

An Analysis and Reflection Pedagogical Toolkit Used in Induction Mentoring

Adina-Elena Glava, Letiția Muntean-Trif, Mihaela-Gabriela Neacșu, Alina-Georgeta Mag

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Adina-Elena Glava ^{a*}, Letiția Muntean-Trif ^b, Mihaela-Gabriela Neacșu ^c, Alina-Georgeta Mag ^d

^a Faculty of Psychology and Educational Sciences, "Babeș-Bolyai" University, Cluj-Napoca, Romania

^b Department of Teacher's Training, "1 Decembrie 1918" University of Alba Iulia, Alba Iulia, România

^c Faculty of Educational Sciences, Social Sciences, and Psychology, Pitești University Centre, The National University of Science and Technology POLITEHNICA Bucharest, Pitești, România

^d Faculty of Social and Human Sciences, „Lucian Blaga” University of Sibiu, Sibiu, România

*Corresponding author: adina.glava@ubbcluj.ro

Abstract

Keywords:

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This paper presents the outcomes of an innovative induction program designed to support beginner teachers during their first year of teaching. It emphasizes the mentoring strategy and the effectiveness of utilizing genuine pedagogical tools that were specifically developed to address the professional needs of new teachers. The induction program tailored for beginner teachers utilized a pedagogical intervention strategy and differentiated approach to develop a new toolkit for lesson analysis and for individual and group reflective activities developed in the classroom. The induction program provided reflects the professional perspective of a group of mentor trainers involved in the first systemic project that trained the teacher mentors at national level. These trainers developed a pedagogical toolkit that is beneficial for both beginner teachers and mentor teachers. Additionally, the program incorporates a remote mentoring model, which has a significant influence on new teachers' continuing development.

1. Introduction

Education is a dynamic field par excellence, and the continuous challenges that arise oblige teachers, especially at the beginning of their careers, to take responsible and informed reflective attitudes and approaches. Most of the time, the practical challenges go beyond the theoretical assumptions – classical and recent, and these considerations determine us, all those involved in teacher training, to accept the need for revisions and ideological resignifications, in order to keep up with the real needs of those in training, for the complex profession of teaching.

A group of 4 mentor trainers from university centres in Cluj, Alba, Pitesti and Sibiu joined forces to build and implement an innovative remote induction program, intended for beginner teachers in education, during 6 months of their first year of education. The group of beginners was represented by participants from 3 counties in Romania, along with a small group of volunteer professional mentors, who offered part of their expertise in dialogues organized as online meetings, throughout the program.

The motivation of the authors, which was the basis of the entire approach, was directly related to their deep understanding of the relevance of valuing the voice of beginning teachers, in order to be able to

genuinely meet their support and training needs in the first year of teaching. In their view, the in-depth knowledge of the individual needs of each beginner and the possibility of providing them with authentic constructive support were made possible by building original, innovative pedagogical tools, specially designed for the designed induction program.

The new pedagogical tools have been used in the analysis of lessons and teaching activities carried out in the classroom, but also in individual and group reflective activities. The tools created integrate and value a multitude of recent perspectives, following the participation of mentor trainers in the PROF systemic project – *Professionalization of the teaching career*.

We also set out to test this pedagogical toolkit in the virtual online learning group, which allowed everyone a flexible and accessible approach, from their personal space, to assess the impact in professional training for the teaching career for the beginner teachers involved.

2. Theoretical foundation

Induction mentoring of today benefits from the necessary professional framework for *"training and capitalizing on a methodical potential and*



pedagogical expertise held by professionals in the pre-university system (methodists, tutors, experienced teachers)" (Cucos, 2017, p. 155). This form of mentoring can be carried out at the level of several programs supported by mentor teachers, members of the body of mentor teachers or at the level of the educational unit *"...with the support of experienced teachers, who can carry out mentoring activities voluntarily and even informally and through mentoring programs for professional development carried out in Teaching Staff Houses"* (Stan, 2020, p.66).

Induction or professional insertion mentoring can have several purposes in supporting "novice" teachers, who are in their first years of teaching, by:

- Facilitating the knowledge acquisition on the specifics of the organizational culture in the school unit where the beginning teachers work;
- Providing support for the professionalization of the teaching career by practicing the profession at quality standards and throughout the continuous professional development.
- Learning professional behaviours and adopting the best communicative behaviours for effective relationships and for establishing positive relationships with colleagues, students and their parents, with other members of the school and local community.
- To support innovative ideas and practices in education and research by advancing new teaching methodologies, by creating new open educational resources, as well as by developing original research projects.

Induction mentoring focuses on *"re-signifying apprenticeship, putting in situation, experiencing the future role..."* (Cucos, 2017, p. 155) as a teacher, in which the mentor teacher assumes new roles, as a coach and counsellor, contextualizing as much as possible the training of beginner teachers by creating various practical learning situations, put in place directly at the workplace. The mentor teachers will place the beginners in various situations and will simulate difficulties, which may arise in the educational field, in order to observe what professional decisions the beginning teachers will adopt autonomously and how they will adjust or rethink the teaching activities on the fly to be able to face the new training conditions or new challenges.

