



Teacher education is a deeply pedagogical process rooted in values, ethics, and the social purpose of schooling. Globally, it sits at the core of educational quality and fairness, as research in comparative and international education demonstrates: the training of teachers directly influences students' learning chances, social inclusion, and the democratic aims of schools. Teachers are not simply transmitters of curricula, but active professionals whose convictions, reflective skills, and ability to manage the complexities of classroom life give shape and substance to the educational experience itself.

The pedagogical dimension of teacher education frames teaching as a relational, context-aware, and ethically grounded profession rather than just a set of procedural skills. From a research perspective, this demands robust research methodologies that can critically examine the complex realities of schools and inform evidence-based policies. Equally important is the connection between theory and practice, which helps to bridge the persistent gap between universities and schools.

The contributions gathered in this volume reflect the richness and diversity of experiences showcased during the ATEE Spring Conference 2024, held at the University of Bergamo from May 29 to June 1, 2024. The volume presents 70 selected papers out of more than 300 presented by researchers representing over 40 countries.

This broad spectrum of studies highlights promising directions that can inspire renewed inquiry and concrete proposals aimed at improving contemporary educational systems.

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Teacher education research in Europe: trends, challenges, practices and perspectives

May 29th – June 1st, 2024
S. Agostino, Bergamo



Edited by Nicole Bianquin and Francesco Magni





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BOOK OF PROCEEDINGS

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The work plan (Plan de Travail) as an educational device that addresses everyone's needs. A survey of teachers' and pupils' perspectives

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Abstract

The work plan is an educational tool derived from Freinet's pedagogy, and it consists of personalized, differentiated, and multidisciplinary tasks to be completed independently or collaboratively within a set time frame. Rooted in the interplay between universality and specificity in teaching, it aims to respect individual differences while fostering participation and a sense of belonging based on two key constructs: Differentiated Instruction and Open Education. The research, conducted over four months with fourth-grade classes, seeks to support teachers in didactic innovation. Findings from interviews and questionnaires indicate increased organizational skills, autonomy, awareness of learning styles, and reflective teaching practices, with a focus on inclusivity.

Keywords: universality/specificity; plan de travail; inclusion; differentiated instruction; open education.

1. Introduction

The paper delineates the findings of a study on the perceptions of teachers and fourth-grade primary school students participating in a research project titled "Promoting Personalized and Inclusive Learning in Primary Education: An Action-Research Project with the Plan de Travail". The project was initiated in 2022 and is ongoing at the IperDEA Research Laboratory of the University of Bergamo. The project aims to support teachers in an institutional innovation process focused on experimenting with inclusive and personalised teaching tools. Specifically, the project seeks to foster a learning environment that addresses the individual needs of students with and without disabilities, promoting a pedagogical approach that respects and values diversity.

2. Definition of the Theoretical Framework

Today's classrooms, although composed of students within the same age group to ensure a certain degree of homogeneity, are characterized by students who differ in numerous aspects. This plurality of characteristics necessitates a targeted and diversified response to students' individual needs (d'Alonzo, 2016). Such a context highlights the need for a pedagogical approach that recognises and values diversity, ensuring that each student receives the necessary support for their full development. According to Connac (2012), an educational institution should not confine itself to applying a principle of formal equality. Still, it should instead concentrate on students' learning processes, supporting the most capable in maximising their potential while assisting those facing challenges in achieving essential objectives. This necessitates the establishment of an inclusive curriculum (Leoni, 2021), characterised by a unified yet highly flexible framework centred on each student's learning process. In this approach, knowledge and skills are viewed to a vehicle in the teaching-learning context.

One potential approach to emphasise the learning process rather than its outcomes is competency-based education. This approach transcends disciplinary boundaries by linking knowledge and skills to tangible, real-world problems, capturing students' interest and mobilising resources (Da Re, 2013). Competencies are the ability to address a task by effectively orchestrating one's internal resources while leveraging available external resources coherently and productively (Pellerey, 2004). Competencies are categorised into three types (D'Amario et al., 2015).

