quality of the activities performed by the school faculty and the level of the student's results).

The doctoral thesis entitled ***Educational Assessment Activities Management For Studying 2nd Grade Mathematics*** comprises, at the end, the annexes which present in details the applied instruments, as well as images of the modality of application of these instruments. The models were conceived on the basis of the studied theory, and integrate characteristic methodical aspects for the formative path, embracing new ideas structured according to an own mind-set. They experimented during the research period and this confirms their applicability, recommends and certifies them.

As a conclusion, the doctoral thesis entitled ***Educational Assessment Activities Management For Studying 2nd Grade Mathematics*** underlines the importance of an adequate *management*, adapted for the *formative path,* through the *Formative Portfolio*, which is not just a simple *instrument*/*document*, but also a continuous reflection of the learning path, an indicator of the dysfunctions, a bridge which directions towards adjustment, correction and which facilitates the summative assessment.

CHAPTER I

THE MANAGEMENT OF THE DIDACTIC EVALUATION

In his work entitled *"Introduction to the Educational Management"*, author Nicolae Stan states that " From an etymological point of view, management is the equivalent of holding in hand and possessing, commanding with a ferm hand, which implies the idea of the action's control and its orientation or direction. The word management, borrowed from the English language in the shape of the "*to manage*" means to administer, to rule. It was then derived in the English manner in the form of manager and management, which means leader or leading." *(*Nicolae Stan, *Introduction to Educational Management,* Didactică și Pedagogică Publishing House, 2010, page 1*).*

Personal approach

Management is defined through the complexity of the undertakings performed with the purpose of a projection, durable and efficient organizing, by taking into consideration the implied factors, the action foundation of an adjusting educational path which aims at an accessible learning and continuous development.

The essential terms which found a qualitative educational management could be concentrated in the following ideas: the perspective of the educational path, the binding of the conceptual area with the action one, the action foundation as a reflection of the theoretical approaches, a process subjective to adaptation, innovation, adjustment, efficiency, the human factor mark, influence, decisions previously analysed and applied in an efficient manner.

The approach of the action directions implies a constant need of revision, upgrading, modifying, and a real support for innovation. Thus the performance, adjustment and the correction generated by the evaluation are based on team work characterised by communication, involvement and feedback functioning.

The key-words of the optimal direction of assessment would be *the process's communication and assessment.*

The Management of Formative Assessment

The evaluation management implies the issue of the *balance* between the formative and the summative assessment. While the summative assessment has the purpose of certifying the student's performance, the formative assessment has the role of modelling, provides the necessary support for the student's progress along the learning path. The determining of the standards does not bear the sole significance, but also the providing of proper conditions

within which student can face these expectations. The power and positive influences of a well-shaped formative assessment were studies by Paul Black and Dylan Wiliam. Studies have shown that the formative assessment *improves the learning process in a considerable manner*.

CHAPTER II

THE THEORETICAL FRAMEWORK OF THE DIDACTIC ASSESSMENT

Assessment – Defining Perspectives

Assessment is not specific to the educational field, but is met in all activities performed by human beings. The assessment in general, its necessity, its role and importance in the educational process, have generated the need of inventing a new branch of Pedagogy, called Educational Measurement. We generally associate this important term with those of *Docimastic* and *Doxology*. If the Educational Measurement is the science which studies exams and their grading system, Docimastic focuses on the exams' techniques and Doxology on the role of assessment in the school education.

Principles, Landmarks of Self-Assessment and the Didactic Assessment

PhD Associate Professor Cristian Stan shows that the forming of contemporary educational systems implies also the re-structuring of Educational Measurement, also taking in consideration the high expectations which society in general and people have concerning the educational institutions. From the analysis of the history of the *Educational Measurement* term which was performed by the author results that even though the assessment was a permanent part of the educational process, the reflections upon this subject have only been made at the beginning of this century.

The place and role of the assessment in the educational process is reconsidered, as more and more specialists show an intimate connection between assessment, teaching and learning, highlighting the role of the assessment in improving the efficiency of the learning process. Specialists are concerned with modernizing the techniques, the assessment strategies and the shaping of some assessment politics at a national level. This cannot be possible if one doesn't take into consideration the student's self-assessment and the relation between self-assessment and didactic assessment.

