

## *Original Paper*

# Individual Instruction as Catalyst in the Transformation of Teaching

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Received: February 4, 2018      Accepted: February 24, 2018      Online Published: March 20, 2018

doi:10.22158/ct.v1n1p1

URL: <http://dx.doi.org/10.22158/ct.v1n1p1>

### ***Abstract***

*This research examines the connection between classroom learning environment and individual instruction methods in the context of the reform known as “New Horizon”. Within this framework of individual instruction, teachers are given opportunities to experiment with various innovative teaching methods and in the process, motivate students and strengthen the personal relationship. Communication and a positive relationship between teachers and the students in the group may contribute to the improvement of the learning environment in the classroom as a whole.*

*The quantitative research was conducted within the framework of a correlative study among 60 teachers (98.3% women and 1.7% men); all of them provide individual instruction to students in first through sixth grade in three elementary schools located in Haifa and other areas in the north. The sample included home room teachers (53.3%), subject teachers (36.7%) and grade coordinators (1.7%). The age of the participating teachers ranged from twenty seven to fifty two years old. Their tenure in teaching, between two and thirty two years; they took part in the New Horizon reform program for one to eight years.*

*The teachers were asked to complete questionnaires; one measured the teaching methods of the individual instruction sessions, the second examined nurturing the best learning environment in this setting.*

### ***Keywords***

*individual instruction, facilitator, coach, exploration and discovery, PBL, collaborative learning, small group, learning environment*

## 1. Introduction

The New Horizon reform, operating in the elementary education system for the last few years, provides a responsive channel for conducting pedagogical education processes using the individual instruction hours assigned to teachers in participating schools. These individual teaching-learning hours are designed to provide additional instruction to individuals or groups of no more than five students that experience difficulties, or to other common interest groups. New Horizon reform emphasizes teaching-learning that is designed for individuals. The individual framework expands the possibilities available to teachers for the purpose of advancing each student from a cognitive perspective, intra-personal and interpersonal relationship (Videslavsky, 2010).

This individual framework provides ample opportunities for students as well as to teachers. The students get the opportunity to realize their potential, promote achievements, develop thinking skills and creativity, and strengthen their sense of belonging to the school community. The teachers get the opportunity to experiment with new and diverse ways of teaching and evaluating, motivate students to learn, and expand a personal relationship with them. Communication and positive mutual relationship between teacher and students may contribute to an improvement in classroom learning environment and to advancing the teacher's ability to work efficiently.

Each student has a distinct personality, style, culture, set of beliefs and background knowledge that are not always fully expressed in the school environment. Learning through diverse teaching-learning methods that are tailored to the student's individual needs may assist them in dealing with the difficulties and challenges ahead, develop and establish the various functioning skills school requires and accomplish these goals working in line with these students' relative abilities and skills. The more the teacher assists, demonstrates genuine interest in the student and treats her at "eye level", the more the classroom learning environment improves (Bar, 2007). An optimal classroom learning environment facilitates a positive and productive environment for learning.

### 1.1 Theoretical Background

#### 1.1.1 Individual Instruction

Individual instruction is an educational approach that recognizes the differences in people. This type of teaching is focused on the individual and assumes that each learner is unique. The teaching is a personal process that takes place in a social context and within the framework of a relationship with a significant adult among a group of equals. Individual instruction assumes that students have different needs and have a learning style that is particular to them and exists within their scope of interest (Dressler, 2010).

The individual learning framework (teacher-student) and the small group setting were intended to facilitate meaningful learning and provide a better response to the different students in the group and to each student personally. The goal is to enable in them the development of diverse aspects—the mental,

emotional, social, and kinesthetic and by that, to attain the necessary achievements for success in school. Individual teaching is fundamentally different in essence and methods than instruction in a classroom setting and requires the teacher undergo special training. It also enables the teacher to better track his students' progress and provide a relevant and effective response to their need to advance forward (CEO memo, 2012/9 (a)).

Another characteristic of individual instruction is forging a stronger bond between the teacher and her students. The result is a closer and more meaningful relationship between teacher and students and among the students in the group. Every student can fully express himself and experience acceptance, community and appreciation (CEO memo, 2012/9 (a)).

#### 1.1.2 Individual Instruction within New Horizon Reform

The New Horizon reform was first implemented into the educational system in Israel in 2007. The reform recognizes the need to adapt the educational processes, instruction and learning to the student; the importance of establishing a personal relationship; and ultimately, the creation of a supportive environment conducive to learning. The individual instruction part of the New Horizon reform is implemented through the individual instruction hours which are at the very core of the reform. The main goal of the individual instruction hours is to facilitate and promote the progress and academic achievement of all students. Through the individual instruction hours it becomes possible to provide education, instruction and learning that are focused on the individual, thereby allowing for better realization of the educational goals.

Every teacher is required to provide instruction hours to individual students and/or to a group of 2-5 students in addition to their scheduled classroom instructional hours. The approach is that "every student can" and the educational system is responsible and accountable in acting to promote the success of each student (CEO 2012/ 9 (a)).

The individual instructional hours given to students focus on reducing the academic gaps in core subjects; it takes place at the end of the school day or at the same time frontal learning hours are in session. The distribution of the individual instruction hours depends on resources available to the school. It is also conducted in a way that provides a proper response to the various needs of a diverse population of students who were identified through a mapping process performed by their teachers. The social and learning structure of the individual groups varies to make the collaborative learning experience available to all students.

The material covered during the individual instructional hour has already been discussed in the classroom and is taught by the same teachers who teach group members in their home room as well as subject classes. In most cases, teachers that participate, teach the subjects they specialize in (National Council on Measuring and Evaluating Education, 2012; CEO 2012/9(a)).

