# THE IMPACT OF LEARNING IN COLLEGE ON THE WORK OF STUDENTS IN PRACTICAL TRAINING

## **Himat Hag Ihia**

Ph.D. student

Department of Psychology

Varna Free University "Chernorizets Hrabar"

**Summary**: This article discusses of the role of learning in college. The college's training focuses on applying experience in mediated learning. We introduced a project interventional program (project "Let's get to know our beautiful language") in practical training to connect the theoretical and existing applications in the field of the emergent literacy and especially in writing.

The purposes were to examine the influence of mediation in case of integrating the project on the prevalence of use of mediated learning strategies among students, and if this use is more affecting the prevalence of the use of mediated learning strategies based on the principles of theorists studied in the college like Vygotsky; Feuerstein and Klein, than those who have not been learned as Gallimore and Tharp, and Wolf. The hypotheses were that the students would integrate the project in the mediation process to make more use of mediated learning strategies and will use more mediated learning strategies.

In the study participated 20 students during their study for a bachelor's degree in college and 310 children from 12 Arab kindergartens in Israel, divided in two groups – experimental group and a control group.

The hypotheses were mostly confirmed. Mediation with the project increased the use of mediated learning strategies on the students, and the extent of the use of mediated learning strategies is high.

The conclusions that rise from the findings are that the college's training process is happening among the Arab students and they use the material learned as learning strategies in their work in the kindergartens. The use of the project in mediation is powerful tool, appropriate to developmental needs and the ways of learning of young Arab children in a Jewish state. Using a project in teaching interaction is an effective strategy for contacting Arab children and to work in cognitive, social, and emotional areas.

**Keywords**: mediation learning strategy, teaching methodology, practical training

Training in college builds students' knowledge to be used actively in their actions and not remain as declarative knowledge alone (Ran & Ben Yehoshua, 2020). Training also emphasizes cultivating thinking and attending to teaching students, while addressing a selection of skills and approaches in all areas of education, which can encourage growth among children (Feiman-Nemser & Ben-Peretz, 2017).

College training is a method for applying the educational approach that is taught to encourage growth among children. There is little research in the literature that deals with the role of learning in a college involved in students and transforming it into learning strategies, and a method for measurement and evaluation is missing in this field. Therefore, the training in the field of mediation as a teaching tool that has creative potential is waiting to be revealed. The uniqueness of the current research is in the attempt to connect the theoretical and existing applications in the field of mediation to promote the advancement of emergent literacy in education and aspects of theoretical and practical knowledge, which exists in the field of experience in mediated learning.

The purposes are to examine if learning and training in the college Mediation approach bring students to use mediation integrated in their work in the kindergarten. By the intervention program project Let's get to know our beautiful language to see how much use of mediation by an intervention program (project Let's get to know our beautiful language) in the mediation process affects to the prevalence (frequency) of the use of mediated learning strategies among students, and if this use is more affecting the frequency of the use of mediated learning strategies according to the principles of theorists of prominent subjects such as Vygotsky, (1978) Feuerstein (1998), Klein, (1993, 1991, 1997). These are the principles learned in the college. They are compared to the incidence of the use of mediated learning strategies according to the principles that were not learned, similar or different and there affects the process of mediation for writing.

## Learning in college and its impact on students

The issue is whether the process of acquiring knowledge and skills about mediation that occurs in college can lead to development and change around learning mediation among students. Does this learning process encourage students to use mediation during their fieldwork (practical training) in kindergartens?

Learning in college curriculum - concepts and principles

In recent years, there has been a growing trend to encourage educational approaches that encourage children to be active participants in educational meetings and kindergarten life (Brebner et al., 2015; Conners-Burrow et al., 2017; Goldshmidt, 2017; Livingston & Flores,

2017). At the same time, there is a growing emphasis in teacher training programs on developing training approaches that emphasize thinking grooming and active participation of teaching students (Findeisen et al., 2021; Weadman et al., 2021). Based on Dewey (Dewey, 1916), emphasizes the importance of experience and reflection on experience as a central part of teacher education. According to Feiman (Feiman et al., 2017), teachers' trainers were told to lay the groundwork of learning through experimentation for the students of teaching at the early, pre-degree stages of training. define the infrastructure for students of teaching at the beginning their way as "range of methods, skills, and attitudes in all areas of education planning that the teachers have at their fingertips and by which they can encourage the growth of the children with disabilities." Indeed, at college, students integrate into different programs, including early childhood education, and receive field teaching training.

Perception of the teaching-learning process: According to research by Tamir, E. et al, teachers who act in a constructivist space led to significant learning. These teachers allow students to construct knowledge out of self-direction in the situations, which focuses on learning processes rather than just the product; teachers impose tasks on the students with those tasks, and there is an opportunity for students to practice the skills they are learning (Tamir, 2020).

Early childhood curriculum at the college has adopted the socio-cultural theory of Vygotsky (Flavian, 2021) as theoretical approach that should guide the learning. The mediation process is emphasized as being essential to meaningful learning in the social cognitive theory. Through internalization and active processing in the learner's mind, significant learning inexorably results in understanding of knowledge and learning processes that are present in culture. According to this theory, people "meet" reality indirectly through psychological tools, which act as sort of "filters" through which each of us perceives the social and physical reality in which we live. According to social cognitive theory, the psychological frameworks we employ to make sense of the world coincidentally come into being as a result of our engagement with culture and the mediation of people (both adults and children) who are more knowledgeable than us about the "theme" at hand. Therefore, Berkowitz refers to the sociocultural theory of Vygotsky as an inviting learning approach that combines inquisitive and collaborative aspects of learning. In this theory, knowledge is perceived in a constructivist manner, which means that it is built in the consciousness of students in social-cultural contexts (Berkowitz et al., 2017). Furthermore, Wang et al. refer to the goals and characteristics of the developing dialogue, as they contribute to the growth of agreeable to all new knowledge: confidence in children's and students' abilities to take an active role in their own learning, which

is, of course, a necessary condition for the joint construction of knowledge. However, if we want knowledge construction to be meaningful, the discourse should include more than just casual opinion sharing (Wang et al., 2016).

The teachers training program of College on an Early Childhood curriculum aims to train the kindergarten teachers who will manage kindergarten classes in different cultural contexts, which are typical to pupils in Israel, in a manner that will create learning conditions and better emotional well-being for all people involved (children and teaching staff). The program of teacher training colleges is based on the idea that both children and teachers are human. On the one hand, they learn and grow throughout their lives; on the other, they require basic conditions of security and emotional well-being in order to realize their inherent learning potential and become active participants in the society in which they live. The perception of the college based on the pedagogical approach of Carmi (Carmi & Tamir, 2022). According to Carmi, et al, "Pedagogy as a form of study applies that the teacher's knowledge of children based on an actual relationship with them". Another major focus of the program is the development of strong socio-emotional infrastructure in order to secure significant learning conditions. Internal and external conditions are the two types of conditions. Internal conditions are states of consciousness that allow for meaningful learning, involved guidance in the process, and product understanding). External conditions are environmental characteristics that enable and encourage internal conditions to lead to meaningful learning (Carmi & Tamir, 2022)

In this program, it is supposed to implement the mediation approach as a major part of the training of students as kindergarten teachers. Therefore, our hypothesis is that the process of training of the students will bring the use of mediation tool in their practical training with the kids in the kindergarten.

The School of Education and Early Childhood Programs developed a coherent and integrative curriculum, with coherence achieved through the development of an integrated, graded, and spiral curriculum: The importance of integrating the various components of the training program cannot be overstated (Egert et al., 2018). Aside from integration, rating the difficulty and complexity of all elements is an important component in the program, in various courses, in experience, and in the linking of theory and research (Stanley & Finch, 2018).

The learning environment in kindergartens is based on close and continuous contact with children, as well as non-formal learning that often stems from children's questions and doubts. As a result, meaningful learning in kindergartens necessitates the teacher's basic knowledge in a variety of disciplines. Furthermore, according to Bean's outline, the Preschool Department of the Ministry of Education in Israel requires kindergarten teachers to teach core

disciplinary contents (language and literacy and children's literature, arts, mathematics, science, etc) (Bean et al., 2018).

The curriculum conceptually grows from different approaches, such as the Reggio Emilia program (Perry et al., 2023) or an early childhood education Vygotskian Approach (Kramarski & Heaysman, 2021). The role of the curriculum as a process, is to help us in this mediating; that goal should be rich, repeated (recursive), relational and strict (rigorous) (Subero et al., 2018).

Teacher training colleges, early childhood curriculums adopted the eco-systemic approach as a general developmental model (Zepeda et al., 2019). This approach sees human development as a dynamic process, which is the product of the inseparable combination of biological effects that the child brings with him, and environmental influences, such as relationships with parents and educators, cultural values and historical factors. Furthermore, according to this approach, functional, behavioral, academic, or social difficulties are a complex product of relating effects and environmental effects, which are associated with cultural values, parents' references, educators' references, and learning environment organization. The eco-systemic approach, which takes into account students' learning and emotional well-being and is based on a classroom, school, cultural, historical, and political context, is used as the foundation for the common conceptual educational concept of the early childhood program as well as the College as a whole. The uniqueness of early childhood development stems from the fact that the human race's primary and fastest development occurs in the first five years of life (Zepeda et al., 2019). This rapid development makes both the learning potential and the possibility of harm because of emotional trauma to the most significant. Therefore, ecology where the child grew in his early years has a dramatic effect on his development (Bodrova & Leong, 2018). However, preschoolers need emotional support and security to learn- even more than older pupils do. Good relationships with adults who give emotional security next to limits and encouragement of cognitive autonomy (Osher et al., 2020) and close relationships with other children are among the weighty factors in building a sense of security and belonging to the kindergarten.

On the other hand, we must consider the children's ability to regulate themselves (self-regulate) and control their attention, which is still developing and lower than that of elementary school-aged children. Their learning strategies are being developed (D. Lee et al., 2018). At the preschool age, it is important to build a foundation of academic skills such as attention and perseverance as well as tools aimed at memory and self-control (Bodrova & Leong, 2018). In other words, while children in kindergarten are curious and interested in learning about the

effects of the physical and social worlds, the chances of us teaching them content they are not interested in through formal instruction (plenary lecture, for example) are very low (D. Lee et al., 2018). Children in kindergarten require guidance and support to continue learning in any field. Furthermore, at the age of five, children lay the groundwork for their future behavior and moral judgment (Bodrova & Leong, 2018).

Literacy skills could be taught in an integrated, interactive and meaningful way by systematic reading through books, which are very favored by children until they know how to "read" them by themselves (Collie et al., 2018; Suggate et al., 2021). Literacy issues, such as phonological awareness, letter recognition, morphology reference, and syntax, are likely to arise in the debate over whether the teacher will read the book to the same group of children repeatedly. Furthermore, he will invite the children to participate when he is reading, studying, and discussing a book with them. This emphasizes the importance of raising the literacy level of kindergarten children, as well as the importance of a kindergarten teacher (Suggate et al., 2021).

## Mediation approach

Mediation refers mainly to being done by an educator or another adult with a higher capacity in order to bring learning to the learner. The purpose of the action is to upgrade the study's thinking through interactions with an educator with a higher ability to interact with the physical environment. Mediation is a deliberate action that has been enacted, mediated between the child and the world that aims to bring meaningful learning. The mediation refers to quality of relationship and not the content. The content varies from culture to culture, from age to age, from person to person.

In this context, there is many psychological models such that developed by Brunner and others (Bruner, 1996) and contextual models like Bronfenbrenner's model (Rosa & Tudge, 2013; Zepeda et al., 2019). Inside the widest outer circle is the general culture of that society, inside of it there is an internal circle, which is community or neighborhood, and inside this circle, there is a family. Within the family circle, there is a circle, closest to the child's relationship with his closest adults, often those are his parents.

The mediation of an adult to a child is a primary and decisive motive in the child's cognitive development. To understand the child's cognitive development, specific patterns of social interaction in which the child participates as a joint interaction with parents must be examined. The "development zone" is where social interactions take place. This zone is located between the child's current developmental level and its potential developmental level (Zone of Proximal Development) (Barrs, 2017). The actual developmental level determined

by way the child solves a problem by himself, and the second level determined by how the child solves the problem with the help of another man, more skilled adult, or another partner with higher qualifications.