- Key competencies, are transferable across various tasks and contexts, reflecting an individual's personal and professional preparation;
- Technical competencies, are specific to a given professional role;
- Transversal competencies are adapting and applying fundamental skills to different contexts.

Transversal competencies differ from basic ones in that they are not solely cognitive (Chiosso et al., 2021) and are characterized by contextual flexibility (transferability), multidimensionality, dynamism, and subjectivity. Transversal competencies are divided into four macro-categories (D'Amario et al., 2015).

- Personal competencies: linked to self-awareness, a sense of self-efficacy, and goal orientation;
- Relational competencies: reflected in communication and collaboration skills, emotional intelligence, and the ability to build effective relationships;
- Cognitive competencies: associated with the ability to analyze and synthesize information, including problem-solving, decision-making, and creativity;
- Organizational competencies: including planning, time management, and monitoring or correcting errors.

These competencies enable students to adopt appropriate and effective behaviors in various situations and play a fundamental role in the process of self-construction (MIUR, 2018).

The centrality of an individual's experiences, abilities, and skills in developing and demonstrating competencies has led to a more inclusive curriculum vision (Leoni, 2021). This inclusivity recognizes the diverse ways a single competency can be achieved and the varying levels of competency expression. Competencies differ from person to person and can be fostered through specific objectives, differentiated content, and varied methods (Castoldi, 2015). Competencies develop and take shape from personal experiences, which, by nature, vary significantly among individuals. Shifting the focus from knowledge and skills to competencies within an inclusive perspective thus involves acknowledging diverse ways of achieving competencies. These pathways depend on individual characteristics and how individuals integrate their knowledge, skills, and prior experiences with external resources (Leoni, 2021).

2.1. Differentiated Instruction

In a context as complex and diverse as today's classrooms, differentiated instruction emerges as a practical, operational, and feasible response to reach all and each one (Folci, 2018). It is an approach that entails adapting teaching and learning pathways to the needs of individual students, intervening on objectives, methodologies, materials, and assessments (Cottini, 2017). Differentiation represents a teacher's strategy aimed at all students within the same classroom, designed to fully realize the teaching-learning process using tools and resources (Vermeë, 2010).

Differentiated instruction should not be understood as a mere set of strategies, methods, or techniques to be employed in the classroom but as a comprehensive way of conceptualizing the teaching-learning process and, more broadly, the entire educational experience, considering the needs of the students present (Tomlinson, 2006). It involves diverse strategies and methodologies, differentiated pathways and itineraries, varied materials and topics, and tailored progression rates, with the clear objective of valuing everyone's unique talents.

Bottero (2021) distinguishes between successive and simultaneous differentiation. Successive differentiation involves alternating different working modalities, providing instructions in varied forms, and managing time to account for each student's pace. Concurrently, simultaneous differentiation entails offering students various activities, engaging them in selecting their pathway and evaluating their learning outcomes. This approach assigns distinct tasks to each student, defining them based on their respective learning levels.

2.2. Open Education

Similarly, to differentiated instruction, open education (Jürgens, 2009) represents a practical approach to address the diverse needs that characterize contemporary educational contexts. It has its roots in child-centered pedagogies developed in the early 20th century, drawing inspiration from the educational philosophies of Montessori, Freinet, and Dewey.

Open education is a methodological approach based on an open system, allowing students to actively participate in constructing their learning pathways, with the teacher assuming the role of a facilitator. It is an innovative approach that, by giving voice to the students themselves, ensures differentiated learning paths that answer to the individual differences of each learner (Demo, 2016).

Open education employs various methodologies and creates an open, organized environment where students can choose the time, space, and materials needed to complete the proposed tasks (Jürgens, 2009, in Demo, 2016). Depending on the degree of openness determined by the teacher regarding instructional planning, students can select the activities to engage in, choose the order in which to address them, organize their available time, and decide how to approach the task, working individually, in pairs, or groups (Demo, 2016).

3. The Plan de Travail: Between Openness and Differentiation

A specific tool supporting simultaneous differentiation is the *Plan de travail*, or 'work plan', first introduced in the Dalton Plan by Helen Parkhurst in the early 20th century and later expanded by

Freinet. This tool was created to recognize and value the heterogeneity of the classroom group, thereby promoting personalized learning (Vermeë, 2010).