### 1.1.3 Teacher Intervention with the Small Learning Group

The teacher is allowed to choose the type of intervention with the small group, but he has to be able to navigate different styles of engagements and tailor them to any given situation at any time it is deemed necessary. The types of intervention available to a small group are: the teacher as a mediator, facilitator, coach or sometimes a group member. The mediator style acts as a type of mentor, the cooperative action of a novice and a master in the area of the student's close development (Vigodetzki, 2004). The mediated learning takes place when a firm, knowledgeable, and experienced person stands between the learner and the world and engages the student with that world, making it more understandable, giving it proper meaning and thereby promoting the development of flexible thinking and structural change (Foyrshtein, 1994). The mediation process is vital to advancing the learning process in a small heterogeneous group of students. The teacher as mediator is an active partner in the learning process, supports, organizes the learning environment and enriches it in a way that builds up the students' development; all while managing a differential curriculum.

The teacher as a facilitator carries the overall responsibility for the group and its work process. She has to create the necessary conditions for productivity, growth and development. It is important that the facilitator has presence, confidence, courage, self-awareness, honesty, authenticity, creativity and trust in the group process. She has to plan the group structure in advance, create a positive environment, assist the participants in working on subjects that are significant to them, sum up things, provide a sounding board and assist passive, quiet participants in the group to fully express themselves. The facilitator is also required to have other proficiencies, such as the ability to actively listen, clarify, reflect, sum up and interpret, validate and support the participants in order to effectively promote the process (Shechtman, 2006).

The teacher as coach motivates and leads the students to explore their goals and the results they are looking to attain for themselves. The teacher uses coaching tools to develop each student's accountability for his own learning and that of the group and to create an empowering teacher-student dialogue. The coaching is a structured, professional process, methodical, result focused and whole. The perceptual starting point assumes that the sum total of the academic and personal data of the individual or the group (skills, proficiencies, etc.) is the best foundation for their future success (Videslavsky, 2010).

The teacher as a participant in the group deals with learning through dialogue, where both the student and the teacher teach and learn.

On the one hand the teacher has to thoroughly be familiar with the subject and on the other, he must be able to shed the "profession's uniform" and learn from his students. During the learning process, an equal dialogue between students and teachers takes place, one that emerges from and is relevant to the students' lives and is based on mutual respect. Through this dialogue, the teacher gets to personally

know the students and the things that are meaningful to them and comes to rely on their cultural world in teaching. The teacher and students learn through this conversation and jointly take part in decisions about the learning and the material chosen for study (Gur, 2007). In dialogue learning within the individual instruction group the learning partners build personal knowledge and create knowledge that is meaningful to each member of the group through sharing and mutual respect (Videslavsky, 2010).

#### 1.1.4 Emotional Resolution through the Individual Instructional Hour

The New Horizon individual instructional hours create an opportunity to promote the personal connection so essential to and at the base of meaningful learning. Organizing the students in the small group facilitates an intimate encounter of the students with each other and with the teacher. The individual instruction takes place in a warm social and educational environment, one that supports and challenges, provides the students with self-confidence, one on one interaction, affection and acceptance. These hours focus the teacher's attention on the individual student, creating a personal relationship with them. The group allows for "eye contact" among the participants, the opportunity to listen to each student and respond to them individually.

In addition to academic aspects, it becomes possible for the teacher to track the student's emotional and intrapersonal functioning. As a result, the students experience a sense of belonging, appreciation, acceptance and competency. (Videslavsky M., 2010; CEO 2012/9 (a)).

The personal instruction leads to a wider perspective of the teacher's role. There is a personal dialogue in the group, between the teacher and the students, emphasizing active listening and paying attention to students' perceptions and feelings. The importance of the personal dialogue is in demonstrating empathy towards the students' problems and naturally leads to identifying difficulties and solutions appropriate to the student's individual needs.

Strengthening teachers' familiarity with their students was also designed to customize for them the teaching-learning process in a way that allows them to develop various aspects such as: mental (cognitive), emotional (effective), social-values, kinesthetic (motor); all towards reaching the anticipated goals. As a result of this, the students in the group have a positive view of themselves and higher self-esteem than students in regular classrooms (Videslavsky, 2010).

#### 1.2 Learning Based on the Constructive Approach

Within the frame work of the constructive perception, teaching-learning processes are based on the assumption that students are not "a blank board we must fill" with knowledge. These, as well as evaluation processes, must be planned while recognizing the thinking structures, personal knowledge, and pervious perceptions of the students as factors that influence the learning process. The learning process happens when previous knowledge is incorporated into new information and the introduction of a new perception.

The better the student's cognitive structure, the more new and complex information will become available to her existing cognitive structures (Brooks & Brooks, 1997).

In the constructive approach to learning, great importance is placed on social interaction. The learning evokes internal processes that only act if there is interaction between the students and their surroundings. Effective interaction takes place as a result of students confronting the point of views other students have as well as adults whose academic level is higher than their own (Vygotsky, 1978).

The constructive approach includes a profound learning strategy of creating connections, generalizing, deciphering, comparing and contrasting the existing knowledge with the newly acquired information and learning that is based on solving problems while using active knowledge (Hativa, 2003). As a result, the learning becomes a meaningful learning; the type that includes comprehension and acquired knowledge applicable by the students in many different contexts.

### *1.3 Learning through Exploration and Discovery*

Learning through exploration and discovery is intended to encourage the discovery of patterns, connections, rules and meaning of the things that surround us. The research process is usually done in a cooperative, shared study setting in the specialized subject.

The student is given maximum autonomy to understand the subject of study. She has to research in order to discover the principals of the study material through research that includes: identifying a phenomenon or a problem; making assumptions; identifying logical conclusions that arise from these assumptions; collecting information, analyzing and interpreting then evaluating and examining based on the initial assumptions, and finally, drawing conclusions (Gil, 2009; Videslavsky, 2010).

Learning-teaching through research allows for many forms of learning experience and activities that involve objects and materials, the performance of presentations and experiments, conducting observations and short field trips (Videslavsky, 2010). In this way, the student develops intellectual independence and proficiency, critical thinking, approaches and tactics to solve problems outside the framework of conventional learning (Gil, 2009).

