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Unlocking Cognitive potential in and out of classroom. The use of the lesson planning of Reuven Feuerstein as answer to special needs

Liberare il potenziale cognitivo dentro e fuori la classe. Il modello di una lezione efficace di Reuven Feuerstein come risposta ai bisogni speciali

di

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Abstract:

The metacognitive method, developed by Prof. Reuven Feuerstein, plays an important role in the acquisition of cognitive skills. It is unique among leading international interventions for teaching thinking and is able to meet the needs of children with learning difficulties. (Falik, L. 2019).

His work revolutionised the way educators and teachers approach teaching and student learning, particularly for those with learning difficulties, notably with his Mediated Learning Experience (MLE) and 'planned lessons'. Feuerstein guarded against any quantification of so-called 'potential' and instead sought to identify mediation processes that supported the unique strengths and needs of the learner. Central to his method is the concept of dynamic assessment, which involves active engagement with students to identify their cognitive strengths and areas for improvement. (Feuerstein, R., & al.2010)

Lesson plans are carefully designed to promote cognitive development and facilitate the acquisition of learning strategies. They are part of the Instrumental Enrichment Programme (I.E.), also developed by the same author, which consists of a series of tasks aimed at strengthening specific cognitive functions such as analytical thinking, problem solving and learning to learn.

In parallel, formative assessment (Trincherò, 2022) is characterised by its role in the educational process, which is not limited to measuring learning outcomes, but actively contributes to the continuous improvement of the student. In particular, it focuses on identifying strengths and areas for improvement during each student's learning journey, allowing students to reflect on their learning strategies and teachers to adapt the most effective teaching methods.

Keywords: Lesson plans, formative assessment, mediated learning experience, learning, thinking.

Abstract:

Il Metodo metacognitivo ideato dal Prof.re Reuven Feuerstein svolge un ruolo importante nel raggiungimento di abilità cognitive, in quanto è unico tra i principali interventi internazionali per l'insegnamento del pensiero che è in grado di rispondere alle esigenze dei bambini con difficoltà di apprendimento (Falik, 2019).

Il suo lavoro, in particolare l'Esperienza di Apprendimento Mediato (E.A.M) e le sue "lezioni pianificate", hanno rivoluzionato il modo in cui gli educatori e gli insegnanti si avvicinano all'insegnamento e all'apprendimento degli studenti, soprattutto per coloro che presentano con difficoltà di apprendimento. Feuerstein era contrario a qualsiasi quantificazione del cosiddetto "potenziale", volendo piuttosto identificare processi di mediazione che supportassero i punti di forza e le esigenze uniche dell'allievo. Al centro del suo metodo c'è il concetto di valutazione dinamica, che prevede un impegno attivo con gli studenti per identificare i loro punti di forza e di aree di miglioramento dal punto di vista cognitivo

Le lezioni pianificate che prendono il nome di "*lesson plans*" sono progettate meticolosamente per promuovere lo sviluppo cognitivo e facilitare l'acquisizione di strategie di apprendimento. Fanno parte del programma di arricchimento strumentale (P.A.S.), ideato sempre dallo stesso autore, che consiste in una serie di compiti mirati a rafforzare specifiche funzioni cognitive come il pensiero analitico, la risoluzione dei problemi e la capacità di imparare ad apprendere. Parallelamente, la valutazione formante (Trincherò, 2022) si distingue per il suo ruolo nel processo educativo, non limitandosi a misurare soltanto gli esiti dell'apprendimento, ma contribuendo in modo attivo al miglioramento continuo dello studente. Essa si focalizza in particolar modo sull'identificazione dei punti di forza e di miglioramento durante il percorso di apprendimento di ciascuno studente, consentendo da un lato agli studenti di poter riflettere sulle proprie strategie di apprendimento e dall'altro agli insegnanti di adeguare le metodologie didattiche più efficaci.

