

Solid Foundations: Leading Change in a Kindergarten

Ella Shoval

The Academic College at Wingate, Wingate Institute, Israel

Tal Sharir

The Israeli Ministry of Education

The action research presented here is our story – a teacher who initiated change in a kindergarten in a small village in the center of Israel, and an academic advisor who observed and guided the teacher for six years. The article is based on formal documents, records of processes that took place in the kindergarten, records of weekly discussions, and in-depth discussions between the teacher and her advisor – all collected over a period of six years. The analysis of the documents and interviews enabled the researchers to identify seven practical foundations underlying the change: (1) taking personal responsibility for each child; (2) exhibiting self-control and providing rational solutions; (3) providing the children with opportunities for mindful movement; (4) constructing a learning framework; (5) instilling in the children independent choice skills; (6) mediating learning in stages; and (7) leading the children to the acquisition of learning-related skills. Seeking connections between these foundations and the teacher’s professional beliefs enabled us to identify coherency in the teacher’s work as the driving force behind the change. The article aims to stimulate thinking about the need to prepare kindergarten teachers for initiating and leading changes.

Introduction

It was 9:30 in the morning. I was standing in front of the kindergarten gate. Strangely, I did not hear any of the loud talking one usually hears around kindergartens. For a moment, I thought the children had not come to kindergarten that day... I rang the bell, and Karen, the kindergarten assistant, opened the gate for me. I entered the classroom and could hardly believe my eyes: 30 children were totally absorbed in their games. A group of children was playing tag, maneuvering among the other children without touching them. Loren was standing at the center of the room on a dynamic-balance pedaling apparatus, slowly moving backwards. In the blocks center, boys and girls were trying to build a bridge together. Helen and Ben were trying to roll hoops, coordinating their efforts between them. In the library center, Gail was holding a book and was reading “The Soul Bird” to some of her classmates as she imitated her teacher’s sitting posture. I asked myself: ‘Is this the kindergarten class they told me is so difficult to handle that each year they have to bring in a new teacher, and in which there are approximately 15 children diagnosed with motor difficulties and developmental retardation?’ When the children noticed my presence in the room, they approached me, gave me hugs welcoming me to their kindergarten, and proudly invited me in: ‘Come and see the new activity we have chosen!’ At that moment, I realized that I had to document the change process and try to understand how this change was occurring before my very eyes. (Ella, first page of her diary, November 6, 2005)

This article is our story – a teacher named Tal, who initiated a change that transformed her kindergarten. It tells the story from Tal's point of view and the point of view of the academic adviser, Ella, who counseled Tal during the process of the change. The change was deemed necessary because the kindergarten's formal teaching and direct preparation of the children for elementary school had failed to bring about significant learning outcomes, so that the children's achievement levels in reading and arithmetic were very low. Tal's initial attempts to enable learning through the adoption of progressive teaching and learning methods did not bear any fruit either. Additional efforts by representatives of the education system to add auxiliary manpower to the kindergarten, to enable parental guiding, and to channel a large number of children to learning therapy frameworks, did not significantly improve the learning process or the kindergarten children's achievements. It became clear to all involved that a change was needed, and it was clear to Tal that she had been charged with this responsibility.

The process of change in educational institutions can be carried out by policy makers, by the principals, or by teachers taking personal initiatives (Fullan, 2014). In any kind of educational change, a teacher has to take the responsibility for implementing it. When a change is imposed from the top down by policy makers or principals, the teachers must adjust to processes of change with which they do not always agree, or with changes that may be incompatible with their teaching qualifications (Stam, Miedema, Onstenk, Wardekker, & ten Dam, 2014). On the other hand, when the change is initiated from the bottom up, that is, by a teacher, his/her involvement is ensured. However, one must be aware of the fact that on the way to enacting a change, teachers have to anticipate difficulties (Tubin & Ofek-Regev, 2010) – personally and emotionally, professionally, politically, and in the interpersonal aspect of their work.

At the personal and emotional level, many difficulties arise, such as the need to discard what is familiar – something that had provided emotional strength which once had been the right way to do things, and head for the unknown (Fullan, 2014); coping day in and day out with doubts and hesitations about the correctness of the new path being taken (Stam et al., 2014); coping with the sense of isolation when decisions have to be made (Fullan, 2014); and perseverance in bringing about the desired change and results over a relatively long period of time (Lazzari, 2012). All this is taking place while the teacher is facing the children's parents, who are very likely also worried about the new change inspired by an unfamiliar curriculum so

different from that of other children. And to make things even more difficult, the teacher often lacks the tools to allay the parents' anxieties regarding the change being effected in their children's kindergarten: is the change really necessary or even good for their children (Tubin & Ofek-Regev, 2010).

At the professional level, additional difficulties arise, such as realizing the complexity of the problem at hand, determining the way to deal with it (Tubin & Ofek-Regev, 2010), and understanding the necessity of the change and the capacity to apply this understanding to the realization of teaching goals (Fullan, 2014).

At the political and interpersonal levels, the difficulties that arise concern a teacher's ability to stand up to education officials such as instructional supervisors. Supervisors often lack the means to look into the many details of what occurs in each of the institutions they supervise due, in part, to the large number of institutions they are in charge of, and because of the large number of functions entrusted in their care (Duffy, 2000). However, they are responsible for the implementation of the curriculum and are held accountable for proper administration of these institutions (Fullan, 2014). As a result, they usually prefer the status quo, finding it very difficult to countenance – not to mention encourage – changes and innovations from the field. In addition, regarding kindergarten, the first-grade teachers of elementary schools to which the children will be sent at the end of kindergarten expect them to be ready to learn language skills and mathematics. They therefore demand that the kindergartens focus on these two subjects in order to enable them to fulfill the achievement levels required by the education system and the parents (Yan, Yuejuan, & Hongfen, 2005). The decision to go for a change, therefore, requires the kindergarten teacher to overcome these difficulties and choose the way that will enable the children to derive the greatest benefit from the change that she/he is going to lead.

Divided in four stages, this article tells the story of the change: first, the change that occurred in the kindergarten will be described briefly in order to enable the reader to become familiar with its essence and qualities; second, the components of the teacher's professional beliefs that motivated the change will be presented; third, the practical foundations that the teacher used to create the change will be described; and last, the article will present what is termed as coherency – the coordination between the components of the teacher's professional beliefs and the practical foundations, and between the practical foundations themselves – which were the driving force behind the change and an important tool used by the teacher in dealing

with the aforementioned difficulties. The discussion will offer some thoughts about the significance of the process described herein for training specialized teachers, so that they will be able to generate change in their own classes.

Methods

This study follows the action research model, in whose process we, the researchers and recorders, were directly involved as a kindergarten teacher and as an advisor. Documentation of the process of change began in September 2005, when Ella joined Tal as her academic advisor, and ended in September 2011. By the end of the documentation, we were in possession of a total of 900 printed pages ready for analysis.

Documentation of the experimental process was conducted in several ways:

- Collecting formal documents that had been received by officials of the Ministry of Education and by the Regional Council. These included yearly teaching programs, yearly summations, and feedback of visitors who had observed the kindergarten.
- Detailed verbal documentation of activities and events that occurred in the kindergarten in the course of direct observations, and the analysis and discussions arising from them.
- Documenting weekly one-hour discussions that were held by the researchers on the day that Ella, the academic adviser, came to visit the kindergarten.
- Conducting four in-depth discussions, each lasting between three to four hours, which were recorded and then transcribed. The discussions were held on August 1, 2007, August 14, 2007, August 20, 2007, and January 3, 2010.

Analysis of Findings

The analysis of the findings got under way three years after the end of the experiment, in order to put as much distance as possible between us and our deep sense of involvement in the change that occurred in the kindergarten, which could have affected the objectivity of our judgment of and emotional separation from the project, indispensable elements for writing a research article like this. In order to mitigate the effects of our over-involvement, each of us analyzed the material separately, and only later did we meet to discuss our differences until we reached points of agreement.