Mediation experiencing learning approaches.

Vygotsky's approach (Flavian, 2021): one of Vygotsky's assumptions is that the developing child has learning ability. This capability realized by contact with mediated environment through an adult, who has an active and conscious role in the mediation process. Vygotsky's social interaction theory emerges that there are basic principles for meaningful interaction and Vygotsky enumerated 5 essential principles for the existence of mediated interaction:

The type of interaction: The type of interaction between students and children is defined as any activity undertaken to communicate with the child, such as a conversation or another relationship such as a smile, hand gestures such as placing a hand on the child's shoulder, applause, or nod. Or participation, which means that the student participates in the activity, and as such, this index included nonverbal bond behavior.

The use of mental and artistic tools: This mediation has been defined as the adult's activity in the use of symbolic mediation such as: language use, the adult explanation and interpretation of words; the mediator uses quantity numbers in a different order, such as account; Using a drawing - employs the painting or requests that the children draw something; utilizing works of art - employs photographs, videos, tablets, and stories; utilizing diagram or graphic charts; incorporating maps into the activity; Using writing - uses or requests writing in the form of air, points, or pastels.

Psychological instruments -This mediation has been defined as the mediator's activity in mental instruments such as: the use of signals (the use of specific signals in the activity); the use of specific hints on a task. using ideas - presents ideas and invites children to contribute ideas; art; presents art and interprets it with children; Oral discussion - discusses trust and grants them the right to speak, technological tools such as a projector, etc.

Social interactions as an intermediary: Social interactions as an intermediary for the development of the learner's thinking - this mediation has been defined as the activity in the use of intermediate teaching styles - the mediator is attempting to make connections between the activities he has undergone and the concepts in which the current activity is; start of response and feedback; allows the children to express their achievements in their private customs; discusses with the children in the structure Negotiations and student dialogue in

mediation Talk with the children in a negotiation and dialogue style, using open questions, listening to the children's references, and responding to the discussion.

Support and scaffold: Scaffolding is the type of help offered by the mediator of support for the study; helping the child to complete the task; helping the child to understand an idea that he could not comprehend in an independent manner; dividing the task into simple parts; in cooperative learning with the children; giving the children the opportunity to experiment with the task; presenting models; presenting advice and procedures; conducting an open discussion with the children.

Educational Accessories: This mediation has been defined as the activity of the mediator in the use of monitoring training Student, the mediator who directs the child to a certain function in the activity; analyzing - analysis is trying to analyze the difference between its functioning and the functioning of the activity; Help assisting helps a child in the use of study methods or appropriate study styles to come from the level of functioning that he has to the intended level of functioning, raises self-confidence in the children begins with tasks that need less help, the children with help to complete the task quickly and successfully. The mediation leaves the children to help themselves, not trying to teach the children a certain skill; thinks how to dismantle the accessories in a gradual manner and then in an entire way.

A connection between everyday concepts and scientific concepts - This mediation is defined as the mediator's activity in using a connection between close concepts and scientific concepts that teaches at first; the automatic concepts and connections with the intended concept; attempting to choose concepts from everyday life that are the intended term at the beginning to understand; and attempting to use means and accessories to stabilize scientific concepts in the absence of divine concepts (Solovieva & Quintanar, 2020).

These are the principles of Vygotsky mediation that are learned in the college.

Many of the new Vygotsky researchers investigated and examined the field of mediation to understand the role of the adult and his contribution to the child's learning process. One of these researchers was Reuven Feuerstein, who developed a theory of mediated learning.

Mediated Learning Experience Feuerstein approach

The theory of experience in mediated learning was developed by Feuerstein and his colleagues (Chapman, 2018). According to this theory, the quality of the interaction between the child and the significant practitioner of his education is the primary factor responsible for the child's cognitive functioning, mind, and ability to adapt to new and complex situations. Based to this approach, it can be seen in genetics and environmental conditions, factors that determine development potential, but the opportunity to realize development potential for the

quality of learning experiences that the child experiences during its development (language dependencies). With the help of mediated learning, new cognitive structures can be created with the child, as well as thought and conduct operations that were not previously present (Feuerstein & Jensen, 1980). Learning occurs when the mediator transforms any event or experience into an opportunity to change and expand the mediation's action schemes. This special interaction occurs while using diverse communication forms, which are not always the intermediate literal that runs the child in a series of activities and troubleshooting processes, it brings the revelations that the child operates on them, as well as the explicit demands of the environment, are made more organized and explicit for him, so he deals better with the tasks and problems presented in front of him, and enriches his repertoire of adaptation (Tzuriel, 2020). Through the recognition of the necessary human mediation in learning it is possible to understand the many individual differences between individuals about their cognitive functioning (Chapman, 2018). Based on the principles of Vygotsky (Chapman, 2018) are defined 13 criteria in which one can distinguish between interaction defined as mediated learning and other interactions. The first five criteria are universal and necessary for the existence of an intermediate quality interaction: A. Intention and reciprocity, B. Transcendental meaning. These three criteria together create the ability of the structural transformation as a common option for all human beings, beyond races, ethnic groups, cultures and other socioeconomic strata, while the other teens are dependent on culture or task.

The Theory of Mediated Learning (Chapman, 2018) indicates that five are basic principles necessary for meaningful interaction. These are the principles of Feuerstein mediation that are learned in the college.

Intention and Reciprocity (Focus): In this principle, there is an underlined primary process, which takes place between the mediator and the child. First, there is a mediator's attention in mediation action and for the general guidance; he focuses the child's attention, for example, to a word, written on the board of all the other words. For this purpose, the mediator filters stimuli (the rest of the words, written on the board) and highlights the relevant stimulus (a specific word). The voting, the embossing, the highlighting, all of this focus the stimulation picked by mediator. The purpose of "reciprocity" is to highlight the sensitivity of the mediator to the initiatives and reactions of the child and to ensure that the child "keeps the attention" with the mediator. Today the "smartphones epidemic" spreads in classrooms in an increasing rate, students immersed in the virtual world and often the attempts of the lecturers to stimulate curiosity on the subject disappear in the chaos. Even this example demonstrates that without "reciprocity" the interaction of mediation and no meaningful learning cannot occur.

*Meaning (excitement):* The principle of meaning is a part of the process where the mediator "pouring" an emotional and enthusiastic values baggage into stimulus through non-verbal behavior (para-linguistic resources): intonations, facial expressions, body language, tone of voice; and using through verbal behavior: labeling, explanation, repetition. For example, Friday kindergarten is not "another day of the week", but is a special day, the teacher, by her words, tone of voice and facial expression correlates for this day a feeling of uniqueness and festivity.

Students who plan teaching activities in kindergartens and schools and give their opinion on the opening part of the activity that it is be interesting, exciting, and intriguing, fail to capture the attention of their pupils.

Transcendence (expansion, and beyond): This interaction of mediation expands the experience beyond the immediate situation and immediate gratification. It is achieved through questioning, explanation, scoring the connection between the immediate experience into a different one in similar interests, comparing, sorting and pointing to a causal relationship and more (Chapman, 2018; Tzuriel, 2020).

Another example that teaches about transcendence shows the importance of the interaction of intermediary at infancy age and its impact on the cognitive development of the baby is a study conducted in Dutch (Helmerhorst et al., 2017).

A mediation of a sense of competence: The highlight in this criterion is not on the ability, or capability, as itself, but rather the sense of the person about his competence. There are few internal sources of information available to the child about his ability level. Often, they based on criteria, tailored to the performance of older people, so the child cannot accurately assess his ability. This is also true for gifted children, who frequently perceive themselves as operating at a low level. The mediator provides feedback to the recipient, interpreting his success level on a scale tailored to him. The mediator is not satisfied with incidental occurrences; instead, he creates initiated situations that are tailored to the child's functioning. This allows him to demonstrate his command to himself and others. The emotional and motivational components of competence increase the child's willingness to deal with new and unfamiliar experiences.

A mediation of regulation and control of behavior: Mediator's intervention intended to bring to the awareness of the recipient that it is in his ability to regulate and control the power of his cognitive function - when he should accelerate and when to rein in his responses. The intermediary aims the recipient to critic and regulate his behavior according to criteria that resulting from its complexity of the situation, according to the importance of the issue and various circumstances (internal and external). The child who did not receive proper mediation

of regulation and control of his cognitive behavior is characterized by extreme fluctuations between unrestrained responses, impulsivity, and excessive restraint of his response, which expressed in a kind of paralysis and lack of ability to respond.

Klein's approach to mediated learning:

Focus is on the quality of interaction between an organism and its environment. This quality created due to changes caused by human intermediary that puts itself between stimulus and the learning organism (Shuper Engelhard et al., 2014).

The mediator adapts himself to the learning organism. He fits the stimuli itself to the learner. There are three partners of stimuli in mediated learning:

- Anything that catches child's senses (sight, hearing, touch, taste, smell, and various internal sensations).
- The learner the child as an entity with tendency to change, with an internal curiosity.
- The intermediary the contact between various phenomena and the child.

Mediator's approach model in interaction between adults and children by Klein (2008): MISC - More Intelligent and Sensitive Child.

The MISC connects the reference to feelings and thinking. According to this approach, quality interaction includes the components of the expression of positive emotions toward the child and instructional behavior – mediation that includes focus of child's attention, transferring of meaning of what he experienced around him, expansion and creation of connections between different experiences, encouraging and regulating of behavior (Klein et al., 2017).

What are the children's needs for optimal development? In every teaching interaction the children need "mental menu" that have two types of components: emotional components, and instructional-cognitive components.

*Emotional components* - contact, smiles, vocalizations, shared expressions of pleasure, "taking turns" physical proximity, eye contact.

Basic messages for the child: I love you, I am with you, you should act, etc.

The mediation behaviors of adults - are instructional components, focus, emotional significance, extension, sense of competence, regulation, intent, and reciprocity.

Focus (Intent and Reciprocity) - In this principle, actions are being carried out to achieve a change in perception, processing, or expression of the child. This principle states that there must be a conscious and planned initiative / deliberate behavior, which should bring factors of environment to the child's awareness. Reciprocity is the interaction between mediator and learner that expressed in listening and focusing on the child, receiving the

message of the mediator by the child, who becomes an active participant. Without "login" there is no real interaction, no significant mediation will occur (Klein et al., 2017).

The attempts of adult to reach reciprocal attention with the child - the focus consists of three components:

- Adult's awareness about the fact that he must act to match child's environment so he will be able to experience it.
- Creation of behavior in purpose of focus.
- The behavior aimed to ensure that there is a match between adult's plan and child's response.

*Expansion*: textual description that helps children to expand their awareness of what is happening in their cognitive awareness beyond the here and now. Expansion processes includes behaviors of giving explanation, specification of relationships between objects, processes, events, causal relationships and more.

The adult helps the child to associate the immediate experience that he experienced with other experiences previously experienced or will experience in the future.

*Mediation a sense of competence*: this mediation based on encouraging of child's feelings of ability by the mediation. This mediation evokes in the child the feeling that he can handle, evokes a feeling of ability, of capability and the awareness that he can rely on himself. This mediation motivates to success and achieve; thus, it has an impact on the level of cognitive function and level of independence (Klein, 1994).

Mediation for meaning: The mediation gives reinforcements to the child (children), accompanied by explanations about why the reinforcement is given. Reinforcements enhance the level of activity of the child and create "appetite" to success. A child who has not experienced the pleasant sensation that accompanies success may suffer from a lack of motivation to try to succeed.

Regulation of behavior: this mediation includes the transfer of information on the activities that the child is doing to improve his performance / functioning by planning and adapting behavior to the task requirements, by verbal or behavioral demonstration.

This mediation creates coordination between task characteristics and cognitive characteristics, to create a balance between performance speed and performance accuracy of the task. (Klein, 1994).

This behavior includes a proposal (often accompanied by an example), how to adapt mode of action to the required task. It has been designed to help the child to perform a task and to develop behavioral strategies for effective action. This behavior sends a message to the child,

that he should stop and think before action to consider various response options or steps of action, to resolve a problem or achieve the goal.

The application of principles of mediation learning by a didactical instruction.