In the induction mentoring process, junior teachers are helped by their mentors to form/develop their capacity for critical reflection on their own teaching performance, one of the core competencies of the teaching profession. Cucos (2024) considers that *"critical self-reflection, in relation to one's own educational activity (including in relation to professional development), is one of the components that define the professional competence of teachers"* (p. 38). For other specialists (Stăncescu et al., 2018, Stoichici & Ioniță, 2022), reflection is one of the key elements of the mentoring relationship, along with stimulation and interactivity. Kalk et al. (2014) measured reflection in beginner teachers with the help of 2 tools created for this purpose: the reflection questionnaire and the learning reflection scale.

By receiving constant feedback from mentors, beginning teachers can improve their teaching on the fly and strengthen their skills in working with students. In induction mentoring, both professional needs and the nature of the mentoring relationship evolve. The mentor is aware of these changes and will modify the degree and type of support offered to the beginner teacher, depending on the requirements and needs identified at a given time. In a specialized study, Barbaros & Bocoș (2023) mentioned the first three main areas of the needs of beginning primary school teachers: curriculum development, adaptation and individualization, the development of effective interactive teaching methods and the implementation of new learning strategies.

At the same time, there are specialists (Tveitnes & Hvalby, 2023) who support the need for the acquisition of inclusive skills through mentoring, so necessary today for teachers that teach increasingly inclusive groups of pupils. Other researchers (Kutsyuruba, & Bezzina, 2024) highlight the important role that school managers play as mentors in the workplace, in creating a school culture based on strong values and practices that will help newcomers to better integrate into school communities. All the above mentioned are topical subtle issues that must be continuously reflected upon as they require adapted solutions and sometimes non-typical approaches.

In the mentoring process, however, self-improvement and individual feedback are not enough to optimize teaching practices. There is a need for many more opportunities for beginners to share their professional experiences and have debates and reflective discussions with colleagues. In this sense,

dialogic reflection (Myllykoski-Laine et al., 2024) can be a useful strategy in induction mentoring.

Reflective teachers are characterized by specific behaviours, which they must constantly train: they design and deliberate on teaching-learning activities, invite students to a collaborative, participatory, interrogative and critical spirit, examine, supervise and permanently self-direct their teaching process, being concerned with optimizing the teaching process on the fly and demonstrating malleability and strategic adaptability (Cucos, 2024). The mentors who support the induction process have an important responsibility to provide balanced models for the use of self-reflection, with a lasting impact for the beginners in the system.

3. Research methodology

3.1. Research design

This article is based on an exploratory qualitative study that examined the perceptions of mentors and novice teachers regarding the effects of the implementation of an online mentoring program for professional insertion, carried out for a period of six months.

Specifically, the following research questions taken from the experimental study are addressed in this article:

- What innovative mentoring strategies and tools must be adopted within the induction mentoring program capable to measure the quality of classroom activities of beginning teachers?
- What are the key features of a toolkit designed to provoke and support professional reflection among junior teachers and encourage in-depth reflection as a tool for professional development?

3.2. Sample and Data

The participants in this study included 24 novice teachers and 3 volunteer mentor teachers from three counties in Romania (Argeș, Sibiu and Alba).

The data collection processes involved qualitative, semi-structured interviews with the 3 mentor teachers based on the 24 sheets completed by the novice teachers, original tools used in the analysis and reflection on the lessons/activities assisted.

The study reported in this article tested the usefulness of a worksheet to support professional reflection in the analysis phase of some model lessons assisted by beginner teachers. Based on the application of the analysis and reflection sheet by the novice

teachers and mentors, we observed the degree of fulfilment of the *79 pedagogical indicators grouped on 11 categories of criteria*, as it follows: aims and objectives, learning content, didactic strategy adopted, didactic evaluation, classroom and learning management, preparation and use of teaching material, use of the blackboard, teacher's attire, attitude, general conduct, voice, didactic design.

The reflection sheet has been designed to facilitate:

- the responsible commitment of the user teachers for own learning based on the experientiation of model lessons;
- working with professional quality standards and established educational process quality criteria.
- identification of arguments and explanations for certain observed didactic realities.