We based our analysis of the findings on an acknowledgement of the importance of action research in monitoring both the introduction of changes in the education system (Carr & Kemmis, 2003) and the suggested ways for conducting action research (McNiff, 2013). The analysis of the materials collected from the field, which consisted of written records and transcripts of interviews, was conducted with special attention to their significance and their context, and they were inductively subsumed under categories according to the process suggested by Shkedi (2014).

The first step was to organize all the material chronologically, and then each of us read the material separately, underlining sentences and passages that seemed to represent part of the answer to the question: How did the change become possible? Following this stage, we met eight times in order to think together about the aim of our article and decide how we were going to analyze the written material. The second step was to re-read, again separately, all the material we had gathered, in order to look for indications that a change had indeed occurred in the kindergarten. The third step was to search, again separately, through all the material that indicated a change relating to the practical foundations that had led to the change. Defining these foundations, which we eventually did together, was complicated by the fact that they were so entwined that it was difficult to separate one from another. At the end of this process we were able to define seven foundations, and we had in our possession everything that was said and written about each one. The next step was to describe all the foundations, and to select one passage for each foundation from the texts that would allow the readers to sense in what way the foundation emerged in the kindergarten. The final step was to review all the materials at our disposal, starting separately and then jointly, extracting the components of Tal's 'professional credo' and examining how they affected her choice of foundations and their application. At this stage we realized how coherent the foundations presented in this study were, and we then made an attempt to understand the significance of this coherency in the success of the change.

The Kindergarten and the Participants

This paper tells the story of a kindergarten we will refer to as "Challenge Kindergarten," which is located in a small village in the central region of Israel, not far from major urban centers. It is part of the public education system and complies with the curriculum requirements (mathematics, science, literacy, life skills, and the arts) and standards of the Ministry of

Education. The kindergarten is designated for 4 to 6 year-old children, who attend it until they reach the regional elementary school that serves all the surrounding villages. Between 28-35 children attend the kindergarten, all from the same village, most of them from a low socio-economic background. Most of the children attend for two years. The kindergarten is taught by one teacher and one assistant. Similar to most kindergartens in the country, Challenge Kindergarten is administered independently from other kindergartens and schools. The teacher is actually the principal of the kindergarten, and serves as the pedagogical and organizational administrator as well.

Instructional supervisors and others responsible for the curriculum of this kindergarten have often been asked to intervene in order to resolve "urgent issues" such as violent behavior and outbursts of anger exhibited by the children, claims by the parents that the kindergarten's atmosphere precludes any significant learning, and complaints by elementary-school teachers stating that children from this kindergarten have a hard time integrating into the regional elementary school. The parent population is homogeneous, consisting mostly of small business owners without an academic education. However, economically they are considered middle-income families.

Tal, the kindergarten teacher, is a graduate of a progressive-oriented teacher training institution. At the beginning of her teaching career she taught in economically advantaged neighborhoods, where she was able to apply what she had learned at college without encountering any special difficulties. In the course of her work at Challenge Kindergarten, Tal suited her progressive professional beliefs to the complexities of this kindergarten. Here are her beliefs as related in her own words:

Belief 1. I believe in the children and trust them. Every child can succeed on their own and move forward to learning independently.

Tal, conversation with Ella, August 1, 2007

Belief 2. I have an obligation to find a solution to every child's unique needs and to take into account his/her characteristics. Giving a child an opportunity for independent investigation and learning should not be confused with going along with every whim they may have, such as keeping a peer out of a game, for example.

Tal, conversation with Ella, August 7, 2007

Belief 3. Every child should be given a ‘fishing rod’ – learning-related skills – so that he/she can be independent and ‘fish’ anywhere, anytime.

Tal, conversation with Ella, August 20, 2007

Belief 4. Learning that denies children the opportunity to use their kinesthetic perception through experiencing movement of the body is like covering their eyes and asking them to learn.

Tal, conversation with Ella, January 3, 2010

Belief 5. Absolute freedom does not create a learning atmosphere. A learning atmosphere can only be created on the basis of clear rules, giving children a sense of confidence, allowing adequate space for choice, and teaching them to accept responsibility for making their choice.

Tal, conversation with Ella, January 3, 2010

Later in the article we will point out where these beliefs appear in the cited passages concerning the practical foundations, and then we will present them as the foundations that enabled Tal’s coherency and led to the change that occurred in the kindergarten.

Ella, the academic advisor, readily accepted the offer to become the advisor of this kindergarten teacher, who was willing to try and deal with the children's learning difficulties by emphasizing movement and physical activity. As a lecturer at a physical education college and a researcher in the field of teacher training, she saw this as an opportunity to become involved in the teacher’s struggle within the field.

The Change

Formal documents submitted by the kindergarten teachers prior to the experiment revealed a sorry picture – an atmosphere of unrest, violence among the children, learning difficulties, lack of learning skills, and low achievements on the yearly tests in language and arithmetic. This situation led to a number of serious problems: the teachers devoting a disproportionate amount of time to solving discipline issues at the expense of academic learning, children wandering around the learning centers accomplishing absolutely nothing, bitterness among the parents, high teacher turnover at the kindergarten, and the therapy clinic treating 20

children out of the 27 attending the kindergarten in one single school-year. During the same year, 40% of the children were held back for one more year in kindergarten, in spite of having already reached the age of six, which in Israel is the age pupils should enter first grade.

This situation changed significantly when the change began to take hold – the kindergarten’s teacher, Tal, continued to work at the kindergarten for many years, and this thorny patch bloomed into a well-tended garden. Violence and other discipline problems disappeared almost completely, the children learned how to be independent and to choose meaningful learning, and the parents became partners in many of the kindergarten’s activities. The elementary school teachers who received the kindergarten children testified to the great change in the children’s approach to learning, even though some still showed insufficient knowledge of subject matter. In addition, visits to the therapy clinic decreased dramatically, and only very few (1 or 2) were left back in kindergarten. Out of the sixty kindergartens in the area, the children of Challenge Kindergarten came in tenth in the yearly language and arithmetic tests, and achieved first place in the level of improvement in the tests between 2007 and 2008.

Findings

The Practical Foundations that Enabled the Change to Occur

The practical foundations are the ways, the techniques, and the actions that a kindergarten teacher routinely chooses in order to lead the process of change. In the analysis of the texts, we arrived at seven such foundations. Two of them concern the recurring personal behavior patterns of the teacher; the third concerns the content of the activity; the means for implementing the three didactical processes are four to six; and the seventh is the goal – the purpose of the entire process (see Figure 1).