### *1.4 Project Based Learning*

Project based learning is a structured learning method whereby groups of students are selected to work together towards the accomplishment of a common goal. The participants are involved in learning essential information and life skills through a structured investigation. The students ask questions, make assumptions, plan, collect and analyze information, and exchange their opinions. The project is three to four weeks long with specific assignments scheduled in a well-defined timeline. The process is organized around complex, authentic queries, deliverables and assignments are meticulously planned out in advance (Videslavsky, 2010).

Project based learning has many advantages such as: an invitation to learn about the real world, development of independent study proficiency (planning the study, assignments, tools and execution),

space to express different styles of learning, encouragement of personal engagement, the opportunity for multi directional and cross subject learning while using various sources, cooperative learning to complete assignments, an opportunity to express values, opinions and ideas of the students with equally varied learning outcomes (Reeves, Herington, & Oliver, 2002)

Projects expand the learning experience beyond the classroom by conceptualizing a research driven idea appropriate to scientists, community and families. In addition, they encourage cooperative learning and interaction among the students in a small group setting. This type of learning encourages collaboration with members of the community and even scientists to gather the necessary information to answer their questions and discuss their findings. Professional literature indicates that project based learning facilitates meaningful learning that breeds an independent, self-directed learner, I would go as far as saying: the ability to work in a team, reflective and critical thinking abilities (Tal & Miedijensky, 2005).

The evaluation of the project is personal and relates to the quality of the outcome, the depth of the content, the demonstrated comprehension of the subject and the project's contribution to learning. The evaluation is incorporated and becomes an integral part of the learning process as a whole and part of structuring the project or the outcome in particular (Tal & Miedijensky, 2005).

### *1.5 Learning in the ICT Environment*

The small group instruction expands the learning environment to create a learning center equipped with a variety of technological tools. This way, the students expand the learning sources available to them for information.

The personal computer is a central learning tool and one example of the many options available in a digital environment.

The collaborative learning, using a personal computer, develops and expands skills such as: design, productive brainstorming, real time response, and verification of assumptions through the use of various data base sources. In addition, collaborative learning through a personal computer improves social skills, deepens the bond between the students, and develops positive team work skills that include empathy and mutual respect.

Online learning in a small group allows the teacher to observe students' academic strengths and weaknesses then adjust the instruction accordingly. In addition, this type of environment makes it possible for the teacher to bring up for discussion meaningful and authentic subjects such as computer work ethics (Videslavsky, 2010).

### *1.6 Collaborative Learning*

Collaborative learning takes place in a small heterogeneous group of students and is based on the premise that students collaborate in the act of learning and become ultimately responsible for their own learning as well as that of the group.

Within the construct of collaborative learning, students engage in cooperative work in a way that allows each student to take part in the group's assignment and contribute without direct and immediate intervention of the teacher. The group is considered successful once all its members achieved their well-defined learning goals. The learning assignment determines the level of collaboration and the dynamic created in the group where cooperation and mutual assistance is highly emphasized.

The learning activities in the collaborative instruction-learning model develop and encourage fundamentals such as: sharing work and personal responsibility, facilitating mutual dependency by connecting with and following through an entire assignment; the will to advance each member of the group while accommodating and evaluating each individual's ability to contribute to the group. All these dynamic processes take place in an atmosphere of support, acceptance, assistance and encouragement (Gil, 2009).

Teachers must plan positive social interaction opportunities to allow for meaningful interactive learning and to help students acquire good communication skills they can use to improve their discussion and dialogue skills. In addition, they must prepare learning activities that allow for a flexible learning pace to fit the variety of skills and abilities of the learners. To facilitate effective activity by the students, the arrangement of the class has to fit the needs of the various assignments (Dressler, 2010).

The adjustment of instruction to the individual groups allows the students to best advance towards their academic goals.

### *1.7 Learning Environment*

Learning environment is a concept that describes the unique environment created in the classroom as a result of the way learning takes place, students creating a social structure; students' relationship to themselves, the teacher and school (Bar-Lev, 2007).

There are three parameters to evaluate a learning environment. The first is relationship and it includes involvement, a sense of belonging, sensitivity and support from a teacher who takes into consideration each student's unique point of view. The second is personal development and includes intellectual learning development, meta cognitive skills, awareness and understanding of thought processes. The cognitive and linguistic development of the child depends on opportunities that adults provide to allow her to express existing, more complex skills. The third parameter, system maintenance, is the organizational part and includes things such as bylaws, rules, organization, and time and attention management. Teachers that use efficient organizational strategies that include well organized administrative structures and routines come up against a lot less discipline issues and experience much higher levels of learning engagement (Trickett & Moss, 1995; Pianta, 2007).

The best learning environment includes several components: Openness of behavior and thought that allows both students and teacher to bring up different subjects for discussion and express independent points of view however unpopular. Another important component in a learning environment is



teacher's support of the students, at both, the social-emotional and the cognitive level. Support is provided through encouragement, acceptance, engagement, assistance and collaboration. Supportive environment nurtures a sense of belonging, unification and affinity among the group members.

Another component is equal treatment by the teacher, avoiding favoritism or personal preferences. This equal status includes students in the process of daily classroom management thereby empowering them to have a say in what happens in their learning environment.

The amount of contribution the students make in planning class activity and the teacher's encouragement to develop new ideas and tasks, both come together to create an optimal learning environment. Keeping a routine and a set class administrative procedures is another component that allows for organization, order in class, a sense of personal justice and confidence for all the students in the class (Tzedkiyahoo, 1988).

### *1.8 The Link between Learning Environment and Individual Instruction*

When the New Horizon reform was formed by the teachers' union along with the ministry of education and treasury, some goals were set in place. A few of these goals refer to the class environment during the individual instruction hour.

According to the general manager's memo 2011, (9/a) it is necessary to conduct a "positive dialogue with each student in order to provide each of them the proper space and consistent emotional support". The teacher's function is to create "the best educational-learning environment in a small group setting which provides each student with a sense of belonging, acceptance and empowerment".