In this regard, the participants were guided by offering specific sets of benchmarks for each of the seven topics of reflection contained in the sheet made available. The benchmarks offered were designed to encourage not only the recording of punctual didactic behaviours, but also to focus the observer's attention on:

- justification of the observed practices by referring to the methodical and curricular requirements in force or imposed by the recent specialized literature (examples of criteria: *Educational goals of competence/targeted behaviour type are explicitly aimed at.; The proponent demonstrates the ability to approach the school curriculum with courage and boldness*).
- Formulating judgments that reflect not only the facts and behaviours seen in isolation, but also the relationships and deep interactions between the different components of the educational process, between practices and principles of action, between didactic behaviours and theoretical conceptions shared and illustrated by the proponent (examples of reflection criteria: *Teaching strategies focused on learning and on the student are selected - the teacher capitalizes on previous knowledge, promptly corrects and provides correct models, organizes the content into smaller units, facilitates the transition to understanding the new content, facilitates the direct interaction of students with the reality they are learning about-; The mental organization of contents in synthetic forms is facilitated: definitions, classifications, categories, schemes, mental models;*

The teaching strategy is characterized by diversity - direct and indirect training is combined, the teaching methodology is diverse.

- Identification and reflection on the causes, implications and effects of what happened in the classroom (Examples of reflection criteria: *The teaching methods and means used in the taught lesson are adapted to the goals and objectives specified in the didactic project; The concern for approaching a creative and flexible way of teaching is visible;*

- Analysis of the observed sequences to extract messages of own professional development (Examples of reflection criteria: *The proponent aims for each student to learn; The teaching methodology is adapted during the lesson, according to the evolution of the learning situations.*

- Focusing the reflection on certain essential and more subtle professional concerns that underlie the design and conduct of each lesson: focusing on the training of transversal competences, designing lessons with a focus on the development of competences, capitalizing on learning contents of a procedural and attitudinal-value nature (examples of reflection criteria: *There is a concern for adapting and flexibly approaching teaching, learning support and assessment behaviours; The feedback messages obtained in the sequential/along the way evaluations are used to adjust the teaching process).*

- Formulating questions for personal reflection, including elements to guide one's own development. (Examples of reflection criteria: *The proponent's concern to ensure the coherence of the design on the axis: objective - learning contents - didactic strategies - evaluation strategies are visible).*

- Evoking in relation to the observed experiences, certain dilemmas, difficulties, aspects that require development within one's own teaching practices (Examples of reflection criteria: *Utilising the mandatory teaching design benchmarks from the curriculum planning and educational plan).*

3.3. Data Analysis

All research participants followed the guiding principles of research ethics. The responses of the mentor teachers were audio-recorded and then transcribed for content analysis. Deductive and inductive strategies were used following standard coding processes for ethical approaches to data analysis.

4. Results

We describe how the beginners and mentors applied the Analysis and Reflection Sheet on the lessons/activities assisted and based on it they also self-evaluated.

4.1. Purposes/ Aims and Objectives

Explicit competence and behaviour-oriented goals are the foundation of operational objectives derived from general goals, clearly formulated and focused on learning outcomes, and learning situations are designed in line with these objectives, to develop transversal competences such as communication, critical thinking, cooperation and argumentation.

Examples of reflections:

The objectives are sometimes misunderstood by the children, because they have not attended kindergarten and are of another ethnicity, they do not understand Romanian well, and they often do not understand.

Goals are not always understood by students.

I have the impression that I don't always choose the most appropriate activities to achieve my goals.

I didn't meet because I fulfilled what I wanted to develop.

I easily identify the skills I will pursue. I formulate the objectives in relation to the specific competences. The operationalization of the objectives is easily achieved. Depending on the methods I have, I can pursue communication, cooperation, etc.

The difficulty of pursuing during the lessons other (transversal) competences than those proposed in the introductory part (specific competences, operational objectives). Sometimes it is difficult for me, when I design, to link myself to objectives and to contents and strategies, at the same time.

Sometimes the goals are partially understood because the children talk although I try with all my heart to capture their attention.

The objectives were clearly presented; The learning situations were correlated with the objectives and the finals.

4.2. Learning content

It is scientifically correct, contextualized, accessible through systematized knowledge and clear and grammatically correct formulations, adapted to the psycho-pedagogical particularities of the class and

expressed in various forms, including text, images, schemes, theorizations and examples.

The contents include declarative knowledge (concepts and facts), procedural (skills, abilities, procedures), attitudinal-value (values, attitudes, emotions) and strategic (the ability to learn and strategically approach the contents), demonstrating the author's ability to approach the school curriculum with courage and boldness.

Examples of reflections:

I try to adapt to the psycho-pedagogical particularities of the class through a language that is as accessible as possible.

It is difficult to adapt the material to the particularities of the class (there are students who do very well and solve tasks easily, but there are also students who require constant support).

A certain clumsiness can be observed in the approach and implementation of the curriculum.

I do not intend to use only the content of the textbook in the lesson project to comply with the elements of scientific rigor, but I always try to come up with other sources and materials in relation to the given topic, to broaden the field of knowledge; Not always, in theoretical examples, do they find elements from the students' lives.

I am concerned with making the content accessible: I start from basic ideas, I explain the known words, I look for examples appropriate to the concrete situation.

I don't know how exactly I should handle situations where many children fall behind. I don't always manage to come up with concrete materials in explaining concepts. I can't approach the contents of the curriculum for each class as I would like, due to the lack of time resources.