Lo scopo di quest'articolo è quello di analizzare l'integrazione del Metodo Feuerstein con la valutazione formante all'interno di un ambiente educativo dinamico, promuovendo un apprendimento più profondo e personalizzato, attraverso l'utilizzo della struttura della "lesson plan" come strumento efficace e di supporto per il docente al fine di poter migliorare le competenze scolastiche di tutti gli studenti.

Parole chiave: Lezione pianificata, valutazione formante, esperienza di apprendimento mediato, apprendimento.

Introduction:

The current results of evidence-based studies highlight the importance of interaction and planning to activate an "effective" lesson (Hattie, 2016; Calvani, 2014), but presently these characteristics do

not seem to be particularly present in Italian schools (Calvani & Trincherò, 2019). Certainly, in our country, the Feuerstein method, which is based on dialogue and includes lesson planning in its training, has made one of the greatest contributions to the knowledge of these aspects. The thousands of teachers who have attended its courses have developed a focus on cognitive processes in curricular teaching after 30 years of diffusion.

Reuven Feuerstein was an internationally renowned Israeli professor of psychology and a scholar in the field of child development. Through his work with individuals who are low functioning and disadvantaged, he developed innovative methods of testing and teaching. In common with other contemporary psychologists, he rejected the notion that people are born with a certain intelligence that remains fixed and static throughout life. In contrast, he proposed that learning occurs through ongoing interaction with others within a social context and that it is this interaction that facilitates change and modifiability in our cognitive processes.

He is well known for his work with students who struggle to learn: he works with students who are considered lost, uneducable, or beyond change that Feuerstein has had his greatest success. Feuerstein's work with these students is based on his theory of Structural Cognitive Modifiability and the practice that support this theory.

His work offers two tools that are useful in any situation where an educator or teacher wants to determine what a student might learn, how a lesson is structured, or what handles an experience offer to foster learning.

One tool is the cognitive map: it represents an instrument that may be employed for the purpose of analysing and interpreting an individual's cognitive performance, through a process of examination of a variety of parameters pertaining to mental acts. It functions as a conceptual framework for comprehending the interrelationship between task-specific attributes and an individual's performance. It is composed of seven fundamental elements: content, modality, phase, cognitive operations, complexity, level of abstraction, and efficiency. These parameters permit educators, teachers and therapists to conduct a systematic assessment of specific areas of cognitive function, thereby identifying strengths and weaknesses in an individual's thinking processes.

The cognitive map constitutes an essential component of Feuerstein's theory of Structural Cognitive Modifiability, playing a pivotal role in his approach to dynamic assessment and cognitive enhancement. It offers a comprehensive framework for the analysis of learning tasks, the differentiation of educational materials and the guidance of mediation processes, with the objective of improving cognitive functions across a range of domains

The second tool is the lesson planning which can support and help teacher to explain in a better way the content of his/her lesson, the modality, the cognitive and mental operations. The approach to lesson planning adopted by Reuven Feuerstein is firmly embedded within his overarching educational philosophy, which underscores the ever-evolving nature of intelligence and the capacity for cognitive alteration. It incorporates phases with explicit objectives, which are tailored to the learners' needs and encourage active engagement and dialogue.

A central component of the Feuerstein approach is the Instrumental Enrichment program, (FIE) which incorporates a range of cognitive tasks designed to enhance thinking and learning abilities. It is readily adaptable for use in a wide range of educational settings, from individual tutoring to classroom instruction and it is therefore equally suitable for learners of all age groups and abilities.

Overall, Feuerstein's lesson plan facilitates an interactive and reflective learning environment, thus encouraging the development of independent and strategic thinkers.

One of the principal advantages of the Feuerstein method is that it prioritises the use of cognitive processes over the mere acquisition of knowledge. This metacognitive approach enables students to acquire skills and strategies that facilitate greater flexibility and autonomy in dealing with different situations, thus enhancing their capacity to learn independently and consciously.

1. Working with special educational needs in school contexts

Being student with special educational needs (SEN) means being part of a broad category of people with learning difficulties at school.