If we analyse the student's educational path and its relation with the grades, we can mention that this is part of the status and role of the student. If in the beginning the quantity and number of grades are important, as the student perceive with more difficulty the

significance and value of a grade, later on, when they start to compare to each other, the evaluation start to be more and more correct. The terminal classes of students (classes previous to the starting of a different educational cycle) show a relative detachment towards the grades, as students are more focused on the priority subjects or towards what they want to undertake in the future. During the whole assessment process, of awarding marks and grades, students learn to assess themselves and manage to approximate the level of the possible accomplishments.

For the National System of Assessment in *Romania*, the last years have meant an orientation towards perfecting the methodologies of assessment concerning the conception, manners of achieving and fields, as well as exams, national tests, current assessment, training faculties and competent institutions (The National Service of Assessment and Evaluation).

As assessment is subordinated to the process of optimal and efficient learning, and the feedback has a benefic impact, the changes in the field of the educational practice are directed accordingly. *"The complementarity of traditional methods with new, modern ones"*, according to author Marin Manolescu, highlights *the alternative, the idea of process* and not of product in the assessment area. On the road of innovation also aligns the preoccupation for a careful selecting, diversification of methods, techniques, assessment instruments, addressing alternative methods, assessment samples elaboration using a varied range of items (objective, semi-objective, and subjective).

CHAPTER III

MATHEMATICS, A STUDY SUBJECT IN THE PRIMARY EDUCATIONAL SYSTEM

The Field of Mathematics in an International Educational Context

In the report entitled "*The Mathematics Learning System in Europe: Common Challenges and National Politics*", the responsible commissary for education, culture, multilingualism and youth, Androulla Vassiliou, refers in the opening statement at the competence in the Mathematics field, which was identified at the European level as being one of the keys competences for personal fulfilment, for an active citizenship, for social integration and integration on the work market in the context of the knowledge society of the XXI century. Studies show reasons of worry in what regards the performance and decreased motivation of the students in connection with the study of Mathematics. From this perspective, is is highly necessary that until 2020 the difficulties, problematic aspects and efficient

approaches should be identified. The above-mentioned report is a comparative analysis of the national politics regarding the re-examination of the Curriculum for the subject of Mathematics, as well as for promoting new methos of teaching and assessment. The report refers also to the support given to professors, to the practical application of the acquired knowledge, to the reducing of the number of students with a low knowledge acquisitions level in Mathematics, and to the increasing of the motivation among students.

The modern sense considers the Curriculum as an integrant concept and operates it by approaching the educational actions in a global and systemic manner. Thus, the meaning of intellectual and affective trajectory which the school submits to the student is kept, understood not in a traditional manner, but as an highlighted exploitation of the student's potential.

Within the cycle of the fundamental knowledge acquisitions, the subject of *Mathematics and Environment Exploration* is new compared to the subjects studied so far in the 1st and 2nd grade within the primary educational system. In the Curriculum, the subject of Mathematics and Environment Exploration is part of the curricular area of "Mathematics and Natural Sciences", and accomplishes an integrant approach of the concepts specific to the fields of Mathematics and Natural Sciences.

A progressive development of the competences, as well as of the other knowledge acquisitions gained by the students is followed, through the highlighting of the affective-attitudinal and action dimensions of forming the students' personalities. The syllabus for the subject of Mathematics and Environmental Exploration was structures as to promote a didactic enterprise centred on the developing of some incipient competences of the student's, with the purpose of building a foundation for a further deepening learning.

By analysing the curricular contents in a comparative manner for the school age correspondent to the 2nd grade in Romania and Great Britain, in accordance with the previous information, we focus on some aspects concerning the syllabus, its detailing on content, relations, but also on the mentioned methodological aspects.

CHAPTER IV

THE ORGANIZATION AND ACHIEVEMENT OF THE RESEARCH TOPIC *"EDUCATIONAL ASSESSMENT ACTIVITIES MANAGEMENT FOR STUDYING 2ND GRADE MATHEMATICS" - DEVELOPING AND EXPERIMENTING THE FORMATIVE ASSESSMENT PORTFOLIO*

The General Presentation of the Research

The research entitled "*Educational Assessment Activities Management For Studying 2nd Grade Mathematics"* with applying the Formative Portfolio (PF) is the result of the experience gained in the educational system, generated by the constant preoccupations concerning the field of the educational assessment, especially the formative assessment. In numerous cases, the assessment implies a multitude of sentiments, emotions, which can be sometimes constructive or otherwise less constructive. Many students have had negative experiences duet to their school assessment and have not felt its shaping and forming role. They have perceived it as simple act in which the performance on the spot was decisive and determinant, regardless of the previous accomplishments and successes. This research is founded on the desire and motivation to approach the educational assessment in a *specific, adapted* manner, more *productive* and with a higher *influence* upon learning.