I like to create learning opportunities and that they love to work.

Although it is difficult to work in a delicate situation with the little girl with SEN because it requires a lot of attention and individual work, I fight to succeed! Carla always requires moral and physical support! That's why sometimes I don't manage to do everything I set out to do!

The learning situations are adapted to the age particularities of the children and according to the curriculum.

There are a variety of materials that help them keep their attention, curiosity, students' interest (letter boards, magnetic letters, individual worksheets, smart boards, etc.).

4.3. Didactic strategy. Teaching methods, procedures, techniques

Student-centred and learning teaching strategies are selected, in which the teacher capitalizes on previous knowledge, promptly corrects, provides correct models, organizes the content in smaller units, facilitates the transition to the new content and the direct interaction of students with the studied reality; The connection and mental organization of the contents is facilitated (through definitions, classifications, categories, schemes, mental models) and active-participatory methods are correctly used in teaching.

The teaching methods and means used in the lesson are adapted to the didactic goals and objectives, presented argumentatively and enthusiastically, with a diversified strategy that combines direct and indirect instruction, using valuable digital applications, promoting creative and flexible teaching, activating students and facilitating the organization of new knowledge through questions, examples, practices and graphic organizers.

Examples of reflections:

The methods they choose are not always the best (this can be seen from the lack of involvement of certain students).

Sometimes I rely too much on digital materials.

I rarely implement activities that require collaboration in large groups because the classroom space does not allow me to arrange the furniture to group them.

I try to approach as many active-participatory teaching methods as possible that capture students and make them participate with interest in the activities.

I mainly use content schematization in the form of clusters, tables, charts or short, clear and concise definitions.

I adapt the methods and means used in teaching the lesson to the proposed contents.

I always try to come up with clear and truthful arguments in the presentation of the contents, while encouraging students to put anything presented by

someone to the test, not to be sure that something is true just because they were told so by the teacher.

I don't manage to use too much technology in the presentation of content because the classroom in which I teach does not have audio-visual materials and devices (video projector, interactive whiteboard, audio devices, etc.).

I manage to activate them through various strategies of breaking the ice, breaking the rhythm, etc.

I use questions to verify the understanding of the contents taught, but also examples and graphic organizers.

The methods they choose probably do not satisfy the children's need to learn and therefore some of them are not so involved in the activity. For example, if I choose to tell them, they get bored, but if I use the screen and tell them a story, they are very careful! They are very attracted to technology!

When I make them collaborate and work as a team, they argue and hardly work! There are days when they get along wonderfully! Sometimes I wonder where I'm going wrong?

4.4. Didactic evaluation

Evaluative forms and strategies are designed and alternated in accordance with the goals and objectives of the lesson, using tools that allow the evaluation of learning outcomes and stimulating students' self-evaluation, while the proponent aims for each student to learn, adapting the teaching methodology along the way, maintaining the coherence of the lesson and differentiating between learning and evaluation.

Examples of reflections:

Feedback in classes is different from feedback in evaluations.

I try to use evaluation in the most diversified forms, from evaluation tests, to portfolios, projects, evaluation of the degree of participation in teaching activities, etc.

The evaluation of the assimilated knowledge is carried out in relation to the objectives proposed prior to it.

I always try to involve and activate each student, regardless of their potential. Moreover, for students who have learning difficulties, I try to look for other methods and stimulate them even more.

The results of the evaluations are based on qualitative, not quantitative, assessment.

I manage to maintain the link between the contents taught and the objectives previously proposed. I make a clear distinction between learning activities and assessment activities.

I provide constant feedback, both to students and parents, on the students' journey.

I try to provide feedback to students and stimulate them to learn through different concrete examples from everyday life.

They have difficulties in stimulating the self-evaluative behaviour of preschoolers.

The feedback from the children is positive and I realize that the operational objectives have been successfully achieved!

4.5. Regulating the teaching-learning-assessment process

There is a concern for the adaptation and flexibility of teaching behaviours, the support of learning and assessment, the teaching methodology being adjusted according to the evolution of the lesson in order to maintain coherence and clearly differentiate between learning and assessment; Feedback messages are used to regulate the teaching process, students' performance is monitored, stimulating dialogues are initiated for feedback, dysfunctions are managed naturally, and feedback is provided continuously.

Examples of reflections:

I try to adapt the teaching-learning methods during the activities, but the lack of time is a real impediment.

I manage to maintain the link between the contents taught and the objectives previously proposed.

I make a clear distinction between learning activities and assessment activities.

I provide constant feedback, both to students and parents, on the students' journey.

I try to provide feedback to students and stimulate them to learn through different concrete examples from everyday life.

I am not yet fully able to cope with the crisis situations during the class and at the same time to achieve all the objectives previously proposed.

The feedback is constant and constructive.