The individual instruction hours lend themselves to activating a learning process that is focused on the individual with the understanding that this type of instruction allows for a better fulfillment of general educational goals and the students' academic achievements.

But beyond academic achievements, the results expected from these instructional hours are supposed to culminate in an intimate and productive dialogue between the students and the teacher and with themselves.

## **2. Method**

### *2.1 Research Assumption*

There is a correlation between teaching methods and classroom environment. This is a two part assumption: a. traditional teaching methods will be negatively correlated to learning environment. That is to say, the more the teacher uses traditional teaching methods in the individual instruction hour; the less productive the learning environment becomes. b. Using various teaching methods will be positively correlated to learning environment. In other words, the more the teacher varies teaching methods during the individual instructional hour, the better the learning environment.

### 2.1.1 Research Population

The research field spun three elementary schools in Haifa and in the northern region of the country. The schools that participated in the sample population joined and have been a part of the New Horizon reform for eight years prior to the research.

The curriculum of these schools was altered because of the reform, and adjusted lesson plans were created for the small groups participating in the individual instruction hours. The school population is heterogeneous and includes students from all socio-economic levels.

The sample population includes 60 teachers that teach the individual instruction hours within the construct of New Horizon reform. Each teacher works in a system that incorporates five individual instruction hours for groups of up to five students and in addition to frontal teaching time.

### 2.1.2 Research Tools

The research tool is a structured questionnaire that contains three parts. The first part included a questionnaire designed to collect background data about the participants. The second part presented a teaching questionnaire for the individual instruction hour and the third part a questionnaire on developing the best educational environment in the small group. An explanation sheet on how the research will be conducted and a confidentiality clause was attached to each questionnaire.

#### 1) Personal Data Questionnaire

Personal data of the participating teachers was collected: age, sex, level of education, tenure, position, years teaching within New Horizon reform and the level of the students participating in the individual instruction hour.

#### 2) Questionnaire on Teaching during the Individual Instruction Hour

A part of this questionnaire was extracted from another on the subject of Math during individual instruction hour then used here for our purpose. The questionnaire was created by Esti Pinsker as part of her final thesis: Teaching Math during Individual Instruction Hours within the New Horizon reform (Pinsker, 2012). The original questionnaire had 29 responses the teachers had to place on Likart scale between one–not at all to five–very much so.

Twenty five responses relating to teaching during individual instruction hour were taken from the original questionnaire.

#### 3) Questionnaire on the Best Learning Environment in the Individual Group

A questionnaire was designed to look into teachers' behavior but not her output as it is being reflected by the relationship of the students with themselves and with the teacher. The questionnaire identified three specific factors: positive environment, encouraging involvement and engagement and personal attention to each student.

Personal data of the participating teachers was collected: age, sex, level of education, tenure, position, years teaching within New Horizon reform and the level of the students participating in the individual instruction hour.

### 2.1.3 Analysis of Research Results

The data extracted from the research was processed using SPSS. The following analysis was performed using this program: theoretical statistics for the main research parameters designed to examine the characteristics of the information provided by the current population sample; quality control of the different scales. Then the marginal matrix adjustment was calculated for the research variants in order to examine patterns of general correlation.

The data output from the research questionnaires were processed using SPSS program. The data analysis led to insights which culminated with the conclusions drawn by this research.

## 3. Results

### 1) Advance Analysis

We checked for correlation between demographic variables such as age, tenure in teaching, tenure in the “New Horizon” program and level of education, and the indices of the variables: teaching methods and classroom environment but no significant correlation was found between the background variables and the research variables. Therefore, the statistical analyses will be performed with no oversight of background variables as intermediate or intervening. Later, the inter-correlation between the different indices of each variable was tested using a series of Pearson tests as they appear in Tables 1 and 2.

**Table 1. Correlations between Indices for Methods of Teaching (N = 60)**

	Traditional Instruction	Various Methods	Teaching Personal Instruction	Peer Assisted Instruction
Traditional Method	-	.10	.20	.28*
Various Teaching Methods	-	-	.78***	.62***
Personal Instruction			.73***	.38**

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .00$

From this table we conclude that the majority of teaching method indices are significantly and positively correlated and therefore represent a common body of content. However, the traditional teaching indices and varied and personal instruction were not significantly correlated.

**Table 2. Correlation between Class Environment Indices (N = 60).**

	Positive Environment	Encouraging Involvement	Personal Approach
Positive environment	-	.47***	.34**
Encouraging Involvement		-	.56***

\*\*p<.01    \*\*\*p<.001

In this Table we find that the indices class environment are significantly correlated to each other and therefore represent a common body of content.

#### Verifying the Research Assumption

To verify the research assumption that deals with the correlation between teaching methods and class environment, we conducted a pearson correlation test between the indices teaching methods and the indices class environment. The findings of the test are represented in Table 3.

**Table 3. Correlations between Teaching Methods and Class Environment (N = 60)**

Methods of Instruction Class Environment	Traditional	Varied/Integrative	Personal	Peer Assisted
Positive Environment	.06	.34**	.18	.17
Encouraging Involvement	.26*	.37**	.28*	.41**
Personal Approach	.28*	.50***	.50***	.39**

\*p<.05    \*\*p<.01    \*\*\*p<.001

From this Table we find that in contradiction to the research assumption, a significant positive correlation exists between traditional teaching methods and encouraging involvement ( $r=.26, p<.05$ ) and with personal approach ( $r=.28, p<.05$ ). However, no correlation was found between traditional teaching methods and positive environment. In line with these findings, the first part of the research assumption was rejected.

As to the second part of the research assumption, significant positive correlation was found between varied/integrative teaching method and a positive environment ( $r=.34, p<.05$ ), encouraging involvement ( $r=.37, p<.01$ ) and personal approach ( $r=.50, p<.001$ ). In a similar way, significant positive correlation were found between personal instruction and encouraging involvement ( $r=.28, p<.05$ ) and personal approach ( $r=.50, p<.001$ ).