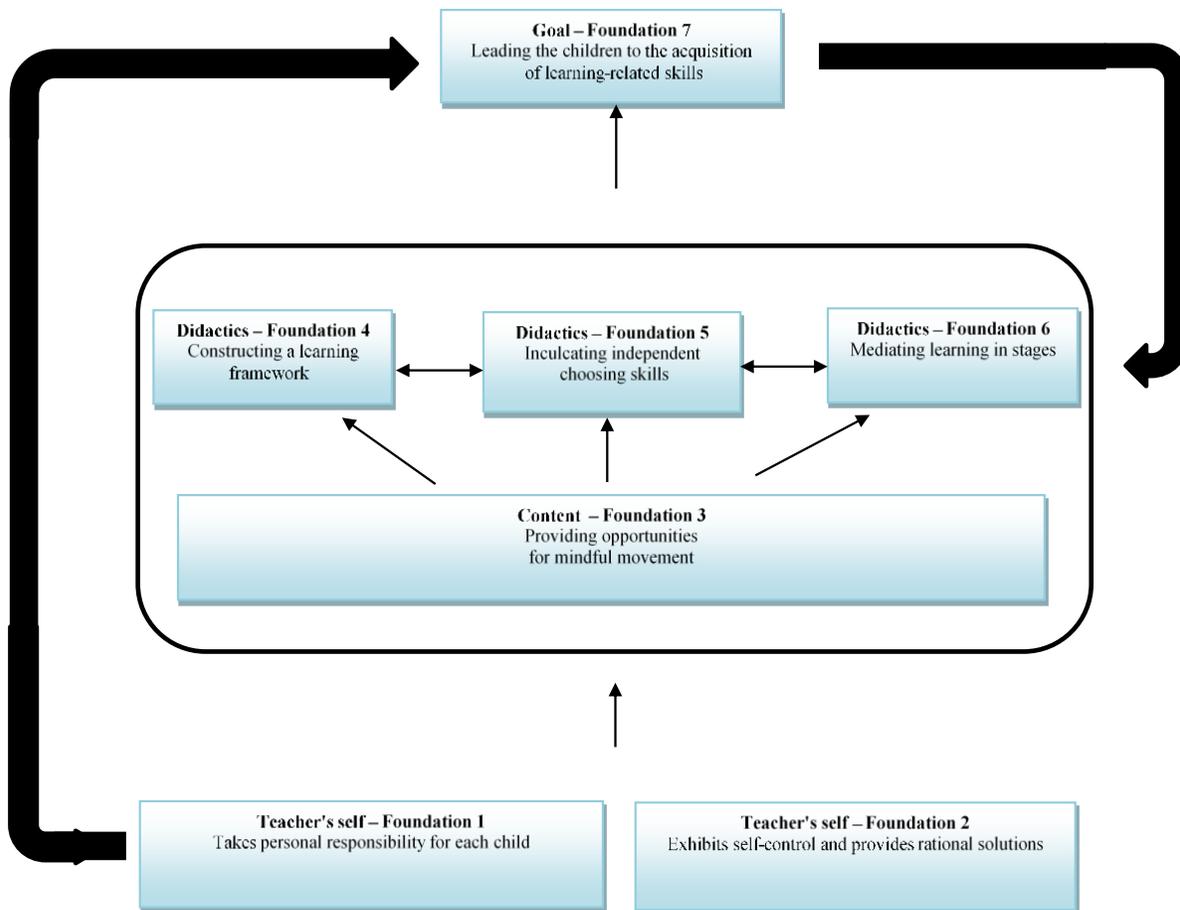


Figure 1. The foundations that brought about change in the kindergarten and the connections between them.

Foundation 1. The Teacher Takes Personal Responsibility

This foundation is the basis on which the change is built. Accepting personal responsibility for something differs from the concept of accountability, according to which the teacher is responsible to the system and is committed to leading the children to reach the standards the system has set for them (Reeves, 2004). Accepting personal responsibility means first and foremost caring about the children and feeling a commitment to the processes each child is going through: 'I plan the kindergarten environment so that the children will have the possibility to bring about a change for themselves.' (Tal, October 15, 2008). Also, 'I evaluate how far each child can go and will not rest until I get him/her there.' (Tal, January 2010). The difference between the two approaches is that accountability means fulfilling the requirements and obligations of the system even when they are not suitable for children whose background makes it impossible for them to reach the required achievements (Ingram, Louis, & Schroeder,

2004; Linn, 2003). In taking personal responsibility, the kindergarten teacher takes upon him/herself the job of bridging the gap between a child's needs and the requirements of the system. Below are quoted passages underlining the taking of personal responsibility by Tal:

Many teachers plan how to teach a subject in their kindergarten, but I plan how to apply the sense of responsibility I feel responsibility toward the children and how to achieve goals at the children's level. For example, I was looking for ways to foster Ben's ability to persevere and to not get distracted. I believed he was capable of this (belief 1), but he was skipping around from one activity to the next, was not able to spend time on any one task till its completion, and was not progressing in his learning. Instead of making do with sending him for therapy, I planned ways to help him within the class framework. I organized new surroundings for him that had a choice of challenges suited to his level and character, and included many body movement challenges (beliefs 4 and 5). Then I helped him choose a game and persevere in playing it even when difficulties arose and he did not believe he could do it without me sitting next to him (belief 2). When I saw he was able to play all by himself for long stretches of time, I gradually raised the level of the challenge, but made sure he did not lose his motivation and his feeling of success at playing the game (belief 3).

Tal, conversation with Ella, August 14, 2007

Three years later, the teacher's adviser stated on the same point:

I took notice of the stages you worked by. First of all, you chose in advance to teach the children to cooperate with each other without your help. You defined the steps that would enable the children to acquire this skill (belief 2). You began with agreed-upon rules of behavior (belief 5) (Gersten & Dimino, 2006) that form the basis for cooperation, and then you proceeded to persevere in group activities that enable social processes to happen. Then, when all the children were busy performing movement in the cooperation-fostering environment prepared for them in advance (belief 4), you monitored the children's behaviors in your observation form, noting that one of the children, Amir, looked troubled and walked around restlessly, unable to connect to the others. You called him over to talk to you and calmly listened to him as if he were the only child in the kindergarten. It was interesting to see how quickly he leaned on you and focused on the

conversation (belief 1). Then you talked about the way he could join the group that was absorbed in building an obstacle course. He approached them, picked up a block as he turned his eyes to you: 'Can I?' You nodded your head, and the children there did the same. After a few minutes, when you were absorbed observing another group, and the children had already started to run on the obstacle course, he shoved two children that were playing there, arousing the anger of the entire group, which threw him out of their game. You went back to the group, gathered them around you, and again listened to their angry complaints and to Amir's frustration (belief 1). He admitted that he very much wanted to stay with the group and play, and everything went back to the way it had been before. At the end of the day I saw you talking to Amir again, trying to think together with him how he could play a game with his peers without needing your help (belief 3).
Ella the advisor, conversation with Tal, August 20, 2010

Accepting responsibility out of caring for the children should be a kindergarten teacher's state of mind, a sense of self-efficacy that she/he is able to help the children move forward, even the ones who pose the most difficult challenges (Meyer & Turner, 2002). Taking responsibility continues through the teacher's selection of teaching strategies so that he/she may realize his/her sense of caring. These methods can be seen in the cited passages as well as in the professional literature dealing with caring and taking responsibility for the children: planning teaching on the basis of teaching goals (Trawick-Smith & Dziurgot, 2011); developing tools for evaluating the children's progress and for a self-check of the teacher's own teaching (Fuligni, Howes, Huang, Hong, & Lara-Cinisomo, 2012; Van de Pol, Volman, & Beishuizen, 2010); mediation focused on the teaching goals (Van de Pol et al., 2010); and steady monitoring of each child's progress in order to arrive at an actual evaluation of each one of them (Trawick-Smith & Dziurgot, 2011).

Foundation 2: Teacher Exhibits Self-Control and Provides Rational Solutions

This foundation is the source of the strength that enabled Tal to hold on for so long. In the conversations and interviews we held, many expressions emerged describing the emotional load a teacher carries in the face of difficulties: 'I couldn't sleep,' 'I became constantly troubled by thoughts about the kindergarten and the great responsibility I was given,' 'I asked myself how am I going to cope with all this stress.' Tal chose to act with self-control, coping rationally, and

thinking constructively. This choice is expressed in considering matters before acting, analyzing situations, and having control over her choice of reactions (Evers, Tomic, & Brouwers, 2005). Such ways of coping are not characterized by spontaneity and randomness. They require consistency, and as a result they are slow, or as Tal put it, 'There are no palliatives for me, only root-canal work.' Here are some cited passages illustrating the way in which Tal controlled her behavior and coped rationally:

During my first half year of teaching I used to cry all the time. I asked myself what was I doing that was wrong. The children would go to the home center and would immediately start fighting, they would start playing the memory game and after one minute they would give up. Everything they did was done violently, utterly ignoring the others around them. At a certain point I realized that the way these children learn was different from the others. I became more caring about these children and their future (belief 2) and I thought it was important to try and 'decode' their 'learning mechanism' (beliefs 3, 5). The strength to stop, observe and listen – to try and understand why they were not communicating – stems from this caring (belief 1).