4.6. Classroom and Learning Management

The management of the group of students includes the use of various forms of organization (frontal, in groups, in pairs, individually) according to the objectives pursued, encouraging students to intervene, to communicate, to make mistakes and to manifest themselves spontaneously and creatively, with an appropriate work rhythm; Learning management involves delegating the responsibility of learning to students, encouraging creativity and originality, constantly motivating students through constructive feedback and punctual support, and adapting teaching interaction according to individual and group particularities

Examples of reflections:
<i>I don't use group methods enough. I sometimes speed up the pace of work because most students finish tasks quite quickly.</i>
<i>I don't find the necessary time (in class) to work according to the particularities of each student. I ask students to help each other if I feel overwhelmed by questions (thus keeping the good ones in place).</i>
<i>I have the impression that I have developed a much too open relationship with the students, which sometimes affects the course of the lesson.</i>
<i>Interaction at group level is relatively easy, always to stimulate and motivate them. I manage to use all forms of organization of the group of students, depending on the objectives pursued, of course, helping me to move the furniture regularly. The students intervene every time they feel the need, being encouraged, regardless of the quality of their intervention. I always try to consider the age particularities of each class, adapting the tasks to my own pace of work.</i>
<i>At the level of interaction with the group, I adapt to each class. For example, the fourth grade is the one that always helps me, the one that I always make responsible, being quite old. They are also the ones who come to the aid of the preparatory and first classes whenever needed.</i>
<i>The relationship I have with my students is, first, one of friendship. Based on this "friendship" followed respect, listening, understanding, empathy, collaboration and cooperation, but, above all, the desire to learn as many things as possible. But this so-called "friendship" does not exceed the limits, the relationship between me and my students being one impregnated with professionalism and responsibility.</i>

I try, every time, to maintain that stimulating and active-participatory atmosphere through different methods, by verbally stimulating and encouraging each student, etc.

In addition to the empathetic and warm attitude I have towards the students, I keep the necessary firmness, seriousness and rigor, so as not to cross the barrier and fall into the other extreme, where any trace of respect, obedience and discipline is lost.

Group activities are few and I intend to find solutions to make them work more in teams. Some children finish tasks quickly and then we prepare extra work for them.

I feel that I don't pay enough attention to the little girl with special educational needs, and I don't have enough time to work with her. I ask the students to help each other when Carla has a crisis, and I try to help her overcome it! They feel that I am too permissive with them and so they make too much noise or are not careful about what I say to them. I don't know yet how to act so that I can be both firm and warm! Therefore, the activity is affected by children's behaviour! They are difficult to manage!

4.7. Preparation and use of teaching material

The teaching material is designed to support the effort of understanding and organizing knowledge, the formation of mental models, being quantitatively appropriate and diversified.

Examples of reflections:
<i>I always use concrete material, especially in the small classes, I don't present any concept without visual support.</i>
<i>I try not to use too many stimuli that lead to a loss of concentration and interest.</i>
<i>I always try to diversify the concrete materials, to avoid boredom.</i>
<i>The materials used are interactive and attract them, but nevertheless they get bored quickly. What is to be done?</i>
<i>It happened a few times that I had "dead" time due to the lack of materials.</i>

4.8. Using the Chalkboard

The contents presented on the board are synthetic, organized and ordered, using the board for their schematic rendering in various forms, and the students

are actively involved in using the board for certain learning tasks.

Examples of reflections:
<i>I rely a lot on the interactive whiteboard, neglecting the classic one (the one with a marker).</i>
<i>I don't involve students enough in the use of the blackboard.</i>
<i>I write down on the board the new concepts, important schemes or tables, but also synthesized and structured definitions of the new terms.</i>

4.9. Attire, attitude, general conduct, voice

The evaluation includes tonality, expressiveness and rhythm, body language (gestures and mimicry), body and clothing of the proposer, time management and his general attitude.

Examples of reflections:
<i>It happens that I speak much too fast for the students.</i>
<i>I always try to have a smile on my face, to motivate them when they are not in a very good mood, to arouse their desire to learn new things, by displaying an enthusiastic attitude.</i>
<i>There are cases when I must raise my voice to make myself heard and understood.</i>
<i>I try to speak calmly and slowly, to always make myself understood. I also always try to be expressive. I use, in my opinion, too many gestures in speech.</i>
<i>I always try to have an appropriate body outfit, the back always being straight.</i>
<i>I try to have appropriate clothing, which is pleasant, decent and that does not stand out too much and distract the students. (I don't use bright or contrasting colors).</i>
<i>There are cases when I must raise my voice so that preschoolers can hear me! How can I make them listen to me without raising my voice?</i>

4.10. Didactic design

The observance of the mandatory didactic design benchmarks in the planning, curriculum and curriculum is valued, and the proponent's concern for ensuring coherence between goals, learning contents, didactic strategies and evaluation strategies is obvious.

Examples of reflections:

I have problems designing the curriculum (for certain subjects).