In activities involving the work plan, the student takes on a central role, establishing a relationship of shared responsibility with the teacher to ensure the success of the learning process. Connac (2009) defines the tool as a support for conducting personalized classroom activities tailored to each student, enabling students and teachers to design a learning pathway collaboratively. It consists of a list of tasks assigned to the student with a specified completion period. The tasks vary in nature, fully aligning with the principles of open education. They can be:

- completed individually, in pairs, or in small groups;
- mandatory, optional, chosen freely by students from multiple alternatives, or invented by the students themselves;
- common to all, customized for small groups, or specifically designed for individual students.

These tasks must be neither too simple nor excessively challenging but are designed to provide a slight stretch beyond the current competencies of each student, thereby stimulating growth and situating them within the student's Zone of Proximal Development (Vermeë, 2010). Autonomy is a fundamental characteristic developed through this educational tool and is part of the organizational transversal competencies (D'Amario et al., 2015). Autonomy encompasses not only managing time and activities but also the correction phase. Control materials can be provided, enabling children, upon completing a task, to review and self-correct their work. To foster autonomy, all necessary materials, and tools for completing activities be found in an accessible location within the classroom. This approach transforms the learning environment into a structured and organized space conducive to the autonomous growth of students.

In addition to autonomy and self-correction, responsibility for one's learning processes plays a significant role (Paturet, 1995 in Connac, 2012). The work plan functions as a tool to enhance students' accountability by allowing them to recognize their responsibilities within the classroom, facilitating self-assessment of their academic commitment, and providing a clear representation of the seriousness and awareness with which they approach their work (Connac, 2012). Furthermore, the tool incorporates a dual evaluative perspective: on one hand, the teacher observes and assesses the student's progress through ongoing observations and analysis of submitted work, offering targeted and constructive feedback; on the other hand, the student actively engages in self-assessment, reflecting on their learning processes and the metacognitive skills developed.

4. Study Design

The action-research project (Losito & Pozzo, 2005) "*Promoting Personalized and Inclusive Learning in Primary Education: An Action-Research Project with the Plan de Travail*" was launched in 2022 at a Comprehensive Institute and is currently ongoing in several primary schools in central and northern Italy. It aims to guide teachers through a process of institutional innovation. This contribution focuses on a subset of the findings from the investigation conducted after the first year of tool experimentation. It involved 67 children aged 9 to 10 from three fourth-grade classes in a primary school and their four Italian and mathematics teachers.

The first year (2022–2023) of the project was structured into the following phases.

- Analysis of the existing literature on differentiated instruction and open education constructs and about the *Plan de Travail* tool (December 2022 – June 2023);
- Experiential observation (Trincherò, 2017) of the context before the experimentation (October 2022 – December 2022);
- Design of the tool, both graphically and in terms of content, including co-construction of tasks and activities with teachers (December 2022 – January 2023);

- Classroom experimentation of the tool, monitored through systematic observations supported by semi-structured observational grids (Trincherò, 2017) (January 2023 – April 2023);
- Collection of outcomes regarding satisfaction, effectiveness in promoting learning, and developing transversal competencies in children (May 2023 – June 2023);
- An in-depth analysis of the outcomes aims to share results with the group of teachers (June 2023 – December 2023).

This paper focuses on phases 3, 4, and 5, presenting the experimentation results about the perceptions of teachers and students, the promotion of transversal competencies facilitated by the tool's implementation, and the insights gained by both teachers and students during the first year of experimentation. Consequently, this contribution seeks to address the following research questions.

1. What are the perceptions of primary school teachers and students who experimented with the *Plan de Travail* regarding its implementation and effects on learning?
2. How can the adoption of the *Plan de Travail* contribute to the development of students' transversal competencies?
3. What reflections and insights does the *Plan de Travail* foster among students and teachers regarding the educational process?