Tal, conversation with Ella, October 15, 2008

I know by experience that the moment I got angry with a child, I would turn the conversation into an argument and a confrontation. It is important for me to talk to the children honestly and sincerely and not to use my authority unfairly (beliefs 1, 3, 5). For instance, when I sent Gil to sit alone to the side of the room, he began to clown around behind my back till I could not manage the meeting in the class any longer. I searched for a way that would allow me to calm down, but I told him sternly that 'you are allowed to choose not to be with us. I trust you to overcome whatever is bothering you and come back to our meeting to watch us.' I found it very difficult to separate his difficulties from mine, not to get dragged into his provocation, and to wait patiently until he stopped. I am by nature a person that searches for effective and quick solutions, but this time I wanted to find a different way – to take care of an issue so that it would not arise again.

Tal, conversation with Ella, August 1, 2007

Tal chooses to deal with the stress-load factors using a rational process: identifying the problem, searching for possibilities to solve it, and choosing the appropriate solution. For this purpose, she has chosen three steps found in the cited passages as well as in the professional literature dealing with rational approaches to these issues using constructive thinking. The first way is listening to everyone who turns to her as she accumulates knowledge about those who do so, creating trust, acceptance, and understanding, as well as a non-judgmental atmosphere (Howes & Ritchie, 2002). One of the advantages of being in a position of listening is that it postpones the time it takes for one to react, and enables the one reacting to have more time to articulate an answer (Parish, 2013). The second way is to separate one's own difficulties from the children's difficulties in order to strengthen one's own self-control. Despite Tal's empathy with the children's difficulties, she neutralizes their attempts to use their difficulties as an excuse for using communication patterns that blame and frighten others. An example of this kind of communication is found in the second example, in which Gil attempts to disrupt a meeting. She does this by keeping her self-control intact and suggesting alternative patterns of communication. These patterns include acceptance of anger and frustration as legitimate, and a patient but firm response demanding adherence to the established framework (Zhang & Sternberg, 2002). The third way is to acquire professional knowledge in the course of looking for solutions to specific problems that arise in the kindergarten. Such knowledge enables the teacher to exercise control and review decisions that are fundamentally instinctive (Zhang & Sternberg, 2002). In addition, it also gives her a sense of knowing what she is doing and the sense of self-efficacy that enable her to 'stick to her guns' (Bondy et al., 2007).

Foundation 3. Providing opportunities for mindful movement

The foundation of providing opportunities for mindful movement is the means through which the use of the other means and the attainment of the learning goals are enabled. Movement includes the motion of the whole body as well as its separate parts. It is the basis of all active learning in early childhood (Shoval, 2011). Given a free choice, children will choose movement activities and will persevere in them for relatively long stretches of time (Fuligni et al., 2012). When learning in kindergarten occurs through movement, the teacher will find it easier to create an environment that includes attainable challenges (Anning & Edwards, 2006). Additionally, movement provides opportunities for social contact, enabling children to feel close to each other

and to persevere in their chosen activities (Ben-Ari, 2002). This experience of movement activity can foster academic learning provided that it is mindful, i.e., it integrates verbal-academic processes (Ben-Ari, 2002). In order for movement to be mindful, the teacher has to be aware of her/his teaching goals and has to suggest integrated activities that will advance her/his teaching goals. This approach is different from using movement in kindergarten directly as an exercise, or as a yard activity whose aim is entirely separate from academic learning and is exclusively focused on the children's motor skills. Here are some quoted passages illustrating how Tal uses movement:

When I am asked why I have chosen movement as my most important teaching method, I explain: 'It is not I who have chosen it, the children have, and I have decided not to go against their choice (beliefs 1, 4). Fortunately, I was given permission to do it. I was curious to find out why children chose movement and how I can exploit and direct this choice to their benefit (belief 2). I searched for guide books on movement activity for early childhood and asked for guidance on the subject, but when I began to integrate movement in my kindergarten, I acted as a kindergarten teacher, thinking about how to organize a learning center for the children based on movement, thinking how to integrate movement in the daily meetings, in the daily schedule, and in the curriculum (belief 5). I began to organize balls, rings, hoops and sand pillows, suggesting to them to come up with some ideas on how to use all these things. When the children did come up with their ideas, I began to think about which ones could be integrated into my teaching: counting exercises, verbalizing and writing down the ideas, instructing a group of children with these ideas, and teaching concepts such as strength, limits, and balance. The children found learning through movement very interesting, and constantly improved their ideas (belief 3).

Tal, conversation with Ella, January 3, 2007

Till today, Norman is still sitting alone. He moves about here and there alone in a limited space, or sometimes participates in activities conducted by the teacher. Today something important happened in his life. He approached a group of girls and asked to join them in their game, 'Chain on Balancing Beam.' The girls immediately agreed and invited him to stand in the middle of the chain and hold Noa's hand on one side and Lia's hand on the

other. Lia even smiled at him openly. I got excited. Before today, the teacher had tried to get him to play with the children, suggesting to Yuval to invite him. Seemingly, one must never give up. When there is an opportunity to play a challenging game involving movement, there is a positive atmosphere of cooperation, as everybody knows the rule that one may not refuse another child's request to join a group, and when there is a kindergarten teacher that the children know will protect them from harm, even the most suspicious and the most scared will join in (beliefs 1, 5).

Ella, work diary, December 5, 2009

Tal allows the children to experience learning through mindful movement in several ways that can be culled from the cited passages and can also be found in the professional literature dealing with physical education in kindergarten. She organizes various kinds of equipment that presents the children with problems to be solved and other challenges; she enables the children to perform movement for relatively long periods of time (Fulgini et al., 2012); she organizes a social movement environment that enables the children to solve problems in teams and help one another in dealing with challenges (Shoval, 2011); and she mediates the academic and social learning processes of the children in movement. Movement allows Tal to monitor the thinking processes of the children and the processes involved in their decision-making from the point of view of an outside observer, helping them only when they really need her (Shoval, Talmor, & Kayam, 2011).

Foundation 4. Creating a Learning Framework

This foundation is actually the imposing of boundaries that enable acquisition of learning-related skills. Without a framework defining the learning goals and the limits of learning space and of choice, it is impossible to let the children choose and lead learning processes (Logue, 2007). The framework is as follows: establishing the rules of behavior for children and norms that delimit their choices. Unlike freedom of choice, the parameters of choice set the limits in which all the children of the kindergarten can operate while having to consider their peers and respect their wishes, being careful not to spoil the common environment (Ponitz, McClelland, Matthews, & Morrison, 2009). Here is a quote illustrating the way in which Tal creates a learning framework:

While playing, Loren tends to quarrel with children. In spite of this, I let her choose the group game she wanted to join. I wanted her to feel that I trusted her capabilities (belief 1). I reminded her of the rules for joining a group game: she has to help the group to play the game and not offend its members, and if she can't, then she will have to leave the group and the game (belief 5). Loren is aware of the fact she can go back to the game when she thinks she can play by the rules. I took her out of a group a few times and then allowed her to go back. The third time, when a quarrel started once again, Loren sent a glance in my direction, stopped for a second, and then turned around. She then approached one of the children and suggested to him she could play doorkeeper of the shop in their group game. The other members of the group agreed and she remained in the game, finding a resolution to the argument (beliefs 2, 3).

Tal, conversation with Ella, August 14, 2007

Tal created a framework for learning by establishing three rules, which can be seen in the cited passages and simultaneously in the professional literature dealing with creating a learning framework in kindergarten. The intention of the three specific rules was to keep the framework working during the day in the kindergarten. They are: (1) every child can choose equipment, activities and a group to play with; (2) if a child damages equipment, or disrupts activities or the group, he/she must leave the group and the game; but (3) he/she can return to the group and the game if he/she, by their own choice decides not to disrupt the game again, and keeps to his/her decision. These three rules are sufficient provided that they are kept strictly and simultaneously. The first rule enables children to play in those areas that interest them personally so that motivation remains constant (Whitebread et al., 2005). The second rule establishes a clear system of values that makes it unacceptable to hurt or offend others or damage the environment (Phillips, Gormley, & Lowenstein, 2009). The third rule leads to taking responsibility for choosing to go back to an activity (Trawick-Smith & Dziurgot, 2011).