The formative assessment for the subject of Mathematics is organically connected to the Curriculum (Competences, Contents, and Learning Activities). The structuring of the Curriculum starting with the general competences towards the Specific competences shows a preoccupation and concern for nuancing the general aspects in order to highlight the particular aspects, which are specific, individual and to ultimately achieve their operation. The path drawn by the Curriculum from general to particular in what regards the competences ensures the transition to the specific through some applicable contents, and through various learning activities. The relation between competences and contents, as well as its practical applicability are not sufficiently visible and relevant in the learning activities.

The Premises of the Research

The comparison between the *traditional* assessment with the *modern* assessment highlights the following mutations/variants: quantity and quality of the information, the student being the one verified or an active participant, procedures/modalities of assessment or the assessment process in itself, the reporting of the knowledge to a values scale versus the

integration of the assessment in the process of teaching-learning, finality or amelioration, the percentage of the summative assessment and the role of the formative assessment, the professor as a creator of the assessment or the student's partner during the assessment, process previously constructed and fixed or favouring self-adjustments, self-reflecting and dynamism.

The option for one or another is not necessary important, but the design of that formative path started from the desire to establish step by step *the pieces of a formative puzzle*, which can show us the student's performance, his manner of reporting to periods more or less far away in time, periods in which we were partners in the learning proves, we have completed each other, have permanently communicated and launched signals.

In itself, this research urges us to start with ideas, concepts, to put together elements in a construction which is apparently ordinary, but which lays on the need of a premature adjustment, of achieving the global/general from specific individual details.

The Formative Assessment – from Instruments to the FORMATIVE PORTFOLIO (Composite/Integrant Instruments Accumulation)

Such an accumulation of instruments in the *Formative Assessment Portfolio (Formative Portfolio, PF)* was born from the need to transiting the formative assessment in a conscious manner, with substance, so that it represent s harmonisation of functional elements. Many practical aspects of the formative assessment were dealt with in an isolate manner, without the shaping of some efficient relations, sometimes even without their discovery or detailed analysis.

The benefits of such an integrated instrument are presented in the centralizer below.

The Organization and Achievement of the Research Topic *"Educational Assessment Activities Management for studying 2nd Grade Mathematics – Developing and Experimenting the Formative Portfolio"*

The research was organized in three stages, these being: the pre-experimental stage, the experimental stage and the post-experimental stage.

The Purpose and Aims of the Research

The purpose of the research is the optimization of the activity of the faculties within the primary educational system and the assurance of the students' educational progress through the formative assessment focused on using some composite/integrated instruments in

the "formative assessment portfolio" for the subject of 2nd grade Mathematics and through the elaboration of a methodological guide. The composition of the formative portfolio associates known general elements with particular, differentiated or even specific elements for each subject/class/faculty.

The aims of the research are formulated as follows:

- **The identification** and **analysis** of the manners of performing the formative assessment by the faculties within the primary educational system for the 2nd grade Mathematics subject;
- **The projecting, construction** and **experimenting** of a formative assessment portfolio which integrates instruments and modalities of collecting, interpreting and exploiting results;
- The issuance of a methodological *guide* destined to faculties for the purpose of achieving the formative assessment.

The Formative Portfolio – from Idea to Application (from Projection to Application)

The conceptual basis of the design of the Formative Portfolio (PF)

a. Practical support of the formative assessment

b. Dynamic formative exercise

c. Reflecting the internal fluctuations of the formative assessment

d. The correspondence of the formative and the summative in the evaluation, landmarks and comparison

e. Progress Value Data

f. Value Associations

g. The comparison between the formative path and the summative stage from the point of view of the student's performance

h. The formative path as a fundament and motor of the summative stage

i. Self-adjusting instrument and qualitative and quantitative adjusting of school results

j. Modality of accessibleness of the professor's decisions

k. The formative portfolio as a pre-stage in issuing the Guide of formative assessment

The Hypothesis of the Research

The didactic research entitled *"Educational Assessment Activities Management For Studying 2nd Grade Mathematics – Formative Portfolio"* wants to demonstrate that the applying of a "Formative Portfolio" based on composite/integrated instruments is beneficial to the activity of the school's faculty in what concerns the following of the individual learning path and has a significant contribution to the learning optimization through the conscious perception of the students of the assessment process.