<i>I try to keep a natural order of moments, but I don't always succeed because I have to resume certain things (especially if there are students who were absent and with whom we didn't work at home).</i>
<i>I strictly try to follow the curriculum and the school curriculum exactly.</i>
<i>I try to achieve a logical thread and a systematization and continuity of the proposed objectives, the contents conveyed, the didactic and evaluation strategies.</i>

5. Discussions

In recent literature, reflection is correlated with *deep learning*, the degree of involvement in reflection actions being considered an indicator of the depth of learning. In this order of ideas, a series of research evidences support the fact that reflection is used more frequently and considered useful in going through higher level cognitive activities (analysis, synthesis, critical and creative relationship to reality), in learning contexts cantered on problem solving, in approaching a complex and unstructured field of knowledge, in the sense of deep processing of information and the search for full understanding, of setting goals and monitoring their achievement (Chiș, 2005). Similarly, literature considers reflection as a quality of the efficient thinker. It is a way of acquiring awareness, accessing and effectively directing own cognitive processes, respectively of regulation of thoughts and emotions that lead to performance (Byrd et al., 2023).

In the context of professional development, the capacity for deep reflection is an essential characteristic of the education professional and a condition of professional development (Hustler & McIntyre, D. (Eds.), 2024) and a central direction in the transformative approach to the teaching career (Hauerwas et al., 2023). In this case, the object of reflection is the professional experience, and the purpose of the reflection effort is learning by integrating the experiences and reactions of the professional to the didactic situations he has provoked. Therefore, reflective capacity training can be a way to support the beginning in the teaching career, and reflection can be a source of intensive learning during the first year of the career. Reflection is a facilitating factor for the internalization of experiences and concepts that guide practice and for their successful transfer to new learning situations (Glava, 2009).

Relevant in this regard is the dynamics of *reflection on action* (Schön, 1987), a type of reflection that aims to ensure the transfer of current experience to situations of learning/development/subsequent action and that is carried out by relating observations on action to the personal theories that were the basis of the action itself and to the theoretical and methodological conceptions found in the professional's personal repertoire. In this regard, an essential condition is that, in the stages of learning and professional development, reflection is guided using dedicated reflection supports. Thus, in the case of professional development, the use of reflection sheets to guide the analysis of the model lessons, which the beginner has the opportunity to witness, is a way of orienting reflection from active experience to awareness of the essential characteristics of actions and to abstract conceptualization that can lead to the development of new and more useful professional conceptions/beliefs (Korthagen, 2001).

6. Conclusions

Numerous studies attest to the need to use reflection tools to support novice teachers in their first teaching experiences (Kalk et. al, 2014; Koretsky et al., 2018). The results of the present study further attest to the value and usefulness of *the analysis and reflection sheet on the lesson/assisted activities*, which was tested in the analysis phase of the model lessons attended by the beginner teachers involved in the induction mentoring program in the 3 counties in Romania. The 70 pedagogical indicators grouped on 11 categories of criteria managed to capture the complexity and diversity of the requirements to be met in classroom activity, from aims and objectives, teaching contents, teaching strategies used, teaching materials, to the evaluation components, classroom management, pedagogical behaviour, didactic design, being a real support for those who are at the beginning of the teaching profession.

We appreciate that the purpose for which this innovative pedagogical tool was developed has been achieved, because it integrates and values the multiple components of the teaching act, and allows beginner teachers responsible reflective approaches, helping them to become active actors in the teaching process, influencing the learning of their students. The study can continue by extensive use of the tool and its correlation with other pedagogical tools, to strengthen the induction mentoring process in the national education system. Finally, the limits of reflexivity in education can also be tested, related to the

competences of those who value, reflect on the sensitive problems of professional development in the teaching career.

Authors note:

Adina-Elena Glava, associate professor, holds a doctoral degree from Babeș-Bolyai University in Cluj-Napoca. She is a member of the teaching faculty of the Department of Educational Sciences and engages in both the introductory and ongoing teacher development programs. She has authored studies pertaining to curriculum development for various educational levels of education and specializes in effective learning and curriculum development. A devoted advocate of cognitive training and experiential learning, she has authored numerous studies in these areas. She is engaged in an investigation into the processes and factors that shape the professional beliefs and theories of novice teachers and prospective teachers regarding education and academic achievement

Letiția Muntean-Trif is an associate professor, PhD, at the Department of Teacher's Training of 1 Decembrie 1918 University of Alba - Iulia, where she teaches Theory and methodology of education, Theory and methodology of training, Pedagogy of primary and preschool education, Management and institutional development, Management of educational processes, Didactics of early education activities and early schooling courses and seminars. With an extensive 22-year tenure in academic education, she has actively engaged in numerous national and international conferences, served as a trainer or researcher on various projects centered around the teaching profession, and has authored five books and numerous articles in Teacher Training that disseminate her research findings. Notable among these are the following: The benefits of inclusive education: new challenges for university teachers, The significance of students' input, The joy of teaching and learning in academia – teachers' perspectives from three countries, Children's Voices and their Impact-Case Study in Romania. Her editorial activity is developed with 20 international journals, and she is the Romanian coordinator for the Association of Experimental Research in Education Sciences.