Problems in school may be relatively mild and limited, or intense and generalised, but they almost prevent one from experiencing the joy of learning and confidence in one's own intellectual abilities. Among the undiagnosed students there are a number of them with socio-economic, linguistic and cultural disadvantages. These students, mainly children born in Italy but who have learnt Italian as a second language, have a fragile command of the language and limited exposure to cultural practices that use reflection and discourse on rules as methods of socialisation into school activities.

Again, there may be scholars whose difficulties in reading, arithmetic or spelling suggest the presence of a specific learning disability and the appropriateness of further diagnostic investigation through specialist assessment among the pupils identified by teachers as having special education needs.

Until such time, the school is required to consider the "special needs" of these pupils and, in any case, to initiate a process of didactic reworking, which includes the preparation of a Personalised Didactic Plan (PDP) in which the class council identifies teaching and methodological strategies that can enhance learning and mitigate the consequences of difficulties.

The assessment should enable the school, in collaboration with other professionals, to establish a functional profile that will allow the identification of cognitive and emotional processes that may be vulnerable and those that can be considered resources to be used to improve learning and social participation.

The main obstacle for learners with SEN is a predominantly transmissive didactic, in which concepts are mainly presented through verbal definitions.

Despite the enormous heterogeneity of the cognitive profiles of this large population, difficulties with working memory are extremely widespread. They require methods that allow for multimodal construction of concepts based on stimuli that are not exclusively linguistic.

Furthermore, when a student studies and makes an effort but does not see any progress, and perceives that he or she is unable to change his or her learning relatively quickly, there is a strong sense of inadequacy, a sense that he or she is not succeeding because of some innate ability, at the same time as motivation and commitment decrease dramatically, the student risks developing a sense of powerlessness to "hang in there" in the expectation of constant failure. This value of inclusion acknowledges that every student has a right to a response to educational needs which, for a period of time or for their whole school career, may be "special" in that they require partly personalised methods and strategies in order to realise their right to learn.

The Feuerstein method with its lesson planning can be a valuable support to help teachers work on the deficient cognitive functions of their students and, through explanation, promote a good learning process.

2. Metateaching: the mediated learning experience

Feuerstein's Mediated Learning Experience (MLE) is a cornerstone of his educational philosophy. It is based on the idea that human cognitive development can be significantly enhanced through intentional and structured interactions between a learner and a mediator (such as a teacher, parent, or peer). The mediator's role is to actively engage with the learner, helping them to interpret and internalize new information and experiences.

Feuerstein believes that there are two modalities of learning: a direct approach and a mediated approach. The first is based on Piaget's formula of S-O-R which signifies that the individual learner (O), interacts directly with the stimuli (S) of the surrounding world and response (R).

In this Kind of interaction with the environment, learning is incidental and not enough to ensure that effective learning takes place. The second, mediated learning, the author develops Piaget's formula of S-O-R further to include a human mediator between the world of stimuli, the individual and the response. Feuerstein's new formula for mediated learning, is S-H-O-H-R, in which H is the human mediator who interposed between the learning organism and the world of stimuli to interpret, guide and give meaning to the stimuli. In this kind of interaction learning is intentional. Both forms of exposure, direct and mediated are necessary at school in order to create an optimal cognitive development. This is because mediation is a type of interaction that develops the basic attitudes and competence from self-directed learning.

When a child does not interact effectively with the environment, or experiences difficulties with learning, we develop what Feuerstein calls "pointing finger". Here, the index finger points stiffly in the direction of the child, indicating, that the problem and failure is fixed firmly in the child.

Feuerstein emphasizes the importance of adults in mediation with his theory of structural cognitive modifiability (Feuerstein R, Feuerstein R.S.& Falik, 2010), based on Vygotsky's idea that every individual is modifiable through social interaction (Kozulin, 2003).