The hypothesis of the research is formulated as such:

For the 2nd grade Mathematics subject, **the application of the "formative assessment portfolio"** based on **composite/integrated instruments** contributes to the **optimization of the activity of faculties** within the primary educational system and to the **assurance of the educational progress** of students.

The Independent Variable:

The application of the "formative assessment portfolio" based on composite/integrated instruments contributes to the optimization of the activity of faculties within the primary educational system and to the assurance of the educational progress for 2nd grade Mathematics.

The formative Assessment Portfolio

From this independent variable two *dependent variables* are deducted, which direct in a harmonious manner the activity of the faculty and student towards the optimal and towards efficiency.

The dependent variables are:

- *The quality of the activities of faculty* belonging to the primary educational system for the 2nd grade Mathematics subject;
- *The level of the school results* for the 2nd grade Mathematics subject;

When building competences, the formative path has had a stronger influence in the case of the experimental sample, as the difference of added percentages amounted to 30,21%. As in what regards competence 1.1. (reading and writing numbers on the scale of 0-1000), in the case of the control sample the transition from formative to summative has not registered

increasing evolutions of students, neither at the superior level (well grounded), nor in the category of students which need practice. If the summative stage has inventoried a number of 104 students which have well-grounded this competence, the formative path amounted 108 students. If the formative path registered 32 students in need of recovery, assisted help, their number increased to 36 in the summative stage.

Competence 1.1. (Recognising even and uneven numbers) brings to attention a stagnation of the control sample in what concerns the educational performance.

This figure offered a *comparative and cumulative* representation of the formative process and of the stage of summative assessment. It shows in parallel, in value, the formative trajectory and its finalization through the summative stage/sequence. The value points accumulated during the formative process by each student were introduced, together with the results in percentages obtained following the applied summative test, in details for each student.

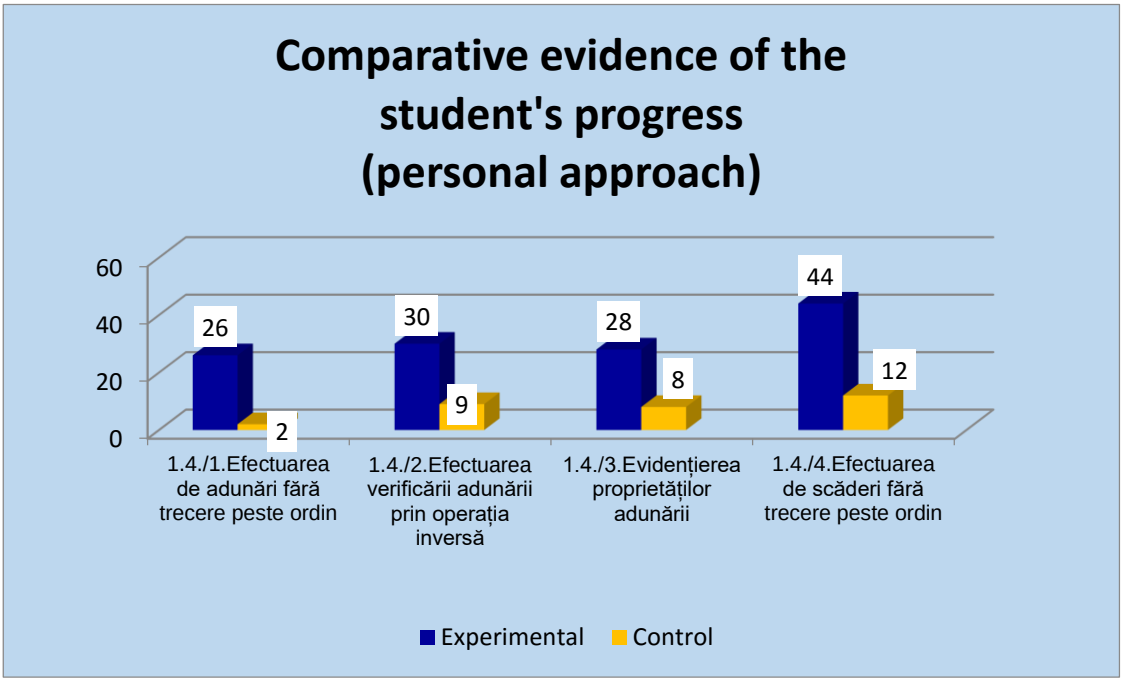
Indicators	*No. of students*	*Percentage*
The value predominance of the *formative process*	95	42,03%
The value predominance of the *summative stage*	87	38,49%
The value *difference* between the formative process and the summative stage is between the interval of 10-20 points	85	37,61%
The value *difference* between the formative process and the summative stage is higher than 20 points	37	16,37%
The positive influence of the *formative process upon the performance in the summative stage*	113	50%