Foundation 5. Inculcating Independent Choosing Skills

The opportunity children are given to choose activities as they see fit is a central learning feature of a kindergarten working according to the constructivist approach, as suggested by Tal's approach. This approach to learning sees the learning child constructing his/her knowledge and

skills through self-experience (Bodrova & Leong, 2007). Choice educates the child toward becoming independent and enables the child to experience significant learning (Vitiello, Booren, Downer, & Williford, 2012). When the teacher supports and supervises the choice processes, significant learning will follow (Goldstein, 2007). However, choice that contributes to learning does not occur automatically; the children must acquire the tools to determine how, when, and how much they should choose (Bodrova & Leong, 2007). Here are some cited passages illustrating the process Tal uses to teach the children how to choose:

I let Bill choose a group to play with (belief 1). He chose to join one of the groups, but very quickly began to disrupt the normal flow of things. My job as a teacher is to teach him the consequences of his choices (belief 3). I told Bill: 'You really want the ball very much, and that's why you stole it from Yuval. What else could you have done?' Bill answered: 'I could have called you or I could have gotten another ball.' I asked him: 'What do you think Yuval is going to do tomorrow when you want to play with him?' Bill answered that Yuval might not agree because he had stolen the ball from him. I did not judge Bill's choice. I simply told him: 'The next time you choose someone to play with, you should be aware of the gain or loss of doing so, and you should choose knowing what is more important to you: giving in to and keeping a friend in the game, or getting the ball' (beliefs 1, 5). These are the things that came up in my talk with Nir since they fit his choices. Tomorrow, a different conversation may take place, but what is really significant is the fact that in every talk I analyze the situation together with the children according to the nature of the issue and their characteristics (belief 2).

Tal, conversation with Ella, April 10, 2007

Ella: 'I have seen that since the beginning of the year, you have let the children choose for themselves. How do they know how to choose?' Tal: 'At the beginning of the year, I organize the kindergarten environment in general and the learning centers in particular at the most basic level so that they will lead the children to choose activities independently (belief 5), without too much outside help (belief 2). I do this because I want them to get used to the idea that they have to choose their own activities (belief 3). Introducing more complex learning centers at too early a stage will not enable them to reach independence in choosing because they will remain dependent on my help (belief 2). I do this because I

want them to get used to choosing.' Ella: 'How do you raise the level? The whole idea is to have significant learning, isn't it?' Tal: 'I raise the level of the complexity of the suggested activity gradually and plan mediation in order to help children with issues (belief 1). At the same time, I look for children who choose challenges that are too difficult for them and I let them lead a group in peer teaching' (belief 2). Ella: 'Isn't there a risk that they will feel failure?' 'It is my task, and in this, movement comes to the rescue, to make sure that at the end of the day the children will feel that they have succeeded and will be able to deal with the challenges (belief 4), and some frustration in the middle of the process won't hurt them. Overcoming frustration contributes to their confidence. If the children don't have to deal with real challenges, they won't acquire the confidence to choose. I hold many talks and discussions with them in order to provide them with tools to cope with challenges' (belief 3).

Conversation between Ella and Tal, January 3, 2010

Tal teaches the children to choose in a mindful manner. She realizes that the children can reach mindful choices out of an awareness of the consequences of each choice they make. In order to reach this awareness, she leads two processes that are possible to see in the quoted passages and simultaneously also in the professional literature dealing with choice.

The first process occurs as she allows the difficulties and the conflicts to develop in the course of the children's activities. In this fashion, difficulties enter into the children's awareness and open the possibility of dialogue about them (Whitebread & Pino-Pasternak, 2013). The second process includes a personal or group discussion in which it is legitimate to bring up any difficulty and in which ways to resolve issues are suggested until a solution that is acceptable to both the teacher and the children is reached. This process enables the children to acquire ways of dealing both as principles and as a reservoir of a variety of ideas that can be used if difficulties arise (Ginsburg & Amit, 2008).

Tal holds structured discussions with the children following these steps: Listening, explaining, analyzing suggested possibilities, and choosing a possibility out of awareness of the consequences. Holding such discussions provides the children with a sense of confidence that somebody is listening to them, and gives them the tools to explain difficulties and to make

mindful choices, i.e., for every decision or choice there is an explanation or justification (Iiskala, Vauras, Lehtinen, & Salonen, 2011).

Foundation 6. Mediating Learning in Stages

The foundation of mediating is an action undertaken by a teacher to assist his/her pupils in dealing with a question, problem, or challenge in attaining new learning. Mediation can be compared to setting up scaffolding (Van de Pol et al., 2010). The mediator must first identify the characteristics of a child or a group of children, adjust the height of the scaffolding to the suitable level, and then let the children work on their own at the fixed level until they master the learning material and are ready for the next level. This method of teaching is complex, requiring the kindergarten teacher to be finely tuned to the personal learning processes of each child and to advance each child in suitable stages (Van de Pol et al., 2010).

Ron wanted to play with a group of children in the building center, but was not successful. This frustrated him and caused him to isolate himself from the others. Instead of sending him to look for other friends or to ask the group to let him join in, which would leave him with a sense of helplessness (belief 2), I realized that I had to teach him to see what he lacked as an attainable skill, and started working in stages (belief 3). First, I searched together with him for ways to join in a game, such as suggesting an additional role in the game, or that he ask to play an existing role. We listened to the group together and heard they were playing a family going out on a trip. I suggested to him to play the part of an additional member of the family, but I let him choose for himself the character he would play. He then proceeded, without my help, to suggest to the group the role of the additional member of the family he would play. I stayed with him to boost his self-confidence so that he would know he was not alone in the process (belief 1). At the second stage, when he wished to join a group, he already knew it was possible since he had learned a formula for doing this. I monitored his progress and continued to help him. At the third stage, I suggested that he invite a group of children playing in the building center and lead them cooperatively to the obstacle course he had planned the previous day when he played kindergarten leader (belief 3).

Tal, conversation with Ella, August 14, 2007

The fact that children learn through movement helped Tal's mediating processes, since movement occurs externally, can be observed, and exposes choice processes and taking responsibility (Giles-Corti & Donovan, 2002). The external aspect of movement enables a teacher to observe a few children at the same time and see their progress simultaneously, making mediation more efficient (Shoval et al., 2011). In order to derive the full benefit from mediation, Tal displayed certain helpful behaviors: she does her best to have the children choose a challenging activity on their own; she leads the children in defining their goals in advance (Bodrova & Leong, 2007); she enables the children to choose and progress independently as long as they can without mediation, and she intervenes only at the point when her intervention can help learning (Zimmerman & Schunk, 2012); and, she teaches children the logic behind her mediation so they can emulate her in the future (Meyer & Turner, 2002).