Finally, significant positive correlations were found between peer assisted teaching and encouraging involvement ( $r=.41, p<.01$ ) and personal approach ( $r=.39, p<.01$ ). It is worth noting that no correlation was found between personal instruction and peer assisted teaching and personal approach, therefore, the second part of the research assumption was almost completely verified.

To check indices of teaching methods as predictors of classroom environment, a series of multiple regression analysis tests were done using the stepwise method. During the first phase, the background variables: age, level of education, tenure in teaching and the “New Horizon” program were entered into the regression analysis model using the ENTER method in the control variables.

During the second phase, all teaching methods indices were entered as independent variables (using STEPWISE method) and classroom environment indices were entered as dependent variables (each separately). The findings are presented in Tables 4–6 and detailed below:

It is important to note that the tables represent the indices that predict only in a significant way.

**Table 4. Multiple Regression Analysis for Indices of Teaching Methods as Predictors of Positive Environment**

Positive Environment			
	Beta	F	R <sup>2</sup> Change
Background Variables (Enter)			
Age, level of education, tenure	.54	2.99*	.18
Teaching Methods Indices (stepwise)			
Varied/Integrative Teaching	.28	5.55*	.08

\*p <.05

The findings indicate that varied-integrative instruction significantly predicts the index of positive environment [ $F(5, 59) = 5/55$ ,  $p < .05$ ] and explain 8% of the variance in the index of positive classroom environment.

**Table 5. Multiple Regression Analysis for Teaching Methods Indices as Predictors to Encouragement of Involvement**

Encouraging Involvement			
	Beta	F	R <sup>2</sup> Change
Background Variables (Enter)			
Age, level of education, tenure	.18	.22	.02
Teaching Methods Indices (stepwise)			
Peer Assisted Teaching	.41	10.13***	.16

\*\*\*p<.001

The findings indicate that peer assisted teaching significantly predicts the index encouragement of involvement = [ $F(5,59)=10.13$ ,  $p < .001$ ] and explains 16% of the variance in the index encouragement of involvement in class.

**Table 6. Multiple Regression Analysis for Teaching Methods Indices as Predictors of Personal Approach**

Personal Approach			
	Beta	F	R <sup>2</sup> Change
Background Variables (Enter)			
Age, level of education, tenure	.04	.50	.01

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Teaching Methods Indices (stepwise)			
Personal Instruction	.46	18.85***	.25
Traditional Teaching	.24	4.05*	.05

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\* $p < .05$  \*\*\* $p < .00$

The findings indicate that personal instruction and traditional instructions significantly predict the personal approach index [ $F(6,59)=4/46$ ,  $p<.05$ ] and explain the 31% variance in the personal approach index.

#### 4. Discussion

The purpose of this research was to examine the correlation between classroom environment and teaching methods during an individual instruction hours. The individual instruction hours that are being taught as part of the New Horizon program expand the possibilities available to teachers to advance each student's cognitive, intra and inter personal aspects (Videslavsky, 2010). Teachers get the opportunity to experiment with alternative teaching and evaluation methods and motivate their students to learn while forging a personal bond with each. Adjusting the instruction-learning methods to students' needs and building team work around learning contribute to creating a positive, respectful, caring context and improves the classroom environment. (Gil, 2009)

This research presented a central assumption that was divided into two parts. The central assumption is that a correlation between teaching methods and classroom environment exists. The parts of this assumption are: 1) traditional teaching methods will have a negative correlation to classroom environment. In other words, the more a teacher uses traditional teaching methods during the individual instruction hour, the less productive the learning environment becomes; 2) Using various teaching methods will prove to have a positive correlation to classroom environment. Meaning, the more the teacher varies the teaching methods in the individual instruction hour, the better the classroom environment.

The research was conducted using quantitative-correlated approach. The emphasis in the quantitative research is on the measurable aspect because this research mostly relies on numerical data collection. The quantitative research focuses on examining existing assumptions or theories (Freidman, 2007). The research tool is a closed questionnaire containing three parts and designed to look at teaching methods during the individual instruction hour and to developing the best educational environment for the individual group.

The first part of the assumption, claiming that traditional teaching methods will be negatively correlated to classroom environment was refuted. The second part of the research that claims that using various methods of teaching will be positively correlated to classroom environment was almost fully supported.

a. Assumption (a) which assumes that traditional teaching methods will be negatively correlated to classroom environment was refuted because a strong positive correlation was found between traditional teaching methods and the encouragement of class involvement through a personal relationship with the teacher. A personal attitude towards the students and encouraging involvement are the building blocks of classroom environment. Research from literature indicates there is a large gap between the learning environments in the classroom as opposed to the individual instruction hour learning groups. Teaching and learning within the classroom has become very difficult, the number of students is high and there's a risk that some of the students are not going to be noticed or learn the study material (Moshel-Ravid, 1995).

In addition, the time the teacher can provide each individual student in the home room class is very limited. The emotional dialogue in class is a lot less intimate and usually deals with educational subjects and solving class problems. The individual instruction may mitigate these difficulties. The personal attention the teacher provides during this time is evident whether the teacher uses traditional methods of teaching or varied ones. The small number of students allows the teacher to respond to the various needs of the students while taking into consideration their individual strengths and weaknesses in different subject (Videslavsky, 2010).

The focus of this research was to negate the traditional teaching methods in relation to classroom environment.

In spite of it, it is evident that learning in a small group can become a positive extension to the educational-learning activity in the classroom through the practice or expansion of what was taught there (Videslavsky, 2010). When the teacher checks the homework or gives the students in the group a workbook assignment for example, she is able to track each student separately, provide quality response and therefore advance the student through personal contact that provides support. The teacher's ability to converse at eye level with each student in the individual group, gives the student a sense of confidence, trust and respect. Indeed, data extracted from the National Stirring Committee for Indexing and Evaluation (Abbrv, 2012), it turns out that teachers speak of the contribution individual instruction hours make to strengthening the bond with their students and allowing them an opportunity to get familiar with the student's emotional sphere.