Figure 63.IV. The Comparative Situation of the Formative Path and Summative Stage in the Experimental Sample (personal approach)

Personal analysis

The analysis of the correspondence between the formative picture with the summative picture was made from the perspective of five indicators (presented in the centralization above-mentioned) and their accomplishment was quantified both numerically and in percentages. I have analysed the percentage in which the formative path was dominant and registered a greater success through quality, consistency, value compared to the summative

stage. This aspect was noticed in the case of 95 students (42,03%). For these students, the support and permanent given help, the motivation and the received feedback facilitated the accomplishment of the work tasks. 87 of the tested students (38,49%) have had a better performance in the summative stage, which leads to the deduction that the careful preparation and covering of the formative stages have proven their efficiency in the finalizing stage of proving the manner in which the followed competences were grounded. The differences of performances between the two spheres of assessment, a procession one (formative assessment), and the other being a stage-driven (summative assessment) are not major in the case of 85 students (37,61%). Due to the focus of the formative process on content elements, on competences which where afterwards summative evaluated, the transition was more accessible and the results have truly reflected the finalization of a path. In the case of 50% of the students, the positive influence of the formative path construction upon the results of the summative stage was proven.



*Legend:

1.4./1. Performing additions without crossing the order

1.4./2. Performing the additions' verification through the reversed operation

1.4./3. Highlighting the properties of additions

1.4./4. Performing subtractions without crossing the order

The Post-Experimental Stage

The Final Test, Results Registration and Analysis

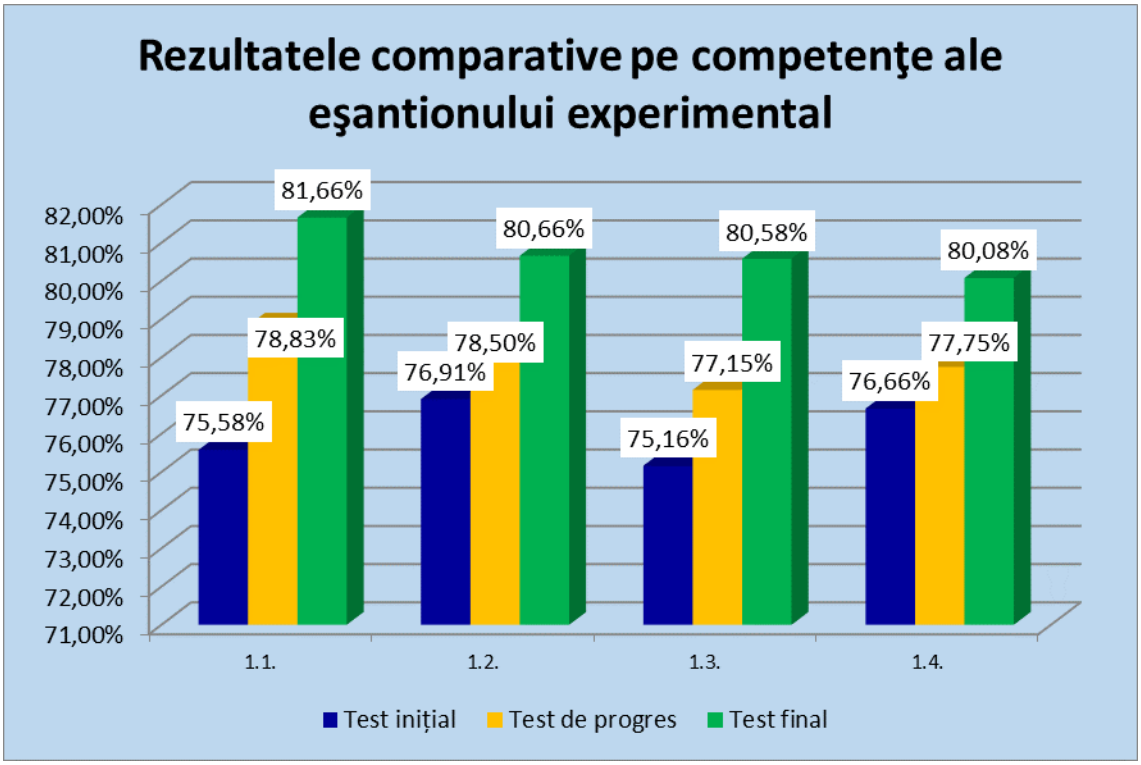
The final test followed the grounding of the researched competences (1.1.,1.2.,1.3.,1.4),which follow the recognition, forming, reading and writing natural numbers on the scale of 0-1000, the recognition of even and uneven numbers (1.1.), the comparison of numbers on the same scale (1.2.), the arranging of numbers, the positioning on the axis, performing estimations, as well as performing additions and subtractions without and with crossing the order on the scale of 0-1000. At the same time, the observation of the progress registered by the experimental sample during the formative stage was followed, from its debut to the summative stage.