Mihaela-Gabriela Neacșu is an associate professor in the Faculty of Educational Sciences, Social Sciences, and Psychology at The National University of Science and Technology

POLITEHNICA Bucharest, Pitești University Centre, with a doctorate in social pedagogy. She conducts courses in Psychology of education, Self-knowledge and personal development, Educational alternatives, Foundations of pedagogy, Educational policies, History of educational ideas/paradigms, Management of information and learning, Didactics of the Human and Society Domain, Didactics of Psychology, Didactics of Religion, Total quality management in education, Educational research methodology, and Specialized practice in school. With extensive expertise in the field of teacher training, she has served as an expert trainer. She has trained future teachers and current teachers, having extensive experience in adult education and training program management. Her research on mentorship, educational quality, and teacher psycho-pedagogy has been published in numerous scientific journals. She participated in Romanian teacher training courses as a specialist.

Alina-Georgeta Mag holds a doctoral degree and is a lecturer in the Department of Teacher Education at Lucian Blaga University of Sibiu. In this capacity, she conducts courses and seminars on early childhood education, educational psychology, inclusive education, and pedagogy. With sixteen years of experience in academic education, she has attended numerous national and international conferences, served as a trainer or researcher on various teaching-related projects, and published six books and numerous articles in Teacher Training to disseminate her research, including: The benefits of inclusive education: new challenges for university teachers, The significance of students' input, The pleasure of learning and teaching in academia: the perspectives of teachers from three countries, Children's Voices and their Romanian impact case study. Her editorial work has been published in twelve international journals. Also, she is the Romanian coordinator for the European Early Childhood Education Research Association.

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Appendixes

Analysis and reflection sheet on assisted lessons/activities

CATEGORIES OF CRITERIA	CRITERIA AND INDICATORS	RATING SCALE 1, 2, 3, 4, 5 min.1-max.5	REFLECTIONS and PROBLEMS MET IN MY CLASSROOM	
1. PURPOSES	1. Purposes such as competences/behavioural dimensions are explicitly targeted;			
	2. The operational objectives are derived from the purposes with a higher degree of generality;			
	3. The operational objectives are clearly and correctly formulated (with a focus on learning outcomes);			
	4. Learning situations are designed in relation to operational objectives;			
	5. The aim is to train transversal skills/abilities (communication, critical thinking, cooperation, argumentation, etc.).			
2. LEARNING CONTENT	The content selected and processed is:			
	6. scientifically correct;			
	7. connected with reality, contextualized;			
	8. accessible: systematized knowledge, formulations; clear, grammatically correct expressions;			
	9. adapted to the psycho-pedagogical particularities of the class;			
	10. expressed in various forms (text, image, diagrams, theorizations and examples);			
	The following contents are selected:			
	11. declarative (concepts, facts);			
	12. procedural (skills, abilities, procedures);			
	13. attitudinal values (values, attitudes, emotions);			
	14. strategic (related to the ability to learn and strategically approach content);			
	15. The proponent demonstrates the ability to approach the school curriculum with courage and boldness.			
	3. TEACHING STRATEGY. METHODS, PROCEDURES, DIDACTIC TECHNIQUES	16. Teaching strategies focused on learning and on the student are selected (the teacher capitalizes on previous knowledge, promptly corrects and provides correct models, organizes the content in smaller units, facilitates the transition to understanding the new content, facilitates the direct interaction of students with the reality they are learning about);		
		17. It is facilitated to connect students with the contents;		
		18. The mental organization of the contents is facilitated (in synthetic forms: definitions, classifications, categories, schemes, mental models);		
19. Active-participatory methods are selected and correctly used in the teaching activity;				
20. The teaching methods and means used in the taught lesson are adapted to the goals and objectives specified in the didactic project/pursued;				
21. The proposer demonstrates an argumentative-persuasive attitude in the presentation of the contents;				
22. The proposer shows enthusiasm in the presentation of the contents;				
23. The teaching strategy is characterized by diversity (direct and indirect training is combined, the teaching methodology is varied);				
24. Digital applications that bring added value in supporting learning are used;				
25. The concern for approaching a creative and flexible way of teaching is visible; creative teaching manner;				
26. The didactic strategy allows the activation and mobilization of the class of students (the group);				