An individual observational grid was designed and employed to examine the promotion of competencies in students (Trincherò, 2017). This tool allowed for the analysis of the evolution of specific distinctive characteristics of the learning process with the *Plan de Travail* through specific indicators organized into categories such as material organization, time management, motivation, autonomy, and peer collaboration. Additionally, questionnaires were developed and administered to the children to investigate the perceptions and insights of the students and teachers involved. At the same time, semi-structured interviews were conducted with all teachers and a selected group of children. The latter's selection criteria included disability diagnoses, certification of specific learning disorders, learning styles, and current academic achievements. Despite employing different methodologies to account for their specificities, both tools enabled the exploration of various aspects, including perceptions, satisfaction, perceived effectiveness, expectations, strengths and weaknesses, and projections for the future implementation of the *Plan de Travail* in teaching practices.

5. Findings and discussion

The following section outlines the findings of the investigation in response to the research questions.

5.1. Students' perceptions

The data collected from students' perceptions highlight a high level of appreciation for the *Plan de Travail*. Precisely, the positive response of 61% of students who reported enjoying the experience "very much" or "extremely," alongside 34% who found it "fairly" enjoyable, reflects the students' overall satisfaction. This result, corroborated by the interviews, aligns with pedagogical theories emphasizing the importance of teaching strategies that foster active engagement and intrinsic motivation (Deci & Ryan, 1985). The opportunity to choose which activities to undertake (67%) and to organize their work according to personal preferences (78%) appears to mirror the value placed on self-determination and personalized learning pathways (Connac, 2012). This is further supported by interviews in which students expressed appreciation for being able to choose additional subjects beyond the core disciplines (mathematics and Italian) to include in their work plan. Another aspect that was particularly appreciated was the opportunity to find out about the day's activities in advance, which was confirmed in the interviews.

C₄: «All you have to do is read the schedule and you already know all the things you have to do, whereas in normal classes you do not».

At the same time, the appreciation of the personalization dimension emerges significantly.

C₁: «[...] However, the Plan de travail is not something too long or too short, because in any case the teachers know you and how you work, and the Plan is customized for everyone».

Equally significant is the data regarding the perceived support provided by the tool about learning, as over 90% of students recognized the value of the Plan de Travail in this regard. This suggests that the approach effectively addressed students' learning needs by supporting, on the one hand, the development of transversal competencies such as autonomy, reflection, and individual responsibility and, on the other, the acquisition of the knowledge and skills outlined in the curricular planning (86%).

5.2. Teachers' perceptions

Teachers' perceptions confirm the Plan de Travail's potential while highlighting some operational challenges. The unanimous willingness to repeat the experience provided the entire teaching team shares it, suggests that implementing innovative teaching tools requires a systemic approach and a collaborative vision. This aspect aligns with the concept of a "community of practice" (Wenger, 1998), where peer collaboration becomes essential for the success of educational innovations.

T₄: «The perplexity remains about the organisational and structural complexity of this thing [...] the problem was perhaps more on the part of the adult in calibrating the first plan de travail, in the sense that the first plan was perhaps a little too ambitious for some children, perhaps we should have calibrated it better».

The reported difficulties, such as balancing activities and estimating the time required for their completion, underscore the importance of adequate teacher training and continuous support in using complex tools.

T₃: «Your presence [of the researcher] was crucial in the sense that I think if you [the researcher] had not been there to manage the ranks, even concretely, on a practical level, in terms of managing the material, I think we might have been stranded. [...] It would have been a bit complicated».

While these challenges do not compromise the overall effectiveness of the tool, they highlight the need for moments of reflection and practice refinement to ensure a design increasingly tailored to students' needs and learning paces.

5.3. Promotion of transversal competencies

The findings highlight how the Plan de Travail has contributed to developing significant transversal competencies. The organization of activities over time (70%) and the acquisition of new skills (60%) demonstrate an improvement in planning and problem-solving abilities, which are essential for both academic and personal success (OECD, 2018).

C₁: «The plan de travail also made me learn more at school, I learnt to organise myself, to organise myself to get the work done in a certain number of days ».