Foundation 7. Leading the Children to Acquisition of Learning-Related Skills

This foundation is comprised of two skills: self-regulation and social competence in cooperation. Self-regulation in learning is one's ability to consistently initiate and carry out one's own learning activities (Zimmerman & Schunk, 2012). Social competence in cooperation includes two or more children working together and solving problems together by supporting each other and learning from each other in order to enrich their learning (Walker, Shore, & French, 2011). Learning-related skills, i.e., self-regulation and cooperation, have a strong influence on success in kindergarten and on learning achievements (McClelland & Cameron, 2012). Children lacking these skills have a hard time realizing their learning potential (Solomon, Battistich, Watson, Schaps, & Lewis, 2000), since these skills lie at the foundation of all independent learning (McClelland & Cameron, 2012). The ability to instill in children the possibility to learn independently should be one of the most important aspirations of every educational system, because it frees one from depending on dictated systems and enables learning throughout life (Scott-Little, Kagan, & Frelow, 2006). Here are some quoted passages illustrating the way Tal leads the children to acquiring control of their ability for self-regulation and their ability in social competence:

Paul sat looking at Guy playing with a three-dimensional puzzle called Catamino, which can be adjusted for levels of difficulty. He tried, but failed, to complete the puzzle at the lowest level of difficulty. He came to me crying and said: 'I can't play because I can't fit

the pieces in their place. They don't fit in place like I want them to fit.' I answered him: 'I see it's hard for you. It's okay if you don't know. When learning, you don't have to know, you only have to try. You don't even have to succeed. I can play with you if you want' (belief 2). As I was talking, I realized Yariv was not ready for a conversation. I told him: 'I see you are having a hard time. If you want to talk, I'm here. I trust you will overcome the problem in spite of the difficulty you are having right now (belief 1, 3). If you wish, you can choose another game and play with me.' But he was not ready for that either. He went to sit on the sofa in the library, took a book and began to browse through it. I let him do that. The next day I brought a new game with me that I thought he could handle, I went to him and suggested that he try it. The game was about a frog that can catch flies that are tossed to him. I invited one of his closest friends, Paul, to join him in the game so that Yariv could experience how to learn with others. He agreed to play together with his friend, he enjoyed it, and he even agreed to count how many flies hit the mark (belief 3). So, every morning I looked for an easy game for him to play, and always with a friend. After a month I saw he started to play with more challenging games. One day, he went back and dared to take down the Catamino. He approached me and said: 'I will try to get to the stages I haven't reached yet. Maybe I will try to turn the pieces upside down, I saw Guy do that. I'll ask him for help if I need it' (belief 3).

Tal, conversation with Ella, March 10, 2008

This morning I observed the children playing in the yard. A group of five chose to play football in front of a single goal. Every time a child got the ball, the other four would jump on him, bodily and metaphorically – with curses. Although the game went on aimlessly and violently, the children did not stop playing. Children watching the game, hoping to join in, called Tal: 'Look, they are not cooperating at all.' Tal went to the yard, stopped the game, and invited the children – also those who were watching – for a talk (belief 1). The first question she asked them was: 'Remember the rules we agreed to keep when playing?' The children recited the rules. Her second question was: 'What do you intend to learn from this game?' (beliefs 1, 2) 'To score goals,' answered Loci while the others nodded their heads. 'What do you have to do to learn how to shoot the ball to the goal?' (belief 3) asked Tal. 'Stand on line and kick when your turn comes,' said Tom. 'To

pass the ball and the last one kicks it in,' suggested Omri. 'To put a referee in charge to write down who has already kicked the ball in and who has not, and it's his turn,' suggested Jonatan. 'Excellent ideas,' Tal suggested. 'You built a framework for learning. You will make progress in both improving your kicks to the goal and in cooperating with each other' (belief 1, 2, 5).

Ella, work diary, October 12, 2007

Tal led the children toward the acquisition of two learning-related skills: self-regulation and social competence in cooperation. The professional literature indicates that most children have trouble acquiring these complex skills without undergoing a planned and gradual learning process (Bodrova & Leong, 2007). In order for self-regulation and cooperation to occur, Tal instilled in them skills that can be seen in the cited passage and simultaneously also in the professional literature dealing with these subjects. In self-regulation, she taught them to set up a goal to reach, to choose ways through which the goal can be reached, to analyze difficulties that arise, to suggest possible solutions, to choose a solution to try, and to take responsibility for trying the independent solution until the goal is reached (Zimmerman & Schunk, 2012). While instilling cooperation, she taught them to keep agreed rules of behavior (Malone & Tietjens, 2000), to persevere in cooperative learning processes until the end (Goudas & Magotsiou, 2009), to avoid fights by finding ways to resolve differences of opinion, and to recognize the value of cooperation for learning (Tarim, 2009).

To conclude, it is important to note that although we have presented all the practical foundations separately, these foundations are intertwined. In the next section we will discuss the connection between the practical foundations and the kindergarten teacher's beliefs, to summarize them, and to illustrate the way change was created in the Challenge Kindergarten through coherency.

Discussion

Coherency Creates Solid Foundations and Enables Change

In teaching, coherency is a characteristic of teachers that marks their ability to keep things connected – a uniting feature between the theoretical foundations expressed in the 'professional credo' of a teacher and the practical foundations of his/her teaching, and also

between the practical foundations themselves (Shoval et al., 2011). Coherency is a kind of consistency very similar to weaving, that is, it is embroidered in the teacher's imagination. He/she then adds the next thread on the basis of observing the fabric and out of being aware of the possibilities at his/her disposal (Buchmann & Floden, 1992). The common thread running through coherency and intuition is the ability of a teacher to adjust to changing teaching situations. The coherent teacher does not leave any room for things to happen at random or by free association, but works according to a given scheme that allows choice to occur. This choice, however, leads to goals that were set in advance (Shoval et al., 2011). It is important to note that coherency is a kind of mechanism ensuring that a teacher reaches what he/she has set out to do and that it will bring about a change, but it cannot guarantee the content of the change, its values, or its quality. These depend on the starting point – on the quality of the teacher's professional beliefs and the associated content (Bowers, 1997).

Each one of the foundations in Tal's work, no matter how important, was not sufficient to bring about the change that occurred in her kindergarten. What actually brought about the change was the coherent fashion in which the foundations were connected, as illustrated in Figure 1 from the bottom up: the change begins at the point where Tal begins her own process of change, and that is the basis to which all the selected means to effect the change are connected.

Below is an example of how the seven foundations are connected to each other and are forged into one single coherent unit, as Tal gives an account of her work with the children:

John is the kind of boy that can easily move a teacher's heart to pity. Every morning he would come in through the gates of the kindergarten with the visor of his baseball cap covering his already downtrodden eyes. But just because I care about his future, I decided not to let him continue to hide, since by continuing to do so he would certainly ruin his future (foundation 1). One morning I approached him and told him privately that I saw that he was having a hard time. I offered to help him if he wanted me to, but he remained on the sidelines alone. I did not give up, and every morning I renewed my offer to help him and told him that I trusted him to overcome whatever it was that was bothering him (foundation 4). I knew he would be able to choose to behave in a different way (foundation 6) and so I became bolder in my approach. Already at the beginning I knew there a long road lay ahead, that I would need a lot of self-control, patience (foundation 2) and self-restraint to go step by step (foundation 7), and would need my knowledge of

learning-related skills (foundation 3). But on the other hand, I realized that I had to ask him to follow the rules (foundation 5) of the kindergarten and take responsibility for his choices and for his social, individual, and academic learning process (foundation 6). I could create for him the optimal conditions for learning (foundation 4), but it is he who must take care of the learning process (foundation 3), which would be lengthy and in small steps (foundation 7). I won't easily forget the first time that he agreed to speak to me. We stepped aside and sat down together. He told me he was having a hard time finding a classmate to play with when he arrived in the morning. I asked him who he wished to join, and we approached the child together (foundation 6). I sat next to them when they began to play, but a week later they did not need me any more (foundation 3). Since that day, John has frequently turned to me, and together we have found solutions. There still were some hard days ahead. John would not talk to me when he encountered difficulties and withdrew from play. But I would approach him every time this happened, and would tell him that I realized he was having a hard time, but I trusted him to deal with the issues. Sometime later, John began to deal with his problems independently and he even approached friends on his own. He seems to have learned an important lesson in life – there may be problems and it may be difficult to solve them, but they can be solved if you turn to someone with whom you can discuss them – whether they be friends or teachers. Actually, the boy learned to believe in himself and learned he could deal with his difficulties (foundation 3).