	27. The proponent facilitates the organization of new knowledge, through questions, examples, practice, graphic organizers.		
4. DIDACTIC ASSESSMENT	28. Different forms of evaluation and evaluation strategies are designed and alternated, in accordance with the goals and objectives pursued;		
	29. The assessment tools used allow the assessment of the learning outcomes targeted by the objectives;		
	30. The proposer aims for each student to learn;		
	31. The self-evaluative behavior of students/children is stimulated;		
	32. The results of the evaluations are justified by qualitative assessments;		
	33. Different forms of evaluation and evaluation strategies are designed and alternated, in accordance with the goals and objectives pursued;		
	34. The assessment tools used allow the assessment of the learning outcomes targeted by the objectives;		
	35. The proposer aims for each student to learn;		
	36. There is a concern for adapting and flexibly approaching teaching, learning support and assessment behaviors;		
	37. The teaching methodology is adapted during the lesson, depending on the evolution of the learning situations;		
	38. The aim is to maintain the coherence (of the red thread) of the lesson, in relation to the objectives pursued;		
	39. The distinction between learning situations and assessment situations is obvious;		
	40. The feedback messages obtained in the sequential/along the way evaluations are used to adjust the teaching process;		
	41. The nominator monitors learning performance;		
	42. The proposer creates feedback opportunities for students and initiates a stimulating dialogue with them;		
	43. The dysfunctions that arise during the lesson are managed naturally, by adapting teaching behaviors;		
	44. The proposer provides continuous feedback.		
5. REGULATING THE TEACHING-LEARNING-ASSESSMENT PROCESS	45. There is a concern for adapting and flexibly approaching teaching, learning support and assessment behaviours;		
	46. The teaching methodology is adapted during the lesson, depending on the evolution of the learning situations;		
	47. The aim is to maintain the coherence (of the red thread) of the lesson, in relation to the objectives pursued;		
	48. The distinction between learning situations and assessment situations is obvious;		
	49. The feedback messages obtained in the sequential/along the way evaluations are used to adjust the teaching process;		
	50. The nominator monitors learning performance;		
	51. The proposer creates feedback opportunities for students and initiates a stimulating dialogue with them;		
	52. The dysfunctions that arise during the lesson are managed naturally, by adapting teaching behaviours;		
	53. The proposer provides continuous feedback.		
6. CLASSROOM AND LEARNING MANAGEMENT	Management of the student body:		
	54. Various forms of organization of the group of students are used: frontally, in groups, in pairs, individually, depending on the objectives pursued;		
	55. Students/children have the courage to intervene, to communicate, to make mistakes, to manifest themselves spontaneously and creatively;		
	56. The pace of work is adequate;		
	Learning Management:		
	57. There are times when the proposer delegates the responsibility for learning to the students		
	58. Creative manifestations / originality are encouraged;		
	59. The proponent aims to motivate students and maintain motivation through constructive feedback, challenge, punctual support of the process of understanding the contents;		

	60. There are times when the didactic interaction is differentiated, depending on individual and group particularities;		
	Relationship and discipline:		
	61. The proposer promotes an open, flexible, empathetic relationship;		
	62. The proposer demonstrates professional responsibility throughout the interaction with the class;		
	63. Steps are taken to establish and maintain a stimulating and motivating atmosphere during the lesson;		
7. REPARATION AND USE OF TEACHING MATERIAL	64. The proponent consistently and coherently applies preventive and corrective discipline techniques;		
	65. The didactic material is designed to support the effort of understanding, organization of knowledge, formation of mental models;		
	66. The teaching material is quantitatively adequate;		
8. USING THE CHALKBOARD	67. The teaching material is diverse		
	68. The contents rendered on the board are presented synthetically, organized, orderly;		
	69. The blackboard is used for the schematic rendering of the contents (in various forms);		
9. TEACHER'S ATTIRE, ATTITUDE, GENERAL CONDUCT, VOICE	70. Students are involved in using the board for some learning tasks.		
	71. Tonality, expressiveness and rhythm;		
	72. Body language (gestures, mimicry);		
	73. The body and clothing of the proposer;		
	74. Time management;		
	75. The general attitude of the proposer.		
	76. Tonality, expressiveness and rhythm;		
10. DIDACTIC DESIGN	77. Body language (gestures, mimicry);		
	78. Capitalizing on the mandatory didactic design landmarks from the planning/curriculum and curriculum;		
	79. The proponent's concern to ensure the coherence of the design on the axis: objectives - learning contents - didactic strategies - evaluation strategies is visible.		

ADDITIONAL OBSERVATIONS AND REFLECTIONS:

NOTES:

1. We recommend that you use the reflection criteria only as a guide and, in relation to them, write down in the section of reflections, opinions and thoughts of an evaluative nature, questions and/or alternative solutions for the lesson watched. Also, please note the problems you face in your own teaching activity, in each of the categories of criteria. You don't need to refer to every criterion. Choose the ones that are most relevant to you.
2. We recommend that you reflect on the didactic activities watched in terms of describing what happened, but also in terms of the causes, implications and effects of what happened.
3. Appreciate the teaching activities watched on the numerical scale, giving each criterion a score from 1- minimum to 5- maximum.
4. Ask us and ask us questions, suggested by the content you have watched, that would help us meet your needs and interests. training.