To date, the author has identified 12 criteria, or types of interaction, that are fundamental to mediation. He believes that the first three criteria are necessary and sufficient for an interaction to be considered mediation: 1) mediation of intentionality and reciprocity which involves deliberate and purposeful interaction where both the mediator and the learner are engaged in a reciprocal exchange. The mediator's intention action is aimed at eliciting responses from learner, fostering a dynamic learning environment; 2) mediation of meaning where the mediator helps the learner understand the significance of the learning material, connection it to broader concepts and personal relevance. This process enhances the learner's ability to make sense of new information and integrate it into their existing knowledge base; 3) mediation of transcendence which focuses on helping the learner apply learned concepts and skills to new and varied context beyond the immediate learning situation. It encourages higher-order thinking and the ability to transfer knowledge to different scenarios.

The mediated learning experience (MLE) holds that intervention by an adult during a child's engagement with a task or challenge is the catalyst for changing thinking and causing the child to learn. Feuerstein said mediation changes cognitive structures which means the numerous capacities of the brain to think. He considered mediation a strong force to change the brain.

Metateaching, as conceptualized by Feuerstein, involves teaching that goes beyond the mere transmission of knowledge. It encompasses the development of metacognitive skills, where learners are taught to think about their own thinking processes. This approach encourages self-regulation, reflection, and the ability to plan and monitor one's learning strategies, and the assessment, in its

formative sense. It is a continuous process with the aim of monitoring and supporting student learning throughout the educational process. (Benvenuto, 2021). In contrast to summative assessment, where the focus is on final results, the focus of formative assessment is on the learning process, providing continuous and constructive feedback to students. This type of assessment allows teachers to adapt their teaching strategies according to the specific needs of the students. It promotes a more inclusive and participative learning environment.

3.The concept of cognitive modifiability

There is no doubt today that the brain shows plasticity and flexibility, and that new pathways, synapses, new or differentially activated neurochemical conductive agents can be formed. This revolution in brain science has major implications for therapy, education, rehabilitation, and by extension the concept of the human being as a modifiable entity. It provides a new type of opportunity to study the effect of various condition of experience and exposure on brain structures. Brown and Campione (1981; 1987) focusing on the importance of accessibility in cognitive processes and its relevance to education and cognitive development.

At the core of their work is the concept of accessibility in cognitive processes which is central to many psychological theories across various domains. They distinguish between two types of access: the first is the multiple access where the ability to flexibility use available cognitive routine; the second is the reflective access, in this case Knowledge about one's own metacognition, both are crucial for understand intelligence and cognitive development.

The Key question is the extent to which certain types of activities can be linked to specific changes in the brain, and the resulting behavioral responses in terms of learning and cognition.

His theory of human development, Structural Cognitive Modifiability (SCM) has three basic ideas (Feuerstein R., Feuerstein R., & Rand, 2006) three forces shape human beings: environment, human biology (both evolutionary terms and in each one's own development) and mediation; 1) temporary states determine behavior: how someone behaves represents a temporary state, not a permanent trait. This means that intelligence is adaptive, it can change, it is not fixed once and for all; 2) the brain is plastic: because all behaviors are open and developing; 3) the brain can generate new structures through a combination of external and internal factors, it is dynamic, continuously changing-system.

Feuerstein developed the theory of SCM which argues that human intelligence is not a static trait but is subject to change and modification. This laid the groundwork for Mediated Learning Experience (MLE), an educational model emphasizing the role of a mediator in the learning process.

He maintains that human cognitive function can be changed regardless of a condition's cause severity, or a person's age, even if the condition is generally considered irrevocable and irreparable.

The principles of structural cognitive modifiability form the foundation of the theoretical-methodological model developed by Feuerstein, wherein the process of learning is subordinated to that of the formation and maturation of mental structures. The way we function at a cognitive level depends on numerous components, including our genetic "make-up". But above all, it is the effects of the environment, and in particular mediated learning experiences, that have a significant influence on the development and strengthening of neural structures. It is not about knowledge or learned skills, but about the cognitive and effector pathways that we activate when faced with new learning (Vedovelli, 2017). It can be considered as radically optimistic view underlies Feuerstein's theory of

structural cognitive modifiability (SCM) of man's natural propensity for change and adaptation to his environment.