You can develop the ability to detect these criteria and then implement them in your teacher or kindergarten teacher training. This ability can be developed through theory learning, observation of lessons and analysis of didactic approaches revealed in them, and processing classes or sections of classes by students from the perspective of mediated learning. You can train a teacher and a kindergarten teacher to act as intermediaries, assisting students in developing their learning abilities. Let us bring some examples of mediated learning activities in teacher work, sorted by various criteria:

- Mutual intention intermediation: the teacher's intention to mediate will be reflected in all his actions and demeanor, openly and explicitly, and in a subtle and non-explicit, verbal, and non-verbal way both. The teacher's intention to mediate will be reflected in organization of learning material and presenting it in such a force that it will have increased penetration to the pupils. The teacher will change the material in a way that the pupil will try to absorb what he wants to teach. The teacher must take care of vigilance, attention, concentration, and attention of pupils.
- Teacher's work reflected in transcendence: Among other things, the selection of study material considering the necessity of learning stages: his concern that pupils will master basic skills and acquire important work habits for progress in future; Fostering rational approach; In assessing questions of "why" and "how" above the questions of "what", "who" and "where". Each event that the teacher would generate would be directed in such a direction so his pupils will acquire new means to absorb other events. When the teacher will teach a new word, he will not be satisfied with its addition to the word vocabulary of the pupil, but he will highlight the word's qualities that make it a model, the template, which will enable the pupil, by himself, to grant and analyze other words. Every interaction between teacher and pupils because of any event should become a starting point for the recognition of other events.
- An intermediation of meaning: The teacher must be aware that his views and values are transmitted to pupils not just by explicit statement, but also, largely by non-verbal behavior standing, expression, voice tone and so on. He should use all these means to convey to pupils the values, which he considers important.
- An intermediation of sense of efficacy (competence): The teacher, will product opportunities of success for pupils at different levels, by selecting appropriate tasks and

adjusting his questions, by providing frequent feedback on student success and significance; by highlighting the positive elements of the pupil's action, even when the overall result is still not at the desired level.

- Regulation and control of behavior: The teacher will restrain impulsive students, ask them to concentrate and think before giving an answer. The teacher will serve as a model in his appearance, his self-criticism, subdued behavior, and lesson structure.
- Sharing the experience with others: the teacher will create opportunities for shared experiences, he will foster children's listening to each other, will foster mutual aid and sensitivity to the needs of others and so on.
- An intermediation to psychological individuation and differentiation: The teacher will encourage independent and original thinking. The teacher will refrain from harming dignity of pupils; he will allow them the freedom of choice in some of the activities.
- An intermediation to goal-orientation: The teacher will demonstrate his own goal-directed behavior by setting clear goals for each lesson, and demand so from the pupils. The teacher will encourage perseverance and diligence in pursuing that goal.
- An intermediation to deal with challenges, favoring the new and the complex: The teacher will evoke opportunities for pupils to success of new missions; he will place in front of them suitable characters for those opportunities. The teacher will consider the degree of novelty and complexity of the task in his evaluation of pupil's work.
- An intermediation to awareness of change: The teacher will arouse within pupil the reflective thinking about his progress in learning; he will show him how to progress.
- Mediation for Interaction: The teacher uses language and conversations to communicate with the child, the use of verbal language, and the body language is especially important.
- Mediation for symbolic and artistic tools such as: language use, teacher, and interpretation of words in a verbal and mathematical manner in order to clarify another illuminated.
- Mediation to maintain social interactions The teacher encourages social interactions between the children and between them.
- Mediation support and scaffolding -the teacher reaches a hand and helps a student who is struggling and gives him scaffolding for help.
- Mediation between everyday concepts and scientific concepts –The teacher extends the concepts known to conceptual concepts.

These are the application of principles of mediation learning by a didactical instruction in the practical training. The place of the practical training is the kindergartens. Therefore, in the following section we will present the mediation approaches and principles of mediation in kindergarten.

## **Empirical verification**

The main purpose of the proposed research was to examine if learning and training in Mediation approach in the college brings students to use mediation integrated in their work in the kindergarten,

Another purpose is to see how much use of the principles of known mediation theorist such as Vygotsky. (1978) (Harland, 2003) Feuerstein (1998) (Feuerstein & Jensen, 1980), Klein, (1993, 1991, 1997) – the principles learned in the college, is the same or different from the use of mediation principles that were not learned at the college – these of Gallimore and Tharpe, (1990) and Dina Wolf (2004).

Third What is the contribution of the use of mediation principles in the process of mediation to the achievements of the emergent literacy and the word writing achievement? To check what is the contribution of the use of the principles of mediation in the process of mediation of the writing word achievements.

Research problem: the question is does students use principles of mediation in their own education after receiving education learning and training in a mediation approach at a college?

Our assumption is that our students will be able to realize what they have learned at the College of Mediation principles and to apply to the kindergartens with the children. Use the mediation by the project intervention program - "Let's get to know our beautiful language" will lead student to use of mediation learning strategies that learned in the College and raise the level of achievements in the literacy and the level of writing among children in kindergarten.

Research Variables

*Independent variables:* 

1. Using the mediation – Integrating the principles of mediation in work with children of the experimental group who participated in the intervention program as opposed to the non-integration of the principles of mediation with the children of the control group. It is derived from these three variables – applying mediation using the principles of the mediation according to Vygotsky: according to Feuerstein and according to Klein.

2. Type of mediation - principles of mediation as taught by both college-taught theorists and those who did not. We want to look at the differences between the principles of mediation that are deeply learned in college (principles of Vygotsky, Feuerstein, and Klein) and those that are not deeply learned in college (principles of Gallimore, Tharp, and Dina Wolff), as well as see if there is a difference in the mediation index of the type (mediation learned and not-learned mediation).

Dependent variables:

- 1. Experience Strategies in mediated learning- Frequency of the use of strategies of experience mediated learning with the student's mediator during the intervention. The strategies have been tested according to the principles of each of the theorist's standards.
- 2. Strategies tested according to the principles of Vygotsky (type of interaction; use of mental and artistic tools and psychological instruments; social interactions as an intermediary for the learner's thinking development; Support and scaffold and educational accessories; connection between everyday concepts and scientific concepts)
- 3. Strategies tested according to Feuerstein principles (Mediation: intent and reciprocity; The significance; (transfer) extension; provision of competence; mediation for regulating behavior).
- 4. Strategies tested according to Klein principles (Focusing; Meaning; Extension; Competence; Regulation of Behavior)
- 5. Strategies tested according to Gallimore and Tharp principles (Demo/Illustration modeling mediation; reinforcements-contingency; Feedback-feeling back; provision of instructing; asking questions; cognitive structuring)
- 6. Strategies tested according to the principles of Diana Wolf (Basic strategies: concentrated listening; Providing a response time; Granting permission to express oneself; repeating the children's words without changing anything; In reference to content; Thinking; definition; Asking questions; language)

Research Hypotheses – the use of mediation learning strategies, the type which are learned according to the principles of Vygotsky, Feuerstein, Klein will be different and higher than the degree of the use of mediated learning strategies. The type of mediation not learned according to the principles of Gallimore and Dina Wolff.

First hypothesis is that the mediation approaches learned in the college come to fruition at working with the children as part of the practical work in the kindergarten. Through the mediation increases the frequency of use of mediated learning strategies among students.

As a result of the college training in general and in practical work that emphasizes mediation approach the student will use the access and principles of mediation according to

Vygotsky, Feuerstein, Klein (through mediation) in working with the children in the framework of the practical work in the kindergarten (mediation by the project intervention program). Through mediation will increase the frequency of use of mediated learning. This hypothesis is based on the study of Berkowitz (Berkowitz et al., 2017) that has found a link between the cultural social theory of Vygotsky and the learning that integrates the aspects of the study with the collaborative aspect of learning. The knowledge was perceived in this description in a constructive manner. The study of Yosefsberg Ben Yehoshua (Margaliot & Gorev, 2020). of the international intelligence system, is that the provision of the use of significant learning is used by teachers who operated in the constructive area.

The second hypothesis is that through the mediation project ("Let's get to know our beautiful language" Intervention Program) increases the frequency of use of mediated learning strategies among students according to the principles of the authors studied in the college (Vygotsky; Feuerstein; Klein). The learning in lessons that the students take away from the experience will encourage them to use the mediation approach with kindergarteners and to refine it when they are used as students by kindergarten teachers. The students' education will prepare them to apply Vygotsky, Feuerstein, and Klein's mediation principles in The Project Intervention Program to their practical training in kindergarten.

The third hypothesis through the mediation would increase the frequency of the use of mediated learning strategies according to the theorists learned in the college compared to the use of not learned theorist's strategies. The college emphasizes three theorists: Vygotsky, Feuerstein, Klein. Less emphasizes the mediation of Gallimore (Gallimore et al., 1993) and Dina Wolff (2004).

The fourth hypothesis is the use of mediation learning strategies by the type of mediation learning according to the principles of Vygotsky, Feuerstein, Klein will be different and higher than the degree of the use of mediation not learning strategies by type of mediation according to the principles of Gallimore and Tharp (1988.1990) and Dina Wolff.

## Research method

In the study, two groups were examined: *children* were randomly selected from attending the regular Arab early childhood cults from the center of Israel. They were divided in two groups – research group and experimental one. In research group were included 155 children, 96 were age 5-6, 59 were 6-7 age; 73 are male and 82 – female. In the control group 76 were age 5-6, 82 – age 6-7; 52 were male and 103 – female.

The *mediator research participants* are students in the College of teacher training in the early childhood track (N= 20). Each of the students has been training work in Arab

kindergarten in regular education in the central region of the country Israel. During their studies in the kindergarten, they were accompanied by a practical training course subject.

#### Research instruments

There are two categories of research tools: tools for observing mediation processes that students had created and tools for examining mediation learning strategies. Additionally, the following tools were used to assess the kids' literacy accomplishments.

Children's tools for examining the achievements in the field of literacy were: spoken language processing test; phonologic awareness of an opening sound; phonologic awareness of a closing sound; knowledge of letters and relationships between sound and signal letters; vocabulary - knowledge about the spoken language; writing letters; writing words test.

A. Observation of mediated learning strategies according to Vygotsky.

A tool for observing the learning strategies of the students who are working with the children was developed by the researchers for this purpose (Boris Minchev & Hag Ihia, 2017). The observation tools the observation tools based on the principles of the Vygotsky (Barrs, 2017) included:

- 1. The type of interaction between students mediators and children such as: An activity that is made to communicate with the child, such as using a conversation or another relationship like a smile, hand gestures like placing a hand on the child's shoulder, or nodding or applauding, is referred to as mediation of the type of interaction. Or participation, which denotes that the student engages in the activity; as a result, this index considered the nonverbal connection's behavior.
- 2. Use of mental and artistic tools this mediation has been defined as the activity of the mediator in the use of Symbolic intermediaries tools: Language use, student mediator mediated explanation and interpretation of words; using a different order, such as the student account, the mediator uses quantity numbers; Using A drawing, the student who is a mediator uses the painting or asks the children to draw something; Using Works of Art, the student who is a mediator uses pictures, videos, tablets, stories; Using Diagram charts, or graphic charts; The mediator uses maps in the activity. The mediator uses writing or asks to write in the form of air or points or with pastels. Psychological tools The mediator's involvement in this mediation has been described as occurring through the use of mental tools like: the use of the student's signals specific signals are used as mediators in the activity. Apply specific tips to a task; the student presents ideas while being mediated and invites the kids to contribute ideas; She shows art to kids and helps them understand it. During the oral discussion, she addresses the trust and grants each participant the opportunity to speak.

- 3. Social interactions as a mediation for the development learners thinking this mediation was defined the activity by the student mediator as the work of mediator in the use of intermedia teaching styles. The student who is the mediator is trying to make connections between the past activities and their concepts in which the current activity has been. Beginning of response and feedback, the student mediator gives the children an opportunity to express their familiarity with activity in their private terms. She discusses with the children in the structure of the activity and from process; she discusses with the children in the words of the terms of the subject of study. Negotiations and dialogue the student mediator talk with the children in the style of negotiation and dialogue. She is using open questions, the student listening to the children's reference and answering their discussion.
- 4. Support and scaffolding This mediation has been described as the mediator's activity while using a scaffold; a scaffold is a type of assistance provided by the mediator student to support learning; the mediator student is assisting the child in completing the task; A concept that the child was unable to understand on his own is made clear to him by the student mediator; The student mediator breaks the task down into manageable pieces and facilitates collaborative learning with the kids. The kids are given the chance to experiment with the task by the student mediator. Models are provided by the student mediator. The student mediator engages the kids in an open dialogue while providing recommendations and guidelines.