The findings of this research shed light on the positive correlation between traditional teaching methods to encourage involvement. For students to demonstrate engagement and active participation in the learning process, they must feel safe and appreciated. The individual instruction hour naturally supports



itself to the engagement and active participation of each member of the group (Slavin, 1995). The environment in the individual group allows students to experience a sense of belonging, appreciation and acceptance (Videslavsky, 2010). That is why within this individual framework even mediocre and weak students that do not usually participate in class discussion allow themselves to get involved.

Another interesting finding of this research that did not receive statistical significance is the correlation between traditional teaching methods and a positive environment. Professional literature suggests that the style of teaching affects the quality of the interaction in class and the emotional environment in it (Mahlab, 2003).

Traditional frontal instruction is less effective in encouraging the social skills so crucial to students' behavior in class and therefore to the resulting learning environment in it. The traditional teaching method is characterized by a competitive class structure focused on personal success and failure. The students are evaluated based on their achievements as compared to others so the reward of one student may be inversed to the reward of her peers. Too much competition creates tension and can negatively impact the classroom environment (Tzedkiyadoo, 1988).

One of the components of a positive classroom environment is openness of mind, and in behavior. It allows students to bring up subjects for discussion and express independent opinions however unpopular (Tzedkiyadoo, 1988). Frontal instruction does not allow the student to express his opinions and ideas because the assignments call for the use of one skill only and tend to encourage obedience and uniformity. As a result the student is more passive during frontal teaching lesson (Mahleb, 2003; Aliasi & Ben-Ari, 2008). Professional literature reinforces the lack of connection between traditional teaching methods and a positive environment.

b. The challenge in the current research was to examine the connection between using various teaching methods and classroom environment. The assumption formed assumed that various teaching methods will be found positively correlated to classroom environment. This assumption was almost completely supported, moreover, additional significant positive correlation was observed between varied-integrative instruction and a positive classroom environment, involvement and personal interaction.

#### The Link between Varied Methods of Teaching and Positive Environment

The findings indicate that varied, integrative instruction can significantly predict the measure of positive environment. Research literature indicates that group learning has as its goal the development of academic, social and emotional functioning. In order to fully utilize the advantages provided by the construct of individual instruction hours, it is vital to foster unity among the students as a "Studying Social Group" that contributes to developing relationship skills, functioning at high academic levels and optimal environment (Gil, 2009).

This becomes possible through varied and collaborative teaching methods that emphasize positive relationships among the students. (Ben-Ari and Eliasi, 2008). Learning through social interaction is based on the constructive theory of the renowned psychologist Vigotsky (Vigotsky, 1978). According to Vigotsky, learning evokes internal processes that are activated only when there is an interaction between the students and their environment.

The constructive methods include a wide variety of teaching methods like research approach, alternative evaluation, project based and collaborative learning (Dressler, 2010). These various teaching methods set a goal or collaborative goals for the group of students in the subject to learn, know or apply. In order to reach these goals, a mutual dependency is established and it leads to mutual activity among the participating students (Videslavsky, 2010).

Group members establish a collaborative action construct and practice social skills such as: listening, speaking in turn, equal participation, tolerance, mutual respect and assistance, self acceptance and that of others, personal involvement and collective responsibility. The students learn because it is not possible to accomplish academic achievements without creating a socially supportive and organized environment (Mahlab, 2003).

As a result, students exchange opinions, feel free to inquire, explain things to each other, work through difficulties, help each other and thoroughly understand ideas and express their feelings about the learning process (Slavin, 1995; Mahlab, 2003). All this explains the positive correlation between varied teaching methods and a positive classroom environment.

#### The Correlation between Peer Assisted Instruction and Encouraging Engagement Aspect

Another unique finding of this research is a significant positive correlation between Peer Assisted Instruction and the encouragement of involvement. This unique finding may contribute to the cumulative body of knowledge on the subject of individual instruction and classroom environment.

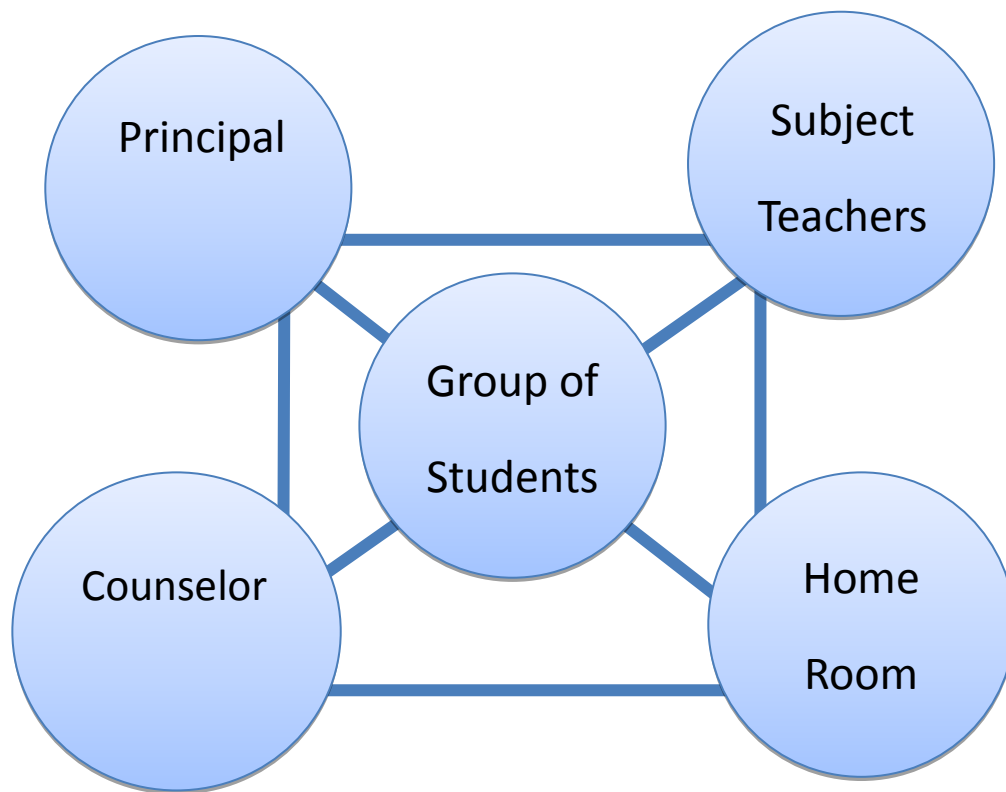
Peer assisted instruction refers to the professional cooperation among the school's educational team teaching the same students in the individual instruction group. Engagement or involvement refers to a student who is active in the learning process and experiences a sense of belonging to the class and the school.