He postulates: "The limits of learning are a priori unknown" (Feuerstein, 2006). Humans are modifiable because they are open systems in constant interaction with their environment and tend to allow meaningful structural changes in their cognition throughout their lives. Cognition is seen as the input, elaboration and output of information.

When an individual is equipped with an appropriate vocabulary, and comparative behaviour, good hypothetical thinking and the ability to draw the right conclusions, they will be able to gain more insight into emotions and other experiences.

Modifiability is possible regardless of three possible barriers: age, the etiology that underlies their condition, the severity of the genetic, physical, or psychological impairment. The theory states that a person's cognitive performance can be significantly modified through mediated learning interventions whose role is to create new cognitive structures. Structural change is more than an increase in content, knowledge or skills acquired. It shapes cognitive structures: these are ways of approaching and solving problems that can be used in completely unknown situations. This theory challenges the traditional view that intelligence is solely determined by genetics, emphasizing the role of environmental and educational factors in cognitive development

4. The purpose of Lesson Planning

It is important to consider the purpose of lesson in context before focusing on what is unique about Feuerstein's lesson planning. In recent years, the setting of objectives for a lesson has been a requirement in all subject areas, irrespective of the age of the students. Teacher staff are expected to start the lesson with a plenum, although brief one, to explain the aims, objectives and expectations of the lesson.

They are also expected to give a summary of what has been achieved at the end of the lesson: when we teach lesson in class, we are building on an existing awareness of teachers that this is a necessary part of their work. How is Feuerstein's Lesson Planning is different?

Firstly, the lesson planning created by the author shifts the emphasis from the product to the process. This requires to prepare not only a subject/content objective, that is, the what of the lesson, but also a cognitive objective: the how, why and what for the lesson. The selection of cognitive functions as an essential goal is facilitated by the use of the Mediated Learning Experience (MLE), which enables the learning process to be enhanced. It is essential that at least one objective from the list of sub-goals pertaining to the content be selected, and that the lesson be planned in accordance with the teacher's knowledge of the cognitive map. It is essential to elicit principles and bridging examples from students and to encourage teachers to reflect on their own work.

The primary responsibility for providing guidance and structure to the session rests with the teacher: this can be achieved by engaging in effective planning, reflection and preparation. Once a structure has been established, it is then possible to adopt a more flexible approach in order to address the specific challenges that may arise during the course of the session. As Feuerstein (2013) notes, a lack of planning is not the same as flexibility: it is an unreflective approach that carries an inherent risk of success being achieved by chance and is therefore poor practice. The plan may be shared with the student in a shortened form or documented on a board at the commencement of each session.

It is similarly advised that the lesson plan be shared with parents on an occasional basis, and that they be kept regularly informed of the teacher's objectives. It is therefore recommended that a notebook be sent home with the children on a regular basis, with the aim of requesting that parents (in particular for younger children) engage in bridging activities at home in line with the topics discussed in the sessions. This modality enables the enhancement of cognitive functions and support for learning, with the monitoring of student progress. It is a transparent record of activities, which can be shared with other teaching staff and therapists.

Secondly, it is recommended that the content be studied in depth, with recourse to the Teacher's Guide and one's own notes, if necessary, to recall any particular point. In the event that the Teacher's Guide does not contain a specific page for the topic under consideration, it is recommended that the information for the entire unit be consulted.

It is then necessary to determine which of the content's objectives are the most relevant for the purposes of this study. Does it introduce a new concept? It is essential to ascertain whether the material serves to reinforce a previously taught concept. Prior to selecting an objective, it is recommended to conduct a comprehensive analysis of the material in question.