Educational Accessories - This mediation has been defined as the activity of the mediator in the use of monitoring training Student, mediator directs the child to a certain function in the activity; analyzing The student mediator analysis trying to analyze with the child the difference between his functioning in the activity and the intended function in activity.; Help assisting The student helps a child in the use of means of learning or learning styles to come from the level of functioning that he has to the intended level of functioning. The student mediator raises self-confidence in the children begins with tasks that need less help. The student mediator provides help to children to complete the task quickly and successfully. The student mediator leaves the children to help themselves. The student mediator is not trying to teach the children a certain skill. The student mediator thinks how to dismantle the accessories gradually and then whole.

5. Connection between everyday concepts and scientific concepts - This mediation is described as the mediator's use of a connection between personal concepts and scientific concepts, in which the mediator first teaches the automatic concepts before connecting them to the intended term. Every day, the student mediator tries to select concepts that are closer to the

intended term than the term itself. In the absence of commonplace concepts, the student mediator is attempting to design scientific concepts of science using means and accessories.

Specification: Each of the interactions between the mediator and the children's group during the teaching activity (we had 10 activities in 10 meeting of literacy activities for children) was filmed and consecrated. Any behavior of the mediator was classified according to the appropriate mediation category and received one point. Specification each of these ways is done separately. Once the observations have been analyzed, each mediated specification is determined in each of the mediation categories. The grades express the amount of mediation during the mediation.

Validity – The researcher editor trained the process used by a counselor who has extensive experience encoding the observations of a mediation interaction and whose research work has also been done in this field to analyze the observations.

For each interaction, the analysis of the student-child interaction took, on average, five hours. Two observations out of the 200 were chosen at random to test the consistency of the judges in the current study. The research editor and the guide each independently examined the observations. The range of adapters received was between 98 and 99, which indicates that the judges' credibility was extremely high.

*Reliability* - The observations were made using factor analysis and judicial analysis, and Cronbach's alpha was used to compare the overall index of the Vygotsky alpha to the internal reliability. Its value was 0.838.

B. Observation of mediation learning strategies according to Feuerstein

For this purpose, the researchers (Boris Minchev & Hagihia Himat, 2017). The observation tools based on the principles of the Feuerstein included:

- 1. Intent and reciprocity This mediation is defined as a student's attempt to direct the attention of the child. The student mediator takes steps such as deliberate selection of stimuli and omission of others, as well as organizing and directing the child's response. The mediator directs the learner child's attention and regulates his level of alertness. The significance of this principle is that the students act in reciprocity by adapting to the child's needs and abilities. It is impossible to relate to the intention without considering the principle of reciprocity, which states that the intention to mediate is ineffective without the child's response to the middle efforts.
- 2. The significance meaning of mediation This mediation was defined as a process in which the student transfers his emotions, enthusiasm, and meaning to the child. Exciting

experiences serve as a foundation for the child's need to seek meaning in the experiences he encounters in his daily life. Everyday behaviors can contribute to the excitement.

- 3. Extension (= transfer) This mediation has been defined as a process for explaining different behaviors, specifying relationships between objects or processes, displaying analogies or sequences, and presenting causal and other relationships. This goes beyond the situation's immediate and concrete need.
- 4 The provision competence This mediation is defined as student behaviors that attempt to give the child the impression that his activity is successful. She does so with enthusiasm and approval. The right to a sense of ability refers not only to the child's success experiences because of the action being performed, but also to the work of the same action with permission from the student. The student who witnesses success recognizes it for the child and connects it to the components of the behavior that resulted in success. The presence of these two conditions, the ability to feel and vote on change, allows the child to gain a sense of control over his surroundings as well as confidence in his ability to succeed.
- 5. The intermediary for regulating behavior- This mediation was defined as the student mediator conveying to the child the message that it is necessary to stop and think before taking any action. By regulating behavior, the child learns to be aware of the need to adapt his behavior and level of intellectual activity to the level of accuracy required of him when performing a role or action. The child learns, among other things, how to take measures that result in an optimal balance of speed, efficiency, and accuracy, depending on the difficulty of the task.

Specification: as described above.

*Validity* – the range of adapters received was r .98 up to r .99. It means, the credibility between the judges was extremely high.

Reliability – the observations have been made through judicial analysis and factor analysis, and the internal reliability was tested by Cronbach's alpha to the overall index of the Feuerstein alpha Cronbach's was 0.956.

C. The strategies for experimenting with learning mediated according to Klein's principles.

For this purpose, we used a visual instrument for the learning strategies of OMI Interaction mediation of observation, developed by Klein and her colleagues (Klein et al., 2017). Based on the study theory of Feuerstein and his colleagues (FEUERSTEIN & JENSEN, 1980).

The observation is intended to evaluate the learning mediation strategies of the mediator in according to the first five categories of Klein principles: focusing, mediation of meaning,

competence, extension mediation, and mediation for regulation of behavior. The observation was held at the meeting in which the mediator was asked to teach the group activities. As part of the observation, the interaction between the student and the group of children was examined. The focus of the observation was examined. The following are the details of intermediary learning strategies (strategies mediation) observed in interaction between children and each of the intermediate

- 1. The focusing this mediation is defined as the actions of the mediator to focus the children's attention on the topic of learning, and to achieve a change in clarity of their perception so that they can understand better, For example, justice, intonation changes, illustration, demo. This index included verbal behavior, non-verbal behavior, and a combination of verbal and verbal behavior.
- 2. Meaning mediation of meaning was defined as giving meaning or explanation for events, people, Actions, objects, and emotions, emphasizing their importance or value. This index included the behavior of an expression of nonverbal emotion, an action of naming and an integrated action of the naming and an expression of non-verbal emotion.
- 3. The transcendence (= transfer) extension this mediation is defined as the actions of the mediation to create generalizations and repopulation in the inclusion of principles that are beyond the specific context of the subject. This index included explanation, process clearing, comparison, addition of knowledge, link to experiences and personal knowledge beyond the topic learned.
- 4. The competence mediation of the feeling of ability has been defined as expressing the verbal satisfaction of the mediator from the children's behavior in relation to the subject of learn, and the definition of the specific components that contributed to their success. This index included a verbal reinforcement and a non-verbal reinforcement in an explanation of the reinforcement.
- 5. Regulation of behavior mediation for the regulation of behavior is defined as an intermediary behavior, which aims to help the children develop behavior strategies that will help the better understanding of the subject being taught. Regulation of behavior is manifested in organizing the behavior, stopping an impulsive response, and filtering irrelevant stimuli. This index included a demonstration, verbal explanation, or combination of both.

Specification: as described above.

Reliability – The reliability analysis between two judges held in the research of Klein and her colleagues (Klein. et al, 1987) for mediation categories, the following adapters were received: intent and reciprocity between 0.76 and .085 Expansion bio 0.62 to 0.83, meaning

between 0.65 and 0.80. A sense of ability is between 0.74 and 0.92 and regulating behavior between 0.68 and 0.81. Other studies conducted on children aged 5-8 years received similar coordinators between two judges (Darling-Hammond, 2017; Tzuriel, 2020)

Validity – In the research conducted by Klein and her colleagues (Klein et al., 2017) for infants 4, 8, 12, 24, and 36 months of age, a ten-minute observation of a mother-child interaction during feeding, bathing, and acting predicts the child's cognitive ability at four years of age. Positive adapters between each of the mediation categories observed indicated a period of stability over the five mediation indices. In the length study of (Klein et al., 2017) a causal link between the mediation indices of the mother, as they are manifested in the observation of a mother-child interaction, and the child's cognitive achievements at the age of four. From studies that were made with older children and other mediators, such as a teacher mediator and peer mediators, the causal relationship of the mediation indices in relation to the ability to modify cognitive variability and the cognitive performance of children (Tzuriel, 2020)

The observations were made through judicial analysis and the factor analysis, and the internal incidence of the indices was examined by the alpha of Cronbach's. The total metric of the Klein Alpha Cronbach's was 0.956.

# D. Observation of mediation according to Gallimore and Tharp

The model of the developmental approach in interaction between adults and children contain six of the mediations (Gallimore & Tharp 1990). For examining the type of mediation on this level among student Boris Minchev & Hagihia Himat has developed a lookout tool based on the theory and tools of Galimore and Tharp (Boris Minchev & Hagihia Himat, 2017). The observation is designed to evaluate the strategies of learning the mediator according to the categories of demonstration theory; illustration; role playing; reinforcement of feedback; providing instructions, asking questions and cognitive construction.

The observation was held at the meeting in which the mediator asked to teach the group activities. As part of the observation, the interaction between the mediator and the children's group was examined. The following are the details of intermediary learning strategies (mediation strategies) observed in interaction between children and each of the intermediate.

- 1. Demo/Illustration- modeling mediation this is defined as the student's actions as a mediator when she performs a certain action, and the children perform the same action.
- 2. Reinforcements-contingency this mediation is defined as the student's activity in the mediator when it strengthens the correct learning and excludes the undesirable behavior. The student uses the words of reinforcement.

- 3. Feedback-feeling back this mediation is defined as the student's activity in the mediator when she gives a child feedback; gives the child a chance to present feedback.
- 4. Provision of instructing mediated instructions This is defined as the student's activity in the provider when she gives instructions to children; explains the phases of the task; performs between her and the students a relationship.
- 5. Asking questions, questioning this mediation was defined as the student's activity in the mediator when she asked questions requiring a linguistic and cognitive response.
- 6. The cognitive structuring cognitive construction is defined as the student's activity in the mediation when she explains and interprets a cognitive pediatric.

According to the tool, can we see which activities were spacious among the students and what are they.

Specification: As described above.

Validity –in order to analyze the observations, the researcher editor trained the process conducted by a counselor with extensive experience in encoding of the observations of a mediation interaction, and whose research work has also been carried out in this field.

The analysis of the student-child interaction took about five hours' average for each interaction. To check the reliability of the judges in the current research, two observations of the 200 were randomly selected. The observations were analyzed by the research editor and the guide independently. The range of adapters received was. r .98 up to r .99, It mean, the credibility between the judges was extremely high.

*Reliability* - The observations were made using judicial analysis and factor analysis, and the internal reliability was tested using the Cronbach's alpha to the overall Gallimore and Tharp index, which was 0.944.

E. The observation of learning strategies according to Diana Wolf (2004)

The observation was conducted at a meeting where the mediator was asked to teach the group activities in order to evaluate the mediator's learning mediation strategies according to Diana Wolf principles. The interaction between the mediator and the children's group was examined as part of the observation.

The following are the details of intermediary learning strategies (mediation strategies) observed in interaction between children and each of the intermediate.

1. The Basic strategies: concentrated listening - This mediation was defined as the student mediator activity in which she listened to the children's words and attempted to understand what they were saying, listened to the children without interrupting them, and did

not pass judgment on them. The student listened to the children's words without interrupting or firing sentences at them.

- 2. Dedicate time to respond *Providing a response time*, the student asks the children and gives them enough time to comply. The student tells the children, "It will take you five minutes to think, plan, and formulate the answer."
- 3. Giving permission to the other to express himself The children are given permission to express themselves in different ways
- 4. Transparency The student's activity as a mediator was defined as repeating the children's words without changing anything, giving the children a chance to return and hear themselves. From the student series, the children are once again given the opportunity to hear and listen to themselves.
- 5. Address the content The student responds to the contents of the children's words in a positive manner; The student responds to the children's words and encourages them to interpret, expand, and stabilize. The student responds to the children's talking and is informed that they should contact information sources such as their parents or the kindergarten teacher.
- 6. Thinking The student mediator encourages the children to consider thinking strategies that will help them concentrate. The student encourages the children to think and assists them in staying organized. The student mediator encourages the children to devise a thinking strategy that will aid them in their planning. The student mediator encourages the children to think strategically about how they will repeat the experience. The student mediator encourages the children to consider thinking strategies that will assist them in complying with a task question.
- 7. Asking questions The student mediator asks unexpected questions; the student mediator gives the children self-confidence; they can write and learn.; the student mediator gives children the interest and their abilities for learning.
- 8. Language The student mediator is clearly communicating with the children in appropriate language. The student mediator uses proper language in a clear manner of analyzing words for letters; the student who uses proper language clearly means that words and are persecuted with the children. The student mediator speaks in a clear language of words and their opposites.