Tal, conversation with Ella, October 21, 2008

The numbered foundations we added in brackets in John's story illustrate how these intertwined practical foundations appear in practice. They are so interconnected with each other that it would be impossible to take one out without causing the whole 'structure' to crumble. In the preceding sections we presented Tal's professional beliefs, and pointed out that they are interwoven in the practical foundations of her method. In John's story, Tal's belief that the time would come when he would accept her invitation to join the activity (belief 1) motivated her to continue suggesting to him to join in, and to tell him that she trusted him in spite of his refusal to cooperate. Her belief that she had to fulfill his needs (belief 2) enabled her to identify with his difficulties and offer him her help, listening to him when he agreed to share with her his most debilitating issue:

finding a classmate to play with him. Her education belief that a teacher should provide a child with a 'fishing rod' and not a 'fish' (belief 3) led her to gradually free him and think together with him about finding solutions, and not provide him with ready-made solutions. The context in which the events took place involved movement games (belief 4), which allowed Tal to observe her pupils from a distance. All this had to be done while observing the rules of the kindergarten (belief 5). One of these rules is that a child may not hurt others or him/herself, which this boy had found very difficult to observe the first few days in kindergarten. It can be stated that the coherent connection between the teacher's professional beliefs and the practical foundations, and between one practical foundation and another, enabled Tal to overcome difficulties, to leave her former familiar place for a new and unknown place, and create a change at the personal-emotional level and the professional level.

At the personal and emotional level, the coherent connection enabled her to deal with the difficulties of this change on the basis of her belief in children's capabilities (belief 1). This belief in children would not have lasted without her success in leading learning processes through mindful movement (foundations 2-7 + beliefs 4-5). The use of movement enables the children to choose activities more easily, to become absorbed in learning, and to attain achievement goals. The movement learning processes would not have lasted long without a gradual progression, day in and day out, in achieving self-regulation and social competence in cooperation (foundation 3). This continuum could only go on repeating itself thanks to Tal's diligent efforts in caring and accepting responsibility, and her capability for self-control (foundations 1-2), which enabled her to overcome her personal doubts and loneliness on one hand, and on the other hand to show anxious parents their children's progress in order to win them over to her side.

At the professional level, coherency enables the teacher to cope with change on the basis of relating to the special needs of each child (belief 2) and defining them rationally (foundation 2). The information about the needs of every child is updated every day thanks to the mediation, through which the teacher is able to identify the child's development (foundation 7). The updated information makes it possible for the teacher to adjust the learning processes to the needs of the children (foundations 4-6 + beliefs 4-5), enabling them to acquire the ability for self-regulation and social competence in cooperation (foundation 3), and leading them to independent learning (beliefs 1 + 3), which for Tal is the aim of teaching. This continuum, like the personal-emotional

one, is made possible thanks to Tal's accepting responsibility and her capability for self-control (foundations 1-2), which enable her to realize her teaching goals.

Tal's professional beliefs and the practical foundations of her work are concentrated on the children and the way they progress, and are not at all related to the political aspect – the Ministry of Education's inspection system and the school to which the children are directed at the end of kindergarten. Thus, one should not be surprised that this aspect of the change was incomplete. Indeed, her success attracted many visitors to the kindergarten, including representatives of the formal education system and the schools. They became acquainted with the sense of responsibility shown by Tal, listened to the rational arguments she presented, observed how the kindergarten ran almost automatically, achieving clear and appropriate goals, and they complimented Tal. Supervisors even sent kindergarten teachers and other field personnel to observe a 'difficult kindergarten that runs smoothly with the children completely absorbed in learning.' However, Tal was not able to convince the representatives of the establishment that the success they were observing was more than just the outcome of 'a personality who knows how to get along with children,' but of coherently interconnected principles that can be suited to, and applied by, other kindergarten teachers provided that they are faithful to their professional principles and accept responsibility for the children's learning. Moreover, the supervisors of the kindergarten and the administration of the regional elementary school where the children were sent at the end of kindergarten did not adjust to the change that had occurred in the kindergarten. They continued to use the frontal teaching method requiring the children to sit for long hours and did not allow the children to continue their development – to continue to exercise their learning-related skills. In fact, the school where the Challenge Kindergarten children were sent continued to compare the achievements of these children with those of children from very different, well-off social backgrounds.

A review of Tal's professional credo and the practical foundations she chose reveals that the basis of her coherency is well-rooted in the children's needs and in the educational processes that are most likely to strengthen them and promote their learning, and is not affected by external political factors. Is it possible to work coherently on the basis of responsibility and focus on the children and still create coherency with the formal education system, which frequently is not finely-tuned to the children's needs, but is always searching for quick, economical, and technical

ways to attain the achievements society expects? The answer to this question will not be found in this article.

Conclusions and Limitations

In this article, we have made a connection between the ability to enact a significant change in learning-related skills and childrens' achievements through mindful movement. It would be interesting to examine other kindergarten teachers who were able to change the status quo and to examine the basis of their coherency, in order to establish whether coherency is really the powerful tool as is claimed in this article, and whether the practical foundations vary from teacher to teacher.

We were given the opportunity to present the change that occurred in Challenge Kindergarten before kindergarten teachers and policy makers. In these meetings, the experienced professionals in the audiences detected three possible limitations to the experiment. The first possible limitation, they said, was that the change was brought about by Tal's unique personality, an exceptional personality that other teachers simply do not possess. The second limitation of the experiment that was mentioned was that Challenge Kindergarten is a kindergarten with special problems. What Tal did there might suit that kindergarten only, and so perhaps it cannot be duplicated in another place. The third limitation was that kindergarten is a 'corridor' committed to preparing the children for school, and the way Tal chose to teach might have left some of them unprepared.

Although these observations may have some truth to them, we believe that it is possible to train teachers during their pre-service studies and through the mentoring process – following a period of adjustment at work and following their decision to deal with these issues – to create change. Every difficult kindergarten is unique and unlike any other. What kindergarten teachers should learn to do is to get to know their professional credo, to choose suitable goals for the children, to examine the coherency between their professional beliefs and their foundations, and above all to prepare themselves for the expected change. As far as the premise that kindergarten is committed to preparing children for elementary school, it has been said that when low achievements are caused by complex problems, it is not clear that focusing on academic achievements in early childhood will lead to better results in future achievements and success (Sirin, 2005).

As far as we are concerned, the greatest difficulty was the sense of isolation. Those in charge of instructional supervision were happy to learn that the external difficulties surrounding the kindergarten had disappeared, but they still gave the impression of being uninvolved and aloof. Some supervisors who had been in charge of the kindergarten during the years in which the experiment took place did not make an effort to understand in depth what had really occurred in the kindergarten. Indeed, adviser Ella supported Tal throughout those years, but one should not forget that she came from an academic background outside the formal education system, where some people treated her, too, with ambivalence – characterized not only by appreciation but also by a feeling of distance.

Meanwhile, Tal has left the kindergarten. She is now teaching the topic “The connection between movement and learning” at an academic institution of teacher education, and, on behalf of the Ministry of Education, she is responsible for experimental schools that are developing special curricula which will serve as future models for other schools. Tal is personally involved in the close supervision and guidance of these schools, with one of her goals being to help them avoid the feelings of isolation that we ourselves experienced in the past.

The kindergarten children involved in our experiment were integrated into the regular district elementary school. Their teachers have reported that quite a few of these pupils are above-average students, and some are even at the top of the class. John has been selected to the school robotics team and participates in national competitions with teams from other high schools. Part of his involvement in his school’s team is to lead and coach younger students who join the team every year. Another of these students, Loren, passed her matriculation exams *summa cum laude* and will continue her studies at university. A few months ago Bill called Tal, and excitedly told her that he had graduated high school and was about to fulfil his dream of studying aviation mechanics.

To conclude, in spite of the limits of this action research as a subjective process in which the story is about one single kindergarten teacher who researched her work, guided by an advisor who was involved in the change, the possibility exists that any kindergarten teacher who is aware of her own professional beliefs, and knows what she can give the children according to their needs, has the basis to effect a change in her kindergarten.