Prior to initiating lessons, it is imperative to select objectives for the material in question, irrespective of whether the students have been identified and their respective profiles of strengths and difficulties ascertained. This is because, at this initial stage, it is not possible to determine which targets are particularly suited to the student's needs. It will not be long before you become acquainted with the strengths and difficulties of your student. Subsequently, when selecting an objective, it is essential to consider two key aspects: firstly, the overarching goals of the page, and secondly, the individual needs of the student. (Bonansea, Damnotti, Picco, 1996)

It is therefore possible that the recommendations set out in the guidebook may not be entirely appropriate for the individual student. This is an integral aspect of the reciprocal process. It is important to recognise that the teaching process encompasses not only the content of a given page, but also the individual being taught, for these reasons, it is necessary to integrate the two needs, revealing a clear theme that runs through the whole session.

Thirdly it is suggested that a plan be devised for the manner in which the session is to be conducted, with the relevant notes being made. It is important to indicate whether your focus will be on the page(s) in isolation, whether the teacher intend to incorporate additional resources. Alternatively, will the session be divided, with a direct application incorporated into an area of the curriculum or in a in a group setting. In this phase of the process, it is crucial to provide a detailed account, the methods you intend to employ to provide support for students who require it, whether due to a slower pace or superior abilities?

Timing is an important consideration in any educational setting: it would be prudent to consider how best to utilise the time available; the session should start with an introduction to the page in question, long approximately five minutes. This should be followed by a joint working session on novel items or concepts, for approximately ten minutes. Feuerstein recommended that the aforementioned structure be adapted according to the time available and the specific content of the session in question. Here is an example of timing in an IE session:

- Plenary/ introduction of the content- 5minutes
- Joint work on novel items or concepts: 10 minutes
- Independent work: 5 minutes

- Joint discussion of strategies: 10 minutes
- Principles and bridging: 10 minutes
- Summary, end of session: 5 minutes.

Adjust according to time available and the content of your session.

The final segment of the session will serve to illustrate the distinctive characteristics of the Feuerstein's approach in full. This represents the third of the core MLE criteria, namely transcendence. Extending and applying the ideas gained from the activity beyond the content itself represents a fundamental shift in the nature of activities, transforming them into a tool for mediated learning. This elevates the level of interaction from working on cognitive functions to metacognition, which in turn facilitates the development of insights into learning itself. At its core, the process of establishing educational principles and frameworks serves as a vital reminder for instructors to exercise the extreme prudence and foster a progressive growth in students' comprehension and proficiency in the subject matter. (Trincherò, 2021; 2022).

For some students, especially those with poor abstract reasoning, poorly developed language and working memory difficulties, generating competence from the content can be too abstract for them. In this situation, it is useful to mediate in reverse order.

At the end of the process of this lesson planning it is important to summarize the lesson. In this phase teacher get students to summarize what they have done today and what they learned from it. According to the author this final stage of summary, it represents a really important phase, because it reinforces the purpose and goals of the session, bring into line with the specified objectives. It focuses on relevant elements and priority points, teaching order and sequence, logical connections, and how to think critically. It helps students remember the events of the session by organizing them, to understand where to start in the next session and shows the mediator where the session's goals were achieved and where improvements can be made and it constitutes a reflective and metacognitive tool for both the student and the mediator.

5. A new vision of the school assessment

The notion of "assessment" often evokes images of time-keeping tools, binary responses, and a summary of results indicating an individual's perceived shortcomings. Within the framework of Prof. Feuerstein's theory, assessment is dynamic because it takes place in a learning process in which child and practitioner are involved in a mediating relationship, in which the mediator tries to offer the best opportunities for there to be a successful and learning experience.