Specification: As described above.

Validity – To analyze the observations, the researcher editor trained a counselor with extensive experience in encoding observations of a mediation interaction, and whose research work has also been conducted in this field.

The analysis of the student-child interaction took about five hours' average for each interaction. To check the validity of the judges in the current research, two observations of the 200 were randomly selected. The observations were analyzed by the research editor and the guide independently. The range of adapters received was. r .98 up to r .99, It mean, the credibility between the judges was extremely high.

Reliability - The observations have been made through judicial analysis and factor analysis, and the internal reliability was tested by the alpha of the Cronbach's alpha to the overall index was 0.974.

# Research findings

The primary goal of the proposed research was to determine whether learning and training instruction in mediation techniques in college encourages students to integrate mediation into their work training in kindergarten. For this purpose, was introduced project "Let's get to know our beautiful language" with intervention program that allowed to measure how students applied mediation in the field of emergent literacy. Another aspect of tracing the applied mediation was to see what principles of mediation are used more often – these that are studied in the college (principles of prominent authors like (Feuerstein & Jensen, 1980; Flavian, 2021; Illeris, 2018; Klein et al., 2017) or those that are not part of college education (Gallimore et al., 1993).

Table 1 The strategies experimenting mediation learning according to Vygotsky; Feuerstein; Klein; Gallimore; Diana Wolff.

Averages and standard deviations of research variables (independent variables)

Vygotsky				Feuerstein				Klein			
	M	SD	A		M	SD	A		M	SD	A
Tybe	1.8	1.257	0.787	Intent and reciprocity	4.69	3.666	0.95	Focusing	1.81	1.796	0.924
Mental instruments	6.49	5.333	0.726	Extension	2.66	2.686	0.91	Extension	3.24	2.907	0.921
Interactions	2.41	2.256	0.944	Meaning	3.28	3.016	0.95	Meaning	1.78	1.718	0.925
Scalding and support	7.33	6.671	0.907	Competence	3.43	2.51	0.92	Competence	2.71	2.619	0.939
Mutuality	2.04	2.328	0.916	Regulating behavior	3.74	2.793	0.91	Regulating behavior	1.3	1.446	0.97
Vygotsky	20.13	16.06	0.838	Feuerstein principles	17.8	13.68	0.96	Klein's principles	10.83	10.01	0.956

Principles of Gallimore				The princ	The principles of Diana W				
	M	SD	A		M	SD	A		
Demo	0.8	0.838	0.644	Listening	1.09	0.979	0.943		
Reinforcement	1.01	0.968	0.933	Providing	1.47	1.402	0.858		
Feedback	0.82	0.919	0.858	Providing	0.95	0.941	0.959		
Borrowing questic	1.52	1.427	0.934	Mirror	1.35	1.309	0.872		
Cognitive construc	1.39	1.294	0.849	Thinking	2.58	2.304	0.881		
				Setting	1.84	1.732	0.957		
				Language			0.974		
Gilamore principle	5.56	5.029	0.944	Diana incl	11.39	10.336	0.974		

Results, based on descriptive statistics for learning strategies as independent variables are shown on table 1. Students as mediators used many and varied strategies. As a result of the college training in general and in practical work that emphasizes mediation approach the students used the access and principles of mediation in working with the children in the framework of the practical work in the kindergarten (mediation by the project intervention program). Through mediation increased the frequency of use of mediated learning.

Table 2
Learned using the mediation strategies use

Variable	M	SD	N	
Usage indices learned	48.91	36.72	402	

The second hypothesis was that through the mediation (project "Let's get to know our beautiful language" Intervention Program) increases the frequency of use of mediated learning strategies among students according to the principles of the authors studied in the college (Vygotsky; Feuerstein; Klein).

This hypothesis was investigated using a single-directional one-way analysis (MANCOVA) with repeated measurements, where the independent variable was the mediation (using project-based activities with/without an intervention program), and the dependent variables were the mediation learning strategies. In this analysis, it has been found a significant effect mediated with activities according to intervention program P > .001 Averages and standard deviations of mediation indices in both situations as well as the various analysis results that were made to compare between the two methods of mediation in each mediated principle, shown in table 5. In this analysis, there is a significant effect for mediation with activity according to intervention program.

Table 3
Averages, standard deviations, and F analysis of the frequency of the use of mediation learning strategies according to the through of the mediation according to Vygotsky;

Feuerstein; Klein – mediation indices

N	Medi	ation wi	th						Mediat	ion without							
T	The i	<u>n</u> tervent	ion prog	gram let's get to kno	w our b	eautiful			The int	ervention pro	ogram le	et's get to k	now	our bea	utiful		
N	Vledi	with	withou	ut				with	withou	ıt				with	withou	ıt	
Mediation I	ndic	es				Mediation	Indi	ces				Mediation	Indi	ces			
Vygotsky				F η², Eta2		Feuerstei	n			Fη	Eta2	Klein				F	η², Eta2
Type of In M	M	2.95	0.66	F(1)=866.114***	0.827	Intent and	M	8.12	1.23	2973.485	0.881	Focusing	M	3.5	0.12	F(1)=3046.484***	0.884
S	SD	0.249	0.696				SD	1.233	1.3				SD	0.762	0.412		
Mental ins M	M	10.91	2.1	F(1)=866.114***	0.684	Extension	M	4.63	0.69	468.003	0.539	Extension	M	5.56	0.93	F(1)=699.204***	0.636
S	SD	3.339	2.616	F(1)=866.114***			SD	2.395	0.967				SD	2.161	1.225		
Interaction M	M	4.49	0.34	F(1)=2235.796***	0.848	Meaning	M	6.07	0.49	2426.998	0.859	Meaning	M	3.11	0.46	F(1)=592.012***	0.597
S	SD	1.006	0.733				SD	1.216	1.049				SD	1.424	0.6		
Scalding a N	M	13.75	0.91	F(1)=5235.924***	0.929	Competen	M	5.62	1.24	1304.999	0.765	Competen	M	5.07	0.34	F(1)=1795.515***	0.818
S	SD	1.717	1.839	P<0,001			SD	0.588	1.616				SD	1.414	0.712		
Mutuality M	M	2.64	1.44	F(1)= 28.739***	0.067	Regulating	M	6.03	1.44	834.659	0.676	Regulating	M	2.45	0.16	F(1)=673.521***	0.627
S	SD	0.722	3.101				SD	1.349	1.802				SD	1.126	0.543		
Principles M	M	33.32	6.14	F(1)=1269.954***	0.76	Fur stein p	M	30.48	5	2585.297	0.866	Klein's pri	M	19.69	2.01	F(1)=1350.466***	0.771
S	SD	5.679	8.47				SD	5.157	4.89				SD	6.364	2.452		
P<0,001***	*											P<0,001*	**				

It is possible to see that according to table 3, the various analyses that were made for each indices and were found signifies differences between the two through of mediation (with the project intervention program / and without the intervention program in all five indices s of Vygotsky. According to the size of the effect ( $\eta^2$ , TA2) You can see that the biggest difference lies regarding scaffold and support. And, in the indices of the use of Mental instruments psychological tools. There are also significant differences and smaller difference regarding three types of interaction, mutuality, and social interactions. The smallest difference concerns the relationship between everyday concepts. Mutuality According to the averages shown in table3, you can see that in each of the mediation, the incidence of mediation that was made according to the program ("Let's get to know our beautiful language") was higher than the mediation frequency that was done without the program. There is also a variation in the frequency of various mediation indices. To see if these differences are clearly signified, different analyses with repeated measurements of the use of the intervention program X-

Learning and mediated strategies 2X5 were performed. In this analysis, a difference between the five mediation indices was found. Furthermore, there is a signified interaction of mediation (with the intervention program) and mediated learning strategies. Hotelling's Trace =46.776 MF (9,392) = 2037.343b P < 0.005.

According to table 3, for Feuerstein indices, based on the size of the effect ( $\eta^2$ , ETA2) the biggest difference lies in the indices of intent and reciprocity, as well as the indices of the use of meaning. There are also significant differences and smaller differences in three, competence, and extension. The smallest distinction is in the extension. According to the averages shown in Table 5, the frequency of mediation performed according to the program was greater than the frequency of mediation performed without the program. There is also a variation in the frequency of various mediation indices.

According to table 3, for Klein indices, one can see that the biggest difference relates to focusing competence based on the size of the effect ( $\eta^2$ , ETA2). Additionally, in the indices of usage of Regarding three and, there are additionally signifies differences and smaller differences. The Regulating behavior is where there is the slightest difference. The incidence of mediation made in accordance with the intervention program was higher than the frequency of mediation made without the program, as indicated by the averages shown in table 5 for each of the mediations. Also, there is a difference in the frequency of various mediation indices Hotelling's Trace= 10.428MF (5.396) = 825.869b P<00.1.

Averages of the mediated learning strategies with project intervention program and averages of the mediated learning strategies without project intervention program are shown in figure 1 respectively.

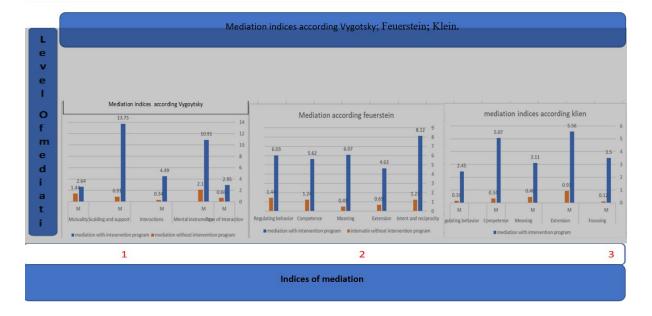


Fig. 1 Averages frequency of the use of mediated learning strategies by the through of mediation according to Vygotsky; Feuerstein; Klein

Figure 1.1 shows that the profile of mediated learning strategies with and without the intervention program has a similar composition. Particularly notable in the mediation of Support and scaffold, and the use of Mental instrumentation tools and Social interaction, however, it seems that the size of gaps between mediation with an intervention program and not a program is not the same in the various strategies of mediated learning, as the main effect of mediation learning strategies.

Figure 1.2 shows that the profile of mediated learning strategies both with and without the intervention program has a similar structure. The mediation of Intent, Reciprocity, Meaning, Controlling Behavior, and Competence stands out in particular. But given that the main outcome of mediation learning strategies, it appears that the size of gaps between mediation with an intervention program and mediation without a program is not the same in different mediated learning strategies.

In figure 1.3 one can see that the profile of mediated learning strategies is similar both with and without the intervention program. Notable in the mediation of Meaning, Competence, and Focus, but it appears that the size of the gaps between mediation with an intervention program and mediation without a program is not the same in the various strategies of mediated learning, as the main effect of mediation learning strategies.

Another hypothesis was that through the mediation project intervention program will increase the frequency of use of mediated learning strategies among students according to the principles of the Gallimore and Tharp; Diana Wolf. This hypothesis was investigated using a single-directional one-way analysis (MANCOVA) with repeated measurements, where the independent variable was the mediation (using project-based activities with/without an intervention program), and the dependent variables were the mediation learning strategies. This analysis has been found A significant effect mediated with activities according to intervention program P > .001 Averages and standard deviations of mediation indices in both situations as well as the various analysis results that were made to compare between the two methods of mediation in each mediated principle. As shown in Table 4 in this analysis, there is a significant effect for mediation with activity according to intervention program.