Data from the National Council on Measuring and Evaluation (Rama, 2012) indicates that one of the significant results of "New Horizon" is the establishment and reutilization of work teams on the subject of individual hours. It happens in the construct of a professional conversation, a discussion on methods and tools of learning, handling challenges and routine problems in the area of interest, applying school policy on operating individual hours and strengthening mutual contribution in the teachers' lounge. It was found that schools organized flexible work teams that include coordinators, counselors, subject or age group teachers or a combination thereof. The frequent staff meetings are being held in between classes and include productive and enjoyable brain storming in a mutually supportive environment.

Teachers report that this type of work advances their personal professional work, assists in the overall learning environment in school and creates a friendly and pleasant environment.

It is apparent from this data that these staff meetings on the subject of individual instruction hours actively engage teachers in the daily process of teaching and supports their efforts to create a successful learning environment, for the students and themselves.

In addition, professional literature reveals that when teachers enter the process of collaborative research about students' work and their learning, they develop the skills necessary to positively adjust their instruction to match the needs of the students and they deal with the challenges unique to their school environment (Militello, Rallis, & Goldring, 2009).



**Figure 1. Synchronization between School Teams on the Subject of Individual Instruction Hours**

It is clear from the chart that when the educational team works together synchronously, it is possible to handle the subject of individual instruction hours in the context of the school curriculum and ensure educational continuity. Team members are active partners in the pedagogical work and are supported by each other in dealing with all the aspects of their work. As result, sharing information about the students becomes possible and conducive to collaborative decision making in regards to complex problems that arise from time to time. Center to the process is the students' best interest, their needs

and success. This way, it is possible to develop an educational environment that is based on caring, concern for others, improving the learning process and students' engagement.

#### The Correlation between Individual and Traditional Instruction and Personal Approach

The research findings point out that individual instruction and traditional instruction, both accurately predict the aspect of personal approach. This finding is new as far as the first part of the research assumption is concerned; the part that states that traditional instruction methods will be negatively correlated to classroom environment because a personal approach is a component of classroom environment; therefore this part of the assumption was refuted. In addition, this finding supports the second part of the assumption regarding varied instruction methods (including individual instruction) being positively correlated to classroom environment (including personal approach).

According to data from the National Council on Measuring and Evaluation (RAMA, 2012), Individual education allows a more central space for students' will and choice and bases the definition of individual educational and personal goals on dialogue and mutual choice. In other words, individual instruction provides a differential response to each of the students. This means that each member of the individual group can set up goals and build, in cooperation with the teacher, an individual study plan, adjusted and tailored to their own study pace and designed to advance that student based on her relative set of skills. (Azulai, 2010; RAMA, 2012).

Traditional teaching methods, when used individually, also allow the teacher to respond to the various needs of a student and provide a personal approach. In the individual group it is possible to learn any subject or content that was originally learned in a full classroom and practice any teaching-learning activity available in the regular classroom, such as: discussion, lecture, explanation, practice. As compared with a regular classroom, where the teacher is not able to dedicate personal attention to each of the students, organizing the students in a small group during individual instruction hours creates an intimate educational encounter between students and teacher. The interaction in the small group is a lot more direct than in a conventional classroom setting and therefore becomes naturally conducive to a close personal relationship because of the small number of students participating. As a result, the teacher is able to maintain eye contact with each student, listen to her and respond accordingly (Videslavsky, 2010).

In conclusion, the current research examined the correlation between classroom environment and the instruction methods during the individual instruction hour. The results indicated a positive correlation between varied integrative teaching and a positive classroom environment and between personal instruction and traditional method of teaching to personal approach. The new aspect revealed with this research is the significant correlation between peer assisted instruction and the encouragement of student participation. This finding lays the ground work to a more detailed examination of professional

teaching constructs by educational teams at schools and their impact on student engagement during individual instruction hours.