Additionally, the ability to independently correct one's work (55%) and collaborate with peers (51%) underscores the tool's role in fostering self-regulation and cooperative dynamics, which are foundational to 21st-century competencies.

From an observational perspective and based on teachers' interview reflections, the noted improvements in self-regulation, time management, and autonomy represent significant outcomes.

T₁: «Working with the work plan has an impact on the whole education, the children are more organised, I feel I am on the right track!».

These findings confirm the effectiveness of educational approaches that place the student at the center of the learning process, promoting their independence from reliance on adult figures (Dewey, 1938).

5.4. Awareness fostered in students and teachers

Another significant element that emerged from the experimentation was the development of awareness among students and teachers. Students reported gaining a deeper understanding of their learning styles, which aligned with the principles of metacognition and promoted the ability to reflect on one's cognitive processes to enhance learning effectiveness (Borkowski & Muthukrishna, 2011). Crucial in this regard was the dual evaluation process—comprising precise feedback provided by teachers and self-assessment by students—and the moments dedicated to reflecting on and sharing the progress of the tool's implementation with the class. These activities aimed to identify effective work strategies and best practices already in place. Teachers emphasized that the Plan de Travail provided an opportunity to understand their students better and critically reflect on their teaching practices.

T₂: « The most important positive effect, in my opinion, is that the students got to know themselves and their own approach better, because they were also made to reflect with your [the student's] presence and they got feedback on it [...] and this is the most important thing: the knowledge that the students got to explore about themselves and their own cognitive style, and in return we were able to observe some of them in particular and their cognitive style, this is in my opinion the most important thing [...]».

This reflective process increased awareness of the importance of personalizing and differentiating educational proposals, highlighting that differentiation is not merely a means to address specific needs but an inclusive pedagogical strategy that values each student (Tomlinson, 2006).

T₃: «We all talk about differentiation, it's a beautiful thing, but sometimes, it's not always easy, because it's bad to say, but you have so many things to do, that sometimes you miss this aspect, which in reality, if you really want to include and give everyone the chance to make the learning process their own, you should do it, but I admit, I struggle sometimes [...] After the Plan, however, it came a little easier in the sense that I thought a little more about the fact that, oh my, this thing, this differentiation, you have to do it. After the [Work] Plan, however, this thing came a little bit easier to me in the sense that I thought a little bit more about the fact that, jeez, this thing, this differentiation, you have to do it [...] and so I said to myself: 'try to do more practical activities that you had somehow forgotten and left in the drawer' [...] in terms of differentiation, yes, the Plan gave me an extra push [...]».

6. Conclusions

The experimentation results with the Plan de Travail demonstrate its potential to foster autonomy, self-regulation, and personalized learning pathways. Students expressed high satisfaction, attributing this to the ability to independently choose and organize their work, aligning with pedagogical theories emphasizing freedom of choice and active engagement, as reflected in the anti-authoritarian school movements of the late 1960s (Augshöll Blasbichler, 2009 in Demo, 2016). The students' perceived freedom in determining their learning path can be seen as a cornerstone for fostering conscious and motivated participation within a fully democratic framework (Demo, 2016). Additionally, the tool promotes transversal competencies such as time management, collaboration, and self-correction, which are essential for personal and social growth (D'Amario et al., 2015). Teachers reported increased awareness of the importance of personalized and differentiated instruction, consistent with the "pedagogy of intentionality" (Schön, 1983; Mortari, 2004), which advocates reflective practices tailored to students' needs. Despite its organizational complexity, the tool encourages teachers to adopt more flexible, collaborative approaches.

Furthermore, the Plan de Travail fosters reflexivity, enabling students to understand their learning styles and teachers better to improve their educational strategies, resonating with Mezirow's (2016) concept of transformative learning through critical reflection. Ultimately, the Plan de Travail emerges as a tool for instructional organisation and promoting personal and professional growth, advocating for further experimentation supported by teacher-researcher collaboration and inclusive teaching practices to meet diverse student needs. These findings encourage further experimentation, backed by broader cooperation between teachers and researchers and a commitment to increasingly inclusive teaching practices that address the needs of every student.

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