Averages, standard deviations, and F Analysis of the frequency of the use of mediation learning strategies according to the through of the mediation according to the Gallimore and Tharp; Diana Wolf – mediation indices.

		mediati	io mediti	on					mediat	imedition		
		with	withou	ıt					with	without		
Gallimore	and 7	Γhar <i>p</i>	The interv	ention program le	et's get to know our beautiful   Diana wolf			lf		The intervent	on program let's get to k	now our beautifu
Mediation	Indic	es			F	η², Eta2	Mediation	Indi	ces		F	η², Eta2
Demo	М	1.43	0.16	F(1) = 551	.464***	0.58	Listening	M	2.01	0.18	F(1)=2834.917	0.876
	SD	0.638	0.43					SD	0.1	0.477		
Reinforce	М	1.92	0.11	F(1)=2846	5.316***	0.877	providing	M	1.8	0.08	F(1)=2487.981	0.861
	SD	0.271	0.397					SD	0.4	0.279		
Feedback	М	1.55	0.1	F(1)=659.	253***	0.622	Permission	M	1	0.09	F(1)=1915.789	0.827
	SD	0.741	0.3					SD	0	0.293		
Borrowing	М	2.9	0.15	F(1)=5479	9.466***	0.932	Mirror	M	1.78	0.13	F(1)=1336.599	0.77
	SD	0.3	0.433					SD	0.543	0.336		
Cognitive	М	2.55	0.23	F(1)=1679	9.934***	0.808	Thinking	M	2.54	0.16	F(1)=1862.549	0.823
	SD	0.499	0.63					SD	0.5	0.598		
Gallimore	М	25.04	2.42	F(1)=2029	9.793***	0.835	Definition	M	4.76	0.4	F(1)=3483.165	0.897
P<0,001**	SD	6.459	2.989					SD	0.553	0.889		
							Setting	M	0.96	0.06	F(1)=1718.835	0.811
								SD	0.196	0.238		
							question	M	3.47	0.21	F(1)=3141.199	0.887
								SD	0.5	0.655		
							Language	M	3.98	0.18	F(1)=6727.167	0.944
								SD	0.199	0.625		
							Diana incl	M	21.33	1.45	F(1)=5577.008	0.933
								SD	1.193	3.582		
							P<0,001*	**				

According to table 4 the various analyses conducted on each of the five Gallimore and Tharpe indices revealed differences between the two through mediation (with the project intervention program) and without the intervention program. According to the size of the effect ( $\eta^2$ , ETA2) you can see that the biggest difference lies regarding Borrowing questions, Reinforcement, Cognitive construction. There are also significant differences and smaller differences regarding Demo, and the smallest difference is relating to the Demo.

The averages in table 4 show that in each mediation, the incidence of mediation made in accordance with the project program was higher than the frequency of mediation carried out without the program. Additionally, there is a variation in the frequency of different mediation indices.

For indices of Diana Wolf also according to table 4 the biggest difference, as indicated by the size of the effect ( $\eta^2$ , ETA2), is in Language, Question and Listening. Additionally, there

is a smaller mirror, which also denotes differences and smaller differences. The averages in table 4 show that, in each mediation, the incidence of mediation made in accordance with the project program was higher than the frequency of mediation carried out without the program. The frequency of different mediation indices varies as well.

With and without the intervention program, the profile of mediated learning strategies is similar, as shown in figure 2. Notable are the mediations of borrowing questions and the use of cognitive construction and reinforcement. But given that the main outcome of mediation learning strategies, it appears that the gaps between mediation with an intervention program and mediation without a program are not all the same size.

The profile of mediated learning strategies is similar both with and without the intervention program. However, it appears that the size of gaps between mediation with project an intervention program and not a program is not the same in the various strategies of mediated learning, as the main effect of mediation learning strategies, which is particularly notable in the mediation of thinking questions, language, and the use of providing.

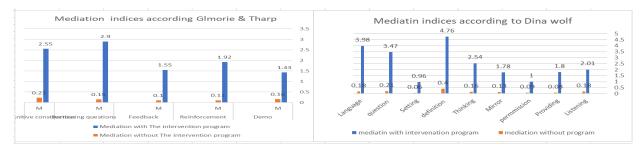


Fig. 2 Averages, frequency of the use of mediated learning strategies by the principles of Gallimore & Tharp; Dina Wolf

We assumed that as the college training is based on the mediation approach, the students will use a more mediation approach in their work with the children as part of the project intervention program and this will be raising the frequency of the use of mediated learning strategies that learned in the college.

Table 5
Averages, standard deviations, and F analysis of the frequency use mediation learning strategies according to the through of mediation according to Vygotsky; Feuerstein; Klein Mediation with intervention program.

mediation indices according to Vygotsky			mediation indices according to Fe	euerstein	mediation indices according to Klein				
Type of Interaction	M	2.95	Intent and reciprocity	M	8.12	Focusing	M	3.5	
	SD	0.259	1 7	SD	1.233	8	SD	0.762	
Mental instruments	M	10.91	Extension	M	4.63	Extension	M	5.56	
	SD	3.339		SD	2.395		SD	2.161	
Interactions	M	4.49	Meaning	M	6.07	Meaning	M	3.11	
	SD	1.006		SD	1.216		SD	1.425	
Scaffolding and support	M	13.75	Competence	M	5.62	Competence	M	5.07	
	SD	1.717		SD	0.588		SD	1.414	
Mutuality	M	2.64	Regulating behavior	M	6.03	Regulating behavior	M	2.45	
	SD	0.722		SD	1.349		SD	1.126	
Principles of global and general mediation	M	33.32	Feuerstein principles including	M	30.48	Klein's principles	M	19.69	
	SD	5.679		SD	5.157		SD	6.364	

From table 5 one can see the means of using mediated learning strategies according to the three theorists learned in the college. The degree of average of the use of learning the overall mediation according to Vygotsky was 33.32. The degree of average of the use of learning the overall mediation according to Feuerstein was 30.48. The degree of average of the use of learning the total mediation of according to Klein 19.69. In general, there is a high use average 83.49 of the learning mediation according to theories learned in the college.

Averages, standard deviations, and F Analysis of the frequency use mediation learning strategies according to the through of mediation according to Gallimore; Diana Wolf.

Table 6

Diana Wolf med	liation ind	dice	Gallimore mediation		
Listening	M	2,01	Demo	M	1,43
	SD	0,1		SD	0,638
Providing	M	1,8	Reinforcement	M	1,92
	SD	0,4		SD	0,271
Permission	M	1	Feedback	M	1,55
	SD	0		SD	0,741
Mirror	M	1,78	Borrowing questions	M	2,9
	SD	0,543		SD	0,3
Thinking	M	2,54	Cognitive constructio	M	2,55
	SD	0,5		SD	0,499
Definition	M	4,76	Gallimore principles	M	25,04
	SD	0,553		SD	6,459
Setting	M	0,96			
	SD	0,196			
Question	M	3,47			
	SD	0,5			
Language	M	3,98			
	SD	0,199			
Diana includes	M	21,33			
	SD	1,193			

The degree of the average of the learning mediation according to Gallimore and Tharp 25.04. The degree of the average of the learning mediation according to Diana Wolff was 21.33. In general, it is seen that the two averages of the theory not learned was 46.37 (see table 6).

The fourth hypothesis was that through of mediation increase the frequency of use of mediated learning strategies according to the theorists learned in the college compared to the use mediation learning strategies according to theorists not learned in the college. This means that the use of mediation learning strategies, the type which are learned according to the principles of Vygotsky, Feuerstein, Klein will be different and higher than the degree of the use of mediated learning strategies. The type of mediation not learned according to the principles of Gallimore and Diana Wolff.

To examine the assumption that there will be differences between the degree of use of learned mediated learning strategies and those who have not learned a T -Test have been conducted to paired samples. The results are shown in the table 7.

Averages, standard deviations between variable indices using mediation strategies according to the principles learned in the college and the indices of the use of mediation

Table 7

Variable	M	SD	N	T	df
Mediation indices using not learned	25.87	22.133	402		
Mediation indices using learned	48.91	36.72	402	27.94**	401

strategies according to non-learned principles.

Table 7 shows that the use indices of the theorist's mediation learned in the College (indices of Vygotsky, Feuerstein, Klein) The general found (M =48.91) is high signified from degree of theorists not learned in college, indices of Gallimore and Diana Wolf (M=25.87) (T (df = 401) = 27.949 \*, p < .001) \*. That is, the mediator students use more indices of learned theories at the college (Vygotsky, Feuerstein, Klein) more than not learned theories (Such as Diana Wolf and Gallimore). Then, the research hypothesis has been fulfilled.

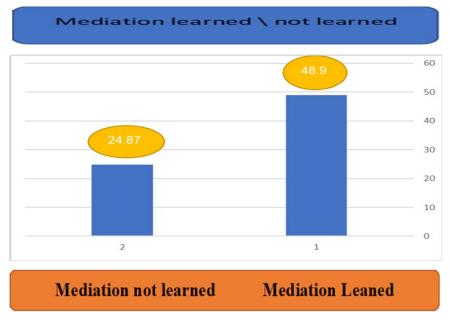


Fig.3. Average's frequency of the use of mediated learning strategies and the use of mediated not learning.

In order to test the hypothesis that there will be differences between the degree of use of learning strategies mediated according to the principles of Gallimore and Tharpe and the degree of use of learning strategies mediated according to the principles of Vygotsky A T-Test was run on paired samples. The outcomes are displayed in table 8.

To examine the hypothesis that there will be differences between the degree of use of mediation learning strategies according to the principles of Gallimore and Tharpe and the principles of Vygotsky, Feuerstein, and Klein. A T-Test has been run on paired samples for each of the three comparisons between Vygotsky and Gallimore and Tharpe, Feuerstein and Gallimore and Tharpe, and Klein and Gallimore and Tharpe. The outcomes are displayed in Table 8.

Table 8

Averages, standard deviations between indices of the use of mediation strategies according to the principles that were learned, Vygotsky; Feuerstein; Klein according to the principles not learned the indices of the use of mediation Gallimore

Variable	M	SD	N	T	df
Indices using mediation Vygotsky	20.51	14.916	402	15.883**	401
Indices using mediation Gallimore	13.73	10.306	402		
Indices using mediation Feuerstein	17.74	13.711	402	17.74**	401
Indices using mediation Gallimore	13.73	12.388	402		
Indices using mediation Klein	10.85	13.711	402	-21.933	401
Indices using mediation Gallimore	13.73	12.388	402		

Table 8 shows that the use of the indices mediation according to Vygotsky in the general found (M =20.51) is significance high from the Gilmore (M= 13.73) (T = 15.883\*\* (df = 401), p < .001). That is, the students use more than the indices mediation according to Vygotsky more than Gallimore. Additional reference to the table 13 shows that the use of the mediation indices according to Feuerstein in the general found (= M =17.74) is higher significance than Glamor's grades (M= 13.73) (T = 17.74\*\* (df = 401), p < .001) that mean: The students are using more the indices mediation according to Feuerstein than Gallimore. The research hypothesis was fulfilled. in table 13 shows that the use of the indices mediation according to Klein in general found (10.85 = M =) is significantly lower than the Gilmore (m= 13.73) (T = -21.933\*\* (df = 401), p < .001) meaning: The students use the indices mediation according to Klein less than Gilmore. The research hypothesis was not fulfilled.

The degree to which mediation learning strategies are used in accordance with the theories of Vygotsky, Feuerstein, and Klein will differ from and be higher than the degree to which they are used in accordance with the theories of Dina Wolf. In order to test the hypothesis that there will be differences between the degree of use of mediated learning strategies according to Dina Wolf's principles and the degree of use of mediated learning strategies

according to the principles of Vygotsky, Feuerstein, and Klein. A T-Test has been run on paired samples for the following tests: Vygotsky against; Feuerstein against; Klein against; and Dina Wolf against, each time performed individually. The outcomes are displayed in table 9.

Table 9

Averages, standard deviations between indices of the use of mediation strategies according to the principles learned by Vygotsky and the indices of the use of mediation strategies according to the principles that were not learned, Dina Wolf; Feuerstein; Dina Wolf; Klein; Dina Wolf.

Variable	M	SD	N	T	df
Indices using mediation Vygotsky	20.51	14.916	402	25.145**	401
Indices using mediation Dina Wolf	11.39	10.306	402		
Indices using mediation Feuerstein	17.74	13.711	402	21.665**	401
Indices using mediation Dina Wolf	11.39	10.306	402		
Indices using mediation Klein	10.85	13.711	402		
Indices using mediation Dina Wolf	11.39	10.306	402		

Table 9 shows that the use of the indices mediation according to Vygotsky in the general found (M = 20.51) is significance high from the Dina Wolf (M=11.39) (T (df = 25.145=401) =, p < .001\*\*). In other words, students use Vygotsky's mediation theory more frequently than Dina Wolf's. The study's hypotheses were confirmed.