## References

- Allhusen, V., Belsky, J., Booth-LaForce, C. L., Bradley, R., Brownwell, C. A., Burchinal, M., & Weinraub, M. (2004). Does class size in first grade relate to children's academic and social performance or observed classroom processes? *Developmental Psychology*, 40(5), 651-664. <https://doi.org/10.1037/0012-1649.40.5.651>
- Azolay, S., & Wordy, A. (2010). Answer to question: What is individual instruction? *Eureka*, 29, 5-24. (Hebrew)
- Bar-Lev, E. (2007). *School Climate: Reality and vision*. Beer-Sheva: Kaye Academic College of Education. (Hebrew)
- Ben-Ari, R., & Eliasi, L. (2008). Frontal Teaching and Complex Teaching Strategies: The differential impact of teaching environment on student achievement motivation. *Megamot*, 45(3), 531-554. (Hebrew).
- Brikner, R., & Ron T. (1999). Adjusted Instruction: Development and reform from an experiential project to establishment and deeper practice: 1973-1999. (R. Globman, & Y. Iram (Eds.)). *The Development of Instruction in Israel's Educational Institutions*. Tel-Aviv: Ramot. (Hebrew)
- Brooks, Z., & Brooks M. (1997). *In Search of Understanding: The case for constructivist classrooms*. Jerusalem: The Branco Weiss Institute for the Development of Thinking. (Hebrew)
- Dressler, M. (2010). Individual Instruction as Opportunity to Learning Differences's Respond. *Eureka*, 29, 33-47. (Hebrew)
- Feuerstein, R. (1993). Mediated Learning. *Hed Hagan*, 38, 135-139. (Hebrew)
- Friedman, Y. (2006). Quantitative Research, Qualitative Research and Combined Methods: When and how? *Hagigey Givah*, 13, 153-164. (Hebrew)
- Gil, H. (2009). *Stages in the Development of a Social Learning Group*. Retrieved from <http://piskak8.com/resources.asp>
- Gur, H. (2007). Dialogue in Teaching. *Hed Hachinuch*, 82(1), 93-95. (Hebrew)
- Hativa, N. (2003). *Teaching Processes in the Classroom*. Tel-Aviv: The Academic Publication, for the Development of Educational Staff. (Hebrew)
- Hertz-Lazarowitz, R., & Fuchs, I. (1987). *Collaborative Learning in the Classroom*. Haifa: Ach. (Hebrew)
- Howes, C., & Ritchie, S. (2002). *A Matter of Trust: Connecting teachers and learners in the early childhood classroom*. New York: Teachers College Press.

- Mahlab, H. (2003). Choosing Instruction Method in the Heterogeneous Classroom. *Aspects in Teaching Computer Science*, Jan., 30-42. (Hebrew)
- Militello, M., Rallis, S., & Goldring, E. (2009). *Leading with Inquiry and Action: How principals improve teaching and learning*. Thousand Oaks, Calif.: Corwin.
- Ministry of Education & Culture. (n. d.). *Prpcedures of Administration of "New Horizon" Reform within Kindergarten, Elementary & Secondary Schools*. Retrieved from <http://cms.education.gov.il/EducationCMS/Applications/Mankal/EtsMedorim/3/3-1/HoraotKeva/K-2014-6-1-3-1-46.htm>
- Moshel-Ravid, O. (Ed.). (1995). *Learning, Teaching, Education & Classroom Size: Review of the professional literature*. Jerusalem: Szold Institute. (Hebrew)
- Pianta, R. C. (1999). *Enhancing Relationships between Children and Teachers*. Washington, D. C.: American Psychological Association. <https://doi.org/10.1037/10314-000>
- Pianta, R. C., Belsky, J., Houts, R., & Morrison, F. (2007). Opportunities to Learn in American's Elementary Classrooms. *Science*, 315, 1795-1796. <https://doi.org/10.1126/science.1139719>
- Pianta, R. C., Mashburn, A. J., Downer, J. T., Harmre, B. K., & Justice L. (2008). Effects of Web-Mediated Professional Development Resources on Teacher-Child Interactions in Pre-Kindergarten Classrooms. *Early Childhood Research Quarterly*, 23(4), 431-451. <https://doi.org/10.1016/j.ecresq.2008.02.001>
- Pinsker, E. (2012). *Teaching Mathematics during Individual Hours Format in the Framework of the New Horizon Reform*. Haifa: Gordon College Academic. (Hebrew)
- RAMA. (n. d.). *Evaluation the Reform New Horizon*. Retrieved from [http://cms.education.gov.il/EducationCMS/Units/Rama/HaarachatProjectim/Ofek\\_Hadash.htm](http://cms.education.gov.il/EducationCMS/Units/Rama/HaarachatProjectim/Ofek_Hadash.htm)
- Reeves, T. C., Herrington, J., & Oliver, R. (2002). Authentic Activity as a Model for Web-Based Learning. In *Annual Meeting of the American Educational Research Association, April*, 1-5. LA: New Orleans.
- Reichert, R. (2009). Democratic Pedagogy's Answer to the Question of Individual Instruction within New Horizon reform. *Education and Its Environment*, 31, 151-162. (Hebrew)
- Rubin, S., & Koren, D. (2007). Research Ethics: Fundamental background and practical suggestions. In Shefler, G., Achmon Y., & Weil, G. (Eds.), *Ethical Issues for Professionals in Counseling and Psychotherapy*, 603-619. Jerusalem: Magnes. (Hebrew)
- Schwartz, J. (1993). Obesity Affects Economic, Social Status. *The Washington Post*, A1-A4.
- Sharan, S., & Sharan, Y. (1976). *Small-Group Teaching*. Englewood Cliffs, N. J. : Educational Technology.
- Shechtman, Z. (2006). *Group Counseling and Psychotherapy with Children and Adolescents: Theory, research & practice*. Mahwah, N. J.: Lawrence Erlbaum Associates.

- Slavin, R. E. (1995). *Cooperative Learning: Theory, research and practice*. Boston: Allyn & Bacon.
- Snow, D. (2003). *Noteworthy Perspectives: Classroom strategies for helping at-risk students*. Denver, Co: McREL.
- Tal, R. T., & Miedijensky, S. (2005). A Model of Alternative Embedded Assessment in a Pull-Out Enrichment Program for the Gifted. *Gifted Education International*, 20, 166-186.  
<https://doi.org/10.1177/026142940502000208>
- Tomlison, C. A. (2000). Differentiation of Instruction in the Elementary Grades. *ERIC Digest*.
- Trickett, E. J., & Moss, R. H. (1995). *Classroom Environment Scale Manual*. Palo Alto, CA: Consulting Psychologist Press.
- Tzedkiyahu, S. (1988). *Classroom Environment: Theory and practice*. Jerusalem: Ministry of Education & Culture. (Hebrew)
- Videslavsky, M. (2010). Opportunities in Teaching and Learning within a Small Group. *Eureka*, 29. (Hebrew)
- Vygotsky, L. S. (1978). *Mind In Society: The development of higher psychological processes*. Cambridge: Harvard University Press.