The results obtained by the students in the experimental sample are presented structured in the following figure:

Competences	*Experimental sample*		
	Initial test	*Progress test*	*Final test*
1.1.	75,58%	78,83%	81,66%
1.2.	76,91%	78,50%	80,66%
1.3.	75,16%	77,15%	80,58%
1.4.	76,66%	77,75%	80,08%

Figure 78.IV. The comparative results per competences of the experimental sample

The comparative results per competences of the experimental sample



*Legend

Blue – initial test

Yellow – progress test

Green - final test

CHAPTER V

V.1. Interpreting the Research Results on the Basis of the Registrations within the Formative Assessment Portfolio (Formative Portfolio – (PF)

Verifying the Efficiency of the Formative Assessment Portfolio (PF)

For the purpose of verifying the validity of the Formative Portfolio, it is beneficial to reflect upon the theoretical and practical aspects defining it.

The first component is connected to the *conception* of the Formative Portfolio, a complex structure, made of composite/integrated instruments, in harmony and relating to one another. It concerns two important *spheres* of the assessment, *a statistical one* and another which penetrates beyond data and questions the *human factor*, orients it to be opened, to expression even though in a simple, symbolic manner, specific to the age.

The value *statistical image* is offered by the pictures which are part of the Formative Portfolio: the formative picture, the summative picture, the picture of the correspondence between the formative and the summative. The formative picture, as a main piece of the Portfolio, characterized by systematization, structuring has put into correlation the manners of assessment with the value codes. These applied value codes have represented the connection between the formative picture with the summative picture, have directed the formative assessment towards objectivity, towards adjusting levelling. The summative picture, as finalizing, as a sum of items and values, marked in percentage as graphically the situation of each student within the group, from the point of view of achieving the projected items. The detailing of the general in particular elements succeeded, concerning each item in particular. The meeting between the two forms of assessment, formative and summative, as comprised in this specific picture, has highlighted the predominance of one of these forms, but also a manner of self-analysis, a cumulated reflection of a process formative and summative built.

CONCLUSIONS

The PhD thesis entitled ***Educational Assessment Activities Management For Studying 2nd Grade Mathematics,*** *through the application of the Formative Assessment Portfolio (Formative Portfolio – PF)* approached the assessment management from the perspective of a fluent formative process, efficient and generating effects upon the optimization of the faculty's activities and the improving of the students' results.

The practical benefits of a registered formative path, analysed, with a devoted image of the staged performances are multiple and are proven by the dynamic of the modalities of assessment which were used, by the initial tests and progress tests which were applied, by the centralizing comparative situations which lead to the idea of the need of shaping a real/credible formative assessment proves, greatly improved compared with the practice of faculties in the primary educational system nowadays.

If the paper firstly assured the transition from the general management to the specific image, adapted to the formative management (the implications of the educational partners, teachers especially, as managers of the class) through a link of concepts and personal approaches, the second contribution concerns a *national harmonisation* and the establishment of *dynamic and pragmatic relations* of the sphere of the formative assessment in the 2nd grade Mathematics field.

The scientific innovation of this PhD thesis is the Formative Portfolio (PF), a practical support of the formative assessment, a dynamic formative exercise which reflects *the internal fluctuations* of the formative path, ensures landmarks and a comparison for the *correspondence of the formative with the summative*. The value data of progress with which it operates, the value associations and their combining with the content of other complementary instruments (the student's observation chart, the student's self-assessment chart, the student's and parent's questionnaire) assures self-adjustments and dynamic adjustments, with immediate effects, make the decision process more accessible and optimizes them through a favourable application. The professor's role is more clearly defined in harmony with that of the student's, and the importance of their commitment in self-assessment, assessment, quantitative and qualitative analyses.

The formative assessment and self-assessment means education and self-education, respect towards people around you and a reciprocal modelling of the human mind and soul.

Thus it can be discovered the hidden and concealed treasure of the immensurable capacity of the student's and the professor's.

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