Additional reference to the Table 9 shows that the use of the mediation indices according to Feuerstein in the general found (M=17.74) is higher significance than Dina Wolf Grades M = 11.39 (T (df = 25.145=401) p < .001\*\*) that mean: The students are using more the indices mediation according to Feuerstein than Dina Wolf. The research hypothesis was fulfilled. Table 12 shows that the use of the indices mediation according to Klein in general found M=17.74) is significantly lower than the Dina Wolf (M=11.39 ((T (df)=25.145=401), p < .001\*\*) meaning: The students use the indices mediation according to Klein less than. The research hypothesis was not fulfilled.

## **Discussion**

In the first part, the findings of this study will be discussed in relation to the influence of the mediation by intervention program on mediated learning strategies, these findings will be discussed in relation to the use of the learning strategies of the mediation in the experimental group, in which mediation was held with the intervention program and according to the control group in which the mediation was held without a program.

In the second section, the research findings will be discussed in relation to the influence of the mediation by intervention program on indices of the use of mediated learning strategies learned.

In the third section, the findings of this research will be discussed in relation to the influence of the mediation by intervention program on the indices of the type of mediation as well as in the differences of the type of mediation (the use of the learning strategies mediation according to the principles of mediation which learned in the college, according to the theory of Vygotsky Feuerstein, Klein, and according to principles not learned Gallimore &Tharp; Dina Wolf).

As far as we know, there have been no studies that examined the effect of the use of the mediation by project intervention program on mediated learning strategies. In the current study, differences have been tested the frequency of use the mediated learning strategies when the intervention program was integrated (including its activities) in the mediation process in comparison with mediation without a program.

A basic hypothesis was that, as a result of the training in the college in general and in practical work, that emphasizes mediation approach and principles (through mediation project intervention program Let's get to know our beautiful language) in working with the children the students will use the mediation and principles as part of the practical work in the kindergartens. Through mediation with program intervention increases the frequency of use the mediated learning strategies by students.

This hypothesis was based on professional studies and literature that suggest that integrating an intervention program into the mediation interaction invites dynamic mediation that enables opportunities for cooperation and verbal exchange between the mediator and the children to improve the discourse (Bowyer-Crane et al., 2019; Korat & Segal-Drori, 2016; Perry et al., 2018; Tzuriel, 2020).

So, we assumed that integrating an intervention program in the mediation process would increase the use of the mediation learning strategies according to the principles of Vygotsky, Feuerstein, and Klein.

The mediation learning strategies have been tested according to the principles of the three theoretical concepts separately.

The use of mediated learning strategies learned in college.

This hypothesis is based on the definition of learning as a permanent change in behavior because of experience (Lazonder & Harmsen, 2016). Learning is a process that aims to acquire or improve knowledge, behavior, skills, values, and perceptions of the world (Conners-Burrow et al., 2017). Harpaz defines learning as the purpose of teaching, so the quality of teaching depends on the quality of learning (Harpaz, 2022). Process involvement and product comprehension are the hallmarks of a valuable learning experience. Indeed, the findings of the current study were consistent with these definitions and demonstrated that when students learned the mediation approach in accordance with the methodology of learning and teaching, they applied it to the instruction of young children. We examined how well the intervention program was using mediation learning strategies in accordance with the college-taught mediation principles, and we discovered that it was being used to a high degree. Through the intervention program, we evaluated how well the mediation learning techniques adhered to the mediation principles we had learned in college.

This hypothesis was through mediation increase the use of mediation learning strategies, among students' mediators according to the type of mediation, the first kind are the principles of the theorists learned in college such as Vygotsky, Feuerstein, Klein, the second kind are principles of the theorists not learned - according to the Gallimore and Dina Wolf.

This claim is based on Beck's (2014) and Harpaz's (2022) definitions of learning, which both listed teaching as one of the learning processes in education. Its objectives are knowledge acquisition and the training of the student to learn independently through the growth of literacy skills, learning strategies, and thinking abilities. A community of researchers whose members actively contribute to the body of new knowledge they are constructing makes it possible to construct the perception of learning (Beck, 2014). Indeed, the findings of this study were consistent with these definitions and demonstrated that students used the mediation approach in kindergarten instruction after learning it in accordance with the teaching and learning methodologies. We monitored the application of the mediation learning strategies through the intervention program in accordance with the mediation principles that were taught in the college about the type of mediation. The findings of this study revealed a significant distinction between two types of mediation, favoring the mediation technique learned in college.

In the framework of the research an initial attempt was made in the research framework to connect aspects of a mediated learning field based on theoretical knowledge learned in college and theoretical and applied knowledge of field intervention for educational and therapeutic needs. This link has made an option for theoretical basis, that it has a connection and a release in reference to subjects investigating intervention programs in early childhood

education, mediation patterns and teaching both in college and in kindergarten, the mediation for writing the ability to change cognitive is manifested in the current research of educational achievements in the field of emergent literacy in general and writing level in particular.

The current research is presenting the effectiveness of the intervention program built for Arab children and has become a practical training recognition in the kindergartens. As a tool for a positive influence on cognitive, fields and emotional areas in kindergarten children, and applied contributions to educators as an alternative way to empower the mediation, and to strengthen the sense of the competence in teaching.

In this research was made first attempt to examine the level of mediation of the mediators, when they combine subsidiary activities and include intervention program in the interaction mediation, and the children's literacy and writing achievements in general and writing following this mediation. An attempt was also made to investigate the effects of mediation in the intervention program of material learned in college on their teaching method and the responsiveness of the children. Integration between the findings received in relation to the mediation in the intervention program in each of the tested areas (mediated learning strategies, mediation for writing, achievements in the field of emergent literacy in general and writing, raises new connection to the findings of existing studies in these fields.

The correlation connections discovered between mediation through and indices of interaction mediation and cognitive achievements in emergent literacy have reinforced and added to the existing knowledge of the significant role of teaching style on these aspects in children. The correlation discovered connections between the use of mediation and the frequency of intermediary learning strategies by the student mediators and their use of this mediation learning strategies as tools for mediation can point to the sense of professionalism in teaching.

The study's findings have a significant impact on working with children in Arab society. The impact of mediation through the intervention program reflects the intensity of the intervention program as a mediation tool, which must cater to Arab children. An intervention program is planned and built based on the cognitive level of children at this age; the research findings demonstrate the importance of this program in promoting writing among children in Arab kindergartens.

An initial attempt was made in the research framework to connect aspects of a mediated learning field based on theoretical knowledge learned in college and theoretical and applied knowledge of field intervention for educational and therapeutic needs. This link has made an option for theoretical basis, that it has a connection and a release in reference to subjects

investigating intervention programs in early childhood education, mediation patterns and teaching both in college and in kindergarten, the mediation for writing the ability to change cognitive is manifested in the current research of educational achievements in the field of emergent literacy in general and writing level in particular.

The current research has a unique contribution to presenting the effectiveness of the intervention program built for Arab children and has become a practical training recognition in the kindergartens. As a tool for a positive influence on cognitive, fields and emotional areas in kindergarten children, and applied contributions to educators as an alternative way to empower the mediation, and to strengthen the sense of the competence in teaching.

In this study, the first attempt was made to examine the level of mediation level of the mediators, when they combine subsidiary activities and include intervention program in the Interaction mediation, and the children's literacy and writing achievements in general and writing following this mediation. An attempt was also made to investigate the effects of mediation in the intervention program of material learned in college on their teaching method and the responsiveness of the children. Integration between the findings received in relation to the mediation in the intervention program in each of the tested areas (mediated learning strategies, mediation for writing, achievements in the field of emergent literacy in general and writing, raises new connection to the findings of existing studies in these fields.

The correlation connections discovered between mediation through and indices of interaction mediation and cognitive achievements in emergent literacy have reinforced and added to the existing knowledge of the significant role of teaching style on these aspects in children. The correlation discovered connections between the use of mediation and the frequency of intermediary learning strategies by the student mediators and their use of this mediation learning strategies as tools for mediation can point to the sense of professionalism in teaching.

The study's findings have a significant impact on working with children in Arab society. The impact of mediation through the intervention program reflects the intensity of the intervention program as a mediation tool, which must cater to Arab children. An intervention program is planned and built based on the cognitive level of children at this age; the research findings demonstrate the importance of this program in promoting writing among children in Arab kindergartens.

# **Bibliography**

- 1. Barrs, M. (2017). Rediscovering Vygotsky's concept of the ZPD: Stanley Mitchell's new translation of 'The problem of teaching [Obuchenie] and mental development at school age'. Changing English, 24(4), 345–358
- 2. Bean, R. M., & Kern, D. (2018). Multiple Roles of Specialized Literacy Professionals: The ILA 2017 Standards. The Reading Teacher, 71(5), 615–621. https://doi.org/10.1002/trtr.1
- 3. Bean, R. M., Dagen, A. S., Ippolito, J., & Kern, D. (2018). Principals' Perspectives on the Roles of Specialized Literacy Professionals. The Elementary School Journal, 119(2), 327–350. https://doi.org/10.1086/700280
- 4. Berkowitz, R., Moore, H., Astor, R. A., & Benbenishty, R. (2017). A Research Synthesis of the Associations Between Socioeconomic Background, Inequality, School Climate, and Academic Achievement. Review of Educational Research, 87(2), 425–469. <a href="https://doi.org/10.3102/0034654316669821">https://doi.org/10.3102/0034654316669821</a>
- 5. Bodrova, E., & Leong, D. J. (2018). Tools of the Mind: A Vygotskian Early Childhood Curriculum (pp. 1095–1111). <a href="https://doi.org/10.1007/978-94-024-0927-7\_56">https://doi.org/10.1007/978-94-024-0927-7\_56</a>
- 6. Brebner, C., Hammond, L., Schaumloffel, N., & Lind, C. (2015). Using relationships as a tool: early childhood educators' perspectives of the child–caregiver relationship in a childcare setting. Early Child Development and Care, 185(5), 709–726. https://doi.org/10.1080/03004430.2014.951928
- 7. Carmi, T., & Tamir, E. (2022). Three professional ideals: where should teacher preparation go next? European Journal of Teacher Education, 45(2), 173–192. https://doi.org/10.1080/02619768.2020.1805732
- 8. Chapman, N. (2018). Teaching thinking, strengthening capabilities, building community: What the Feuerstein approach has to offer. English in Aotearoa, 93, 48–49. <a href="https://search.informit.org/doi/10.3316/informit.838569629045092">https://search.informit.org/doi/10.3316/informit.838569629045092</a>
- 9. Collie, R. J., Martin, A. J., Roberts, C. L., & Nassar, N. (2018). The roles of anxious and prosocial behavior in early academic performance: A population-based study examining unique and moderated effects. Learning and Individual Differences, 62, 141–152. https://doi.org/10.1016/j.lindif.2018.02.004
- 10. Conners-Burrow, N. A., Patrick, T., Kyzer, A., & McKelvey, L. (2017). A Preliminary Evaluation of REACH: Training Early Childhood Teachers to Support Children's Social and Emotional Development. Early Childhood Education Journal, 45(2), 187–199. https://doi.org/10.1007/s10643-016-0781-2