Scholastic assessment is often perceived as a conclusive and summative moment, completed primarily by the attribution of grades and students. However, the studies of Coggi and Trincherò (2002) propose a broader and more formative view of assessment, understood as a dynamic process capable of enhancing student learning. They place significant emphasis on the importance of formative assessment, which they argue should accompany the learning process rather than merely measuring its final outcomes. The key aspect is the conception of evaluation as a process of activating the students' potentials. Instead of merely 'measuring' competences already acquired, assessment aims to:

Formative assessment, in its formative sense, is a continuous process with the aim of monitoring and supporting student learning throughout the educational process. In contrast to summative assessment, where the focus is on final results, the focus of formative assessment is on the learning process,

providing continuous and constructive feedback to students. This type of assessment allows teachers to adapt their teaching strategies according to the specific needs of the students. It promotes a more inclusive and participative learning environment.

Trincherro (2018) examines the potential of 'formative assessment' as a pedagogical tool to enhance students' cognitive engagement, with a particular emphasis on the effective integration of technology in the classroom. The author places significant emphasis on the necessity of assessment that not only gauges learning outcomes but also becomes an intrinsic component of the teaching process, fostering reflection and ongoing enhancement. He presents a series of practical strategies for implementing this approach, leveraging the potential of digital technologies to create engaging and personalised learning environments. The work underscores the value of structured assessment in guiding students towards a more profound comprehension of content while simultaneously developing the metacognitive abilities crucial for autonomous learning. His approach aims to transform the assessment moment into a learning opportunity, stimulating students' reflection and continuous improvement, the development of metacognitive skills essential for autonomous learning (Trincherro, 2021).

Corsini and Gueli (2022) argue that numerical grading, often perceived as an ordinal summary, fails to capture the complexity and richness of student learning. They contend that a more nuanced approach is necessary to assess student performance. This would involve a descriptive assessment that highlights strengths, areas for improvement and concrete strategies for student progress. Such an approach would allow for teaching that is not constrained by the "tyranny of the grade" and would facilitate more effective communication between teachers, students and families. The assessment system employed in educational institutions should not be designed in a way that merely measures students' competencies in a competitive manner. Instead, the system should be constructed in a way that encourages a fair and personalised learning environment, where all students have the opportunity to succeed. (Giovannini, 2022). The assessment system should be transformed into an instrument for enhancing educational outcomes, rather than a means of categorising students. To this end, it is of paramount importance to explicitly convey the learning objectives and success criteria to students, thereby fostering self-assessment and peer assessment as indispensable practices for fostering metacognition and learner autonomy. This contribution can be found in Feuerstein's pedagogical theories, which advocated a learner-centred education oriented towards personal growth, rather than competition. Lesson planning represents a valid educational proposal to be used in the classroom to improve learning and metacognition. This approach focuses on the process rather than the final product.

Conclusions

The Feuerstein method provides an invaluable approach to the enhancement of cognitive abilities and the development of learning capabilities, which remains highly pertinent in the 21st century.

The concept of Structural Cognitive Modifiability is defined as: the conviction that intellectual capacity is not innate but can be enhanced and augmented through the medium of mediated learning experiences.

When applied to lesson planning, the Feuerstein method places particular emphasis on the following aspects: to improve a dialogical and interactive approach between teacher and students, focusing the

attention on developing thinking skills, metacognition, developing a careful and structured organization of lesson content.

The method has been shown to improve students' propensity to learn and cognitive skills, develop greater self-awareness of learning processes, enhance problem-solving and critical thinking abilities, and increase student engagement and motivation. While not widely used in some countries like Italy, lesson planning based on Feuerstein's principles offers teachers an opportunity to become more intentional and aware of the learning process. The phases and structure proposed by Feuerstein decades ago are aligned with current evidence-based practices in effective teaching.

In conclusion, the Feuerstein method provides a comprehensive framework for enhancing cognitive development and learning ability that can be applied to lesson planning and curricular teaching. Its emphasis on mediated learning experiences and developing thinking skills makes it a relevant approach for addressing the cognitive challenges of the 21st century. It represents a challenge, but also an opportunity to improve the quality of learning and teaching to conceive of assessment as a dynamic process of empowerment.

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