References

- Anning, A., & Edwards, A. (2006). *Promoting children's learning from birth to five: Developing the new early years professional*. New York, NY: McGraw-Hill International.
- Ben-Ari, R. (2002). Mindful movement: Towards enhanced intergroup relations in heterogeneous classrooms. *Curriculum and Teaching, 17*(2), 19-36.
- Bodrova, E., & Leong, D. (2007). *Tools of the mind: The Vygotskian approach to early childhood education* (2nd ed.). Columbus, OH: Merrill/ Prentice Hall.
- Bondy, E., Ross, D., Adams, A., Nowak, R., Brownell, M., Hoppey, D., . . . Stafford, L. (2007). Personal epistemologies and learning to teach. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 30*(2), 67-82.
- Bowers, C. A. (1997). *The culture of denial: Why the environmental movement needs a strategy for reforming universities and public schools*. Albany, NY: SUNY Press.
- Buchmann, M., & Floden, R. E. (1992). Coherence, the rebel angel. *Educational Researcher, 21*(9), 6-9.
- Carr, W., & Kemmis, S. (2003). *Becoming critical: education knowledge and action research*, London, UK: Routledge.
- Duffy, F. M. (2000). Reconceptualizing instructional supervision for 3rd millennium school systems. *Journal of Curriculum and Supervision, 15*(2), 123-145.
- Evers, W., Tomic, W., & Brouwers, A. (2005). Constructive thinking and burnout among secondary school teachers. *Social Psychology of Education, 8*(4), 425-439.
- Fuligni, A. S., Howes, C., Huang, Y., Hong, S. S., & Lara-Cinisomo, S. (2012). Activity settings and daily routines in preschool classrooms: Diverse experiences in early learning settings for low-income children. *Early Childhood Research Quarterly, 27*(2), 198-209.
- Fullan, M. (2014). *Teacher development and educational change*. London, UK: Routledge.
- Gersten, R., & Dimino, J. A. (2006). RTI (response to intervention): Rethinking special education for students with reading difficulties (yet again). *Reading Research Quarterly, 41*(1), 99-108.
- Giles-Corti, B., & Donovan, R. J. (2002). The relative influence of individual, social and physical environment determinants of physical activity. *Social Science & Medicine, 54*(12), 1793-1812.
- Ginsburg, H. P., & Amit, M. (2008). What is teaching mathematics to young children? A theoretical perspective and case study. *Journal of Applied Developmental Psychology, 29*(4), 274-285.
- Goldstein, L. S. (2007). Beyond the DAP versus standards dilemma: Examining the unforgiving complexity of kindergarten teaching in the United States. *Early Childhood Research Quarterly, 22*(1), 39-54.
- Goudas, M., & Magotsiou, E. (2009). The effects of a cooperative physical education program on students' social skills. *Journal of Applied Sport Psychology, 21*(3), 356-364.
- Howes, C., & Ritchie, S. (2002). *A matter of trust: Connecting teachers and learners in the early childhood classroom* (Vol. 84). New York, NY: Teachers College Press.
- Iiskala, T., Vauras, M., Lehtinen, E., & Salonen, P. (2011). Socially shared metacognition of dyads of pupils in collaborative mathematical problem-solving processes. *Learning and Instruction, 21*(3), 379-393.

- Ingram, D., Louis, K. S., & Schroeder, R. (2004). Accountability policies and teacher decision making: Barriers to the use of data to improve practice. *The Teachers College Record, 106*(6), 1258-1287.
- Lazzari, A. (2012). Reconceptualising professionalism in early childhood education: insights from a study carried out in Bologna. *Early Years, 32*(3), 252-265.
- Linn, R. L. (2003). Accountability: Responsibility and reasonable expectations. *Educational Researcher, 32*(7), 3-13.
- Logue, M. E. (2007). Early childhood learning standards: Tools for promoting social and academic success in kindergarten. *Children & Schools, 29*(1), 35-43.
- Malone, B. G., & Tietjens, C. L. (2000). Re-examination of classroom rules: The need for clarity and specified behavior. *Special Services in the Schools, 16*(1-2), 159-170.
- McClelland, M. M., & Cameron, C. E. (2012). Self-regulation in early childhood: Improving conceptual clarity and developing ecologically valid measures. *Child Development Perspectives, 6*(2), 136-142.
- McNiff, J. (2013). *Action research: Principles and practice*. London, UK: Routledge.
- Meyer, D. K., & Turner, J. C. (2002). Using instructional discourse analysis to study the scaffolding of student self-regulation. *Educational Psychologist, 37*(1), 17-25.
- Parish, C. (2013). Reflection in action. *Mental Health Practice, 16*(9), 3-3.
- Phillips, D. A., Gormley, W. T., & Lowenstein, A. E. (2009). Inside the pre-kindergarten door: Classroom climate and instructional time allocation in Tulsa's pre-K programs. *Early Childhood Research Quarterly, 24*(3), 213-228.
- Ponitz, C. C., McClelland, M. M., Matthews, J., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology, 45*(3), 605.
- Reeves, D. B. (2004). *Accountability for learning: How teachers and school leaders can take charge*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Scott-Little, C., Kagan, S. L., & Frelow, V. S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly, 21*(2), 153-173.
- Shkedi, A. (2014). *Qualitative data analysis*. Tel-Aviv, Israel: Contento de Semrik.
- Shoval, E. (2011). Using mindful movement in cooperative learning while learning about angles. *Instructional Science, 39*(4), 453-466.
- Shoval, E., Talmor, R., & Kayam, O. (2011). The concept of coherency in teaching: forging an idea from professional literature—a case analysis and a discussion with experts. *International Journal of Qualitative Studies in Education, 24*(4), 397-417.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research, 75*(3), 417-453.
- Solomon, D., Battistich, V., Watson, M., Schaps, E., & Lewis, C. (2000). A six-district study of educational change: Direct and mediated effects of the Child Development Project. *Social Psychology of Education, 4*(1), 3-51.
- Stam, M., Miedema, W., Onstenk, J., Wardekker, W., & ten Dam, G. (2014). Researching how and what teachers learn from innovating their own educational practices: the ins and outs of a high-quality design. *International Journal of Qualitative Studies in Education, 27*(2), 251-267.

- Tarim, K. (2009). The effects of cooperative learning on preschoolers' mathematics problem-solving ability. *Educational Studies in Mathematics, 72(3)*, 325-340.
- Trawick-Smith, J., & Dziurgot, T. (2011). 'Good-fit' teacher-child play interactions and the subsequent autonomous play of preschool children. *Early Childhood Research Quarterly, 26(1)*, 110-123.
- Tubin, D., & Ofek-Regev, N. (2010). Can a school change its spots? The first year of transforming to an innovative school. *Journal of Educational Change, 11(2)*, 95-109.
- Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher-student interaction: A decade of research. *Educational Psychology Review, 22(3)*, 271-296.
- Vitiello, V. E., Booren, L. M., Downer, J. T., & Williford, A. P. (2012). Variation in children's classroom engagement throughout a day in preschool: Relations to classroom and child factors. *Early Childhood Research Quarterly, 27(2)*, 210-220.
- Walker, C. L., Shore, B. M., & French, L. R. (2011). A theoretical context for examining students' preference across ability levels for learning alone or in groups. *High Ability Studies, 22(1)*, 119-141.
- Whitebread, D., Anderson, H., Coltman, P., Page, C., Pasternak, D. P., & Mehta, S. (2005). Developing independent learning in the early years. *Education 3-13, 33(1)*, 40-50.
- Whitebread, D., & Pino-Pasternak, D. (2013). Video analysis of self-regulated learning in social and naturalistic contexts. *Interpersonal Regulation of Learning and Motivation, 14-44*.
- Yan, L., Yuejuan, P., & Hongfen, S. (2005). Comparative research on young children's perceptions of play—an approach to observing the effects of kindergarten educational reform. *International Journal of Early Years Education, 13(2)*, 101-112.
- Zhang, L. F., & Sternberg, R. J. (2002). Thinking styles and teachers' characteristics. *International Journal of Psychology, 37(1)*, 3-12.
- Zimmerman, B. J., & Schunk, D. H. (2012). *Self-regulated learning and academic achievement: Theory, research, and practice*. Berlin/Heidelberg, Germany: Springer Science & Business Media.