- 11. Dewey, J. (1916). Nationalizing Education. Journal of Education, 84(16), 425–428. https://doi.org/10.1177/002205741608401602
- 12. Diamond, A., Lee, C., Senften, P., Lam, A., & Abbott, D. (2019). Randomized control trial of Tools of the Mind: Marked benefits to kindergarten children and their teachers. PLOS ONE, 14(9), e0222447. <a href="https://doi.org/10.1371/journal.pone.0222447">https://doi.org/10.1371/journal.pone.0222447</a>
- 13. Egert, F., Fukkink, R. G., & Eckhardt, A. G. (2018). Impact of In-Service Professional Development Programs for Early Childhood Teachers on Quality Ratings and Child Outcomes: A Meta-Analysis. Review of Educational Research, 88(3), 401–433. https://doi.org/10.3102/0034654317751918
- 14. Eisenberg, N., Vidmar, M., Spinrad, T. L., Eggum, N. D., Edwards, A., Gaertner, B., & Kupfer, A. (2010). Mothers' teaching strategies and children's effortful control: A longitudinal study. Developmental Psychology, 46(5), 1294–1308. https://doi.org/10.1037/a0020236
- 15. Feiman, R., Mody, S., Sanborn, S., & Carey, S. (2017). What Do You Mean, No? Toddlers' Comprehension of Logical "No" and "Not." Language Learning and Development, 13(4), 430–450. https://doi.org/10.1080/15475441.2017.1317253
- 16. Feiman-Nemser S. and Ben-Peretz. M. (2017). Getting the teachers, we need: international perspectives on teacher education. Lanham, Maryland: Rowman & Littlefiel
- 17. Feuerstein, R., Rand Y., Haywood, H. C., Kyram, L., & Hoffman, M. B. (1995). Learning propensity assessment device manual. Jerusalem: The ICELP Press.
- 18. Feuerstein, R. and Feuerstein, S. (1991). In Feuerstein, R., Klein P and Tannenbaum, A. (Eds.). Mediated learning experience: Theoretical, psychosocial, and learning implications. Freund Publishing House, pp. 3-51 Lidz, C. S. (1991). Practitioner's guide to dynamic assessment. New York: Guilford Press.
- 19. Feuerstein, R., & Jensen, M. R. (1980). Instrumental Enrichment: Theoretical Basis, Goals, and Instruments. The Educational Forum, 44(4), 401–423. https://doi.org/10.1080/00131728009336184
- 20. Feuerstein, R., Rand, Y., Hoffman, M.B. & Miller, R. (1980). Instrumental Enrichment: An intervention program for cognitive modifiability, Baltimore: University Park Press
- 21. Feuerstein, R., Rand, Y., & Hoffman, M. B. (1979). The dynamic assessment of retarded performers. Baltimore, MD: University Park Press

- 22. Findeisen, S., Deutscher, V. K., & Seifried, J. (2021). Fostering prospective teachers' explaining skills during university education—Evaluation of a training module. Higher Education, 81(5), 1097–1113. <a href="https://doi.org/10.1007/s10734-020-00601-7">https://doi.org/10.1007/s10734-020-00601-7</a>
- 23. Gallimore, R., Goldenberg, C. N., & Weisner, T. S. (1993). The social construction and subjective reality of activity settings: Implications for community psychology. American Journal of Community Psychology, 21(4), 537–559. https://doi.org/10.1007/BF00942159
- 24. Gallimore, R. & Tharp, R. (1990). Teaching Mind and Society: Teaching, Schooling, and Literate Discourse. New York: Cambridge University Press, 175-205
- 25. Goldshmidt, G. (2017). Waldorf Education as Spiritual Education. Religion & Education, 44(3), 346–363. https://doi.org/10.1080/15507394.2017.1294400
- 26. Helmerhorst, K. O. W., Riksen-Walraven, J. M. A., Fukkink, R. G., Tavecchio, L. W. C., & Gevers Deynoot-Schaub, M. J. J. M. (2017). Effects of the Caregiver Interaction Profile Training on Caregiver–Child Interactions in Dutch Child Care Centers: A Randomized Controlled Trial. Child & Youth Care Forum, 46(3), 413–436. https://doi.org/10.1007/s10566-016-9383-9
- 27. Illeris, K. (2018). An overview of the history of learning theory. European Journal of Education, 53(1), 86–101. https://doi.org/10.1111/ejed.12265
- 28. Klein, P. S., Shohet, C., & Givon, D. (2017). A Mediational Intervention for Sensitizing Caregivers (MISC): A Cross-Cultural Early Intervention. In Handbook of Applied Developmental Science in Sub-Saharan Africa (pp. 291–312). Springer New York. https://doi.org/10.1007/978-1-4939-7328-6\_16
- 29. Klein, P.S. (2001). A mediational approach to early intervention in Israel: Mediational intervention for sensitizing caregiver (MISC) of typically developing and hard to reach children. In S. Odam, M. Hanson & J. Blackman, (Eds.), International perspectives on early intervention (pp. 69-90). Brookes Pub. Co
- 30. Klein, P. S. (1996). Early intervention: Cross cultural experiences with a mediational approach. New York: Garland .
- 31. Klein, P. S., & Alnoy, S. (1993). Immediate and sustained effects of maternal mediated behavior in infancy. Journal of Early Intervention, 17, 177-193.
- 32. Klein, P. S. (1991). Improving the quality of parental interaction with very low birth weight children: A longitudinal study using a mediated learning experience model. Infant Mental Health, 12, 321-337
- 33. Klein, P. (1988). Stability and change in interaction of Israeli mothers and infants, Infant Behavior and Development, 11, pp. 55-70.

- 34. Klein, P. S., Wieder, S., & Greenspan, S. I. (1987). A Theoretical overview and empirical study of mediated learning experience: Prediction of preschool performance from mother-infant interaction patterns. Infant Mental Health Journal, 8(2), 110-129.
- 35. Klein, P.S. (1982). Cognitive performance of kindergarten children when tested by parents and strangers. In N.Nir- Janiv, B. Spodek & D. Steg (Eds.), Early childhood education (pp. 429-440). New York & London: Plenum
- 36. Korat, O., & Segal-Drori, O. (2016). E-Book and Printed Book Reading in Different Contexts as Emergent Literacy Facilitator. Early Education and Development, 27(4), 532–550. https://doi.org/10.1080/10409289.2016.1095613
- 37. Kramarski, B., & Heaysman, O. (2021). A conceptual framework and a professional development model for supporting teachers' "triple SRL–SRT processes" and promoting students' academic outcomes. Educational Psychologist, 56(4), 298–311. https://doi.org/10.1080/00461520.2021.1985502
- 38. Lee, D., Huh, Y., Lin, C.-Y., & Reigeluth, C. M. (2018). Technology functions for personalized learning in learner-centered schools. Educational Technology Research and Development, 66(5), 1269–1302. https://doi.org/10.1007/s11423-018-9615-9
- 39. Lee, J. A. C., & Al Otaiba, S. (2015). Socioeconomic and gender group differences in early literacy skills: a multiple-group confirmatory factor analysis approach. Educational Research and Evaluation, 21(1), 40–59. <a href="https://doi.org/10.1080/13803611.2015.1010545">https://doi.org/10.1080/13803611.2015.1010545</a>
- 40. Lee, J., & Albert, L. R. (2021). Students' Personality and Susceptibility to Persuasion during Mathematics Groupwork: An Exploratory Study. Journal of Practical Studies in Education, 2(6 SE-), 10–22. https://doi.org/10.46809/jpse.v2i6.35
- 41. Levlin, M. & Waldmann, C. (2020). Written language in children with weak reading skills: The role of oral language, phonological processing, verbal working memory and reading. L1 Educational Studies in Language and Literature, 20(1), 1–25. https://doi.org/10.17239/L1ESLL-2020.20.01.02
- 42. Livingston, K., & Flores, M. A. (2017). Trends in teacher education: a review of papers published in the European journal of teacher education over 40 years. European Journal of Teacher Education, 40(5), 551–560.

# https://doi.org/10.1080/02619768.2017.1387970

43. Lukie, I. K., Skwarchuk, S. L., LeFevre, J. A., & Sowinski, C. (2014). The role of child interests and collaborative parent—child interactions in fostering numeracy and literacy development in Canadian homes. Early Childhood Education Journal, 42(4), 251-259. http://doi.org/10.1007/s10643-013-0604-7

- 44. Margaliot, A., & Gorev, D. (2020). Once they've Experienced it, will Pre-Service Teachers be Willing to Apply Online Collaborative Learning? Computers in the Schools, 37(4), 217–233. <a href="https://doi.org/10.1080/07380569.2020.1834821">https://doi.org/10.1080/07380569.2020.1834821</a>
- 45. Minchev ,B & Hagihia H. (2017). Observation of mediation principles
- 46. Osher, D., Cantor, P., Berg, J., Steyer, L., & Rose, T. (2020). Drivers of human development: How relationships and context shape learning and development 1. Applied Developmental Science, 24(1), 6–36. https://doi.org/10.1080/10888691.2017.1398650
- 47. Perry, N., Adi-Japha, E., & Spektor-Levy, O. (2023). What a cool classroom! Voices of 5-year-olds on the design of physical learning environments. Early Childhood Research Quarterly, 63, 370–385. <a href="https://doi.org/10.1016/j.ecresq.2023.01.003">https://doi.org/10.1016/j.ecresq.2023.01.003</a>
- 48. Perry, N., Friedman, R. (2018) Gardens of Reggio Emilia, Travel Diary. Da-Gan Bulletin 11, pp. 100-106.
- 49. Perry, L. K., Prince, E. B., Valtierra, A. M., Rivero-Fernandez, C., Ullery, M. A., Katz, L. F., Laursen, B., & Messinger, D. S. (2018). A year in words: The dynamics and consequences of language experiences in an intervention classroom. PLOS ONE, 13(7), e0199893. https://doi.org/10.1371/journal.pone.0199893
- 50. Rosa, E. M., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. Journal of Family Theory & Review, 5(4), 243-258. http://doi.org/10.1111/jftr.12022
- 51. Shuper Engelhard, E., Klein, P. S., & Yablon, Y. B. (2014). Quality of care at home and in daycare and social behaviour in early childhood. Early Child Development and Care, 184(7), 1063–1074. <a href="https://doi.org/10.1080/03004430.2013.842563">https://doi.org/10.1080/03004430.2013.842563</a>
- 52. Solovieva, Y., & Quintanar, L. (2020). Proposal for Development of Spatial Functions at Pre-school Age on the Basis of Neuropsychological Analysis of Graphic Activity. Lurian Journal, 1(1), 109–128. https://doi.org/10.15826/Lurian.2020.1.1.8
- 53. Stanley, L., & Finch, M. (2018). Instructional strategies To enhance alphabet knowledge in kindergarten. Journal of Teacher Action Research, 4(2), 31–46.
- 54. Subero, D., Llopart, M., Siqués, C., & Esteban-Guitart, M. (2018). The mediation of teaching and learning processes through identity artefacts. A Vygotskian perspective. Oxford Review of Education, 44(2), 156–170. https://doi.org/10.1080/03054985.2017.1352501
- 55. Suggate, S. P., Lenhart, J., Vaahtoranta, E., & Lenhard, W. (2021). Interactive elaborative storytelling fosters vocabulary in pre-schoolers compared to repeated-reading and phonemic awareness interventions. Cognitive Development, 57, 100996. https://doi.org/10.1016/j.cogdev.2020.100996

- 56. Tamir, E. (2020). The effects of teacher preparation on student teachers' ideas about good teaching. Australian Journal of Teacher Education (Online), 45(4), 1–17. https://search.informit.org/doi/10.3316/informit.270886154778164
- 57. Tamir, E. 2020a. The Effects of Teacher Preparation on Student Teachers' Ideas about Good Teaching. Australian Journal of Teacher Education 45(4)
- 58. Tamir, E. 2020b. Teacher Education in a New Age of Accountability: How can Programs Develop Responsible and Valuable Self-Assessment. The New Educator
- 59. Tzuriel, D. (2020). Dynamic Cognitive Assessment for Preschool Age Children. In Oxford Research Encyclopedia of Education. Oxford University Press.

https://doi.org/10.1093/acrefore/9780190264093.013.942

- 60. 59.Vygotsky. (1978) Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- 61. Vygotzky, L, S (1986) Thought and Language (new ed.). Cambridge, Mass: Harvard University Press
- 62. Wang, C., Hatzigianni, M., Shahaeian, A., Murray, E., & Harrison, L. J. (2016). The combined effects of teacher-child and peer relationships on children's social-emotional adjustment. Journal of School Psychology, 59, 1–11.

https://doi.org/10.1016/j.jsp.2016.09.003

- 63. Wang, H., Hall, N. C. & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions
- 64. Weadman, T., Serry, T. & Snow, P. C. (2021). Australian early childhood teachers' training in language and literacy: A nation-wide review of pre-service course content. Australian Journal of Teacher Education, 46(2), 29–56.

https://search.informit.org/doi/10.3316/informit.757691161404236

65. Zepeda, C. D., Hlutkowsky, C. O., Partika, A. C., & Nokes-Malach, T. J. (2019). Identifying teachers' supports of metacognition through classroom talk and its relation to growth in conceptual learning. Journal of Educational Psychology, 111(3), 522. <a href="https://doi.org/10.1037/edu0000300">https://doi.org/10.1037/edu0000300</a>