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## **Are They Genuinely Novice Teachers?: Motivations and Self-Efficacy of Those who Choose Teaching as a Second Career**

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### **Introduction**

The purpose of this study is to investigate the reasons for choosing teaching as a second career and the self-efficacy among graduates of a retraining teaching course. The study is based on changes that have occurred in recent years that point at an ongoing increase of teacher training programs and alternative routes for academics in Israel and around the world. (Kfir, 2008; Sinclair, 2008). These programs include a variety of models; most of which the theoretical-academic requirements of teacher training have been reorganized in order to accelerate the entrance into the teaching career and the fast integration into schools. The number of people, who choose to embrace the teaching career, is constantly increasing, (Richardson & Watt, 2006). Most of the applicants are characterized by maturity and a broad perspective over civilian and military technological careers they had engaged in before choosing to retrain for teaching.

The main aims of the study are: a. To investigate, characterize and compare the motives that have directed the graduates to embrace teaching as a **second career**; b. To research the self-efficacy of the graduates to cope with the challenges of this career.

Comparison of the learners' perceptions from the various groups can illuminate the phenomenon of mature and experienced people turning to the teaching profession as second career and their feelings of self-efficacy. Moreover, the findings help broaden the point of view of the policy makers in the system of education about the justification and value of the establishment of special courses for teacher training in order to attract valuable people who regard teaching as a vocation.

### **Literature Review**

#### **The Background to the Emergence of Special Teacher Training Programs**

The issue of the shortage of teachers, mainly quality teachers (Darling-Hammond & Berry, 2006) who choose to practice teaching, is a central issue that preoccupies decision makers in many countries of the world (in the USA-Luekens, Lyler & Fox, 2004; NCES, 2005; Wilcox & Samaras, 2009; in Europe-OECD, 2005, 2011; in Australia- Richardson & Watt, 2006; in Australia and England- Peterson, 2006;). The findings about attrition rate for teachers make the problem even more serious. In England and Australia, for instance, one in every five teachers leaves the teaching profession within the first three years of his teaching (Ofsted, 2001; Johnson & Birkkeland, 2003). In Israel, the numbers are very similar (Kfir & Ariav, 2008). In the US the numbers are even higher - 30% of the teachers leave within the first three years of their career (Darling-Hammond, 2001).

On the other hand, there is a constant increase in the numbers of applicants who choose teaching as a second career (Richardson & Watt, 2006). Those applicants bring with them experience from a variety of domains from their former professional occupation (Wolpert-Gawron, 2008). Therefore, they might be able to bring a partial answer to the criticism of educational

institutions that says that schools are irrelevant and far from reality. The second career teachers are described as professionals in their decision making considerations, their life experience, wisdom, maturity and working habits, in comparison to the young teachers who have chosen teaching as a first career (Lovett, 2007; Richardson & Watt, 2006).

As a result of the changing profile of the applicants to a teacher education career, there is a growing need for planning special teacher training courses (Suell & Piotrowski, 2007) and alternative routes (Harrel & Harris, 2006) to attract potential applicants so that they are able to integrate into the system within a reasonable amount of time (Darling-Hammond & Bransford, 2005). The De-Regulation Approach to teacher training is the basis of part of these programs and it is supported by public figures and economists. These are short term programs, which enable the entrance into schools before the completion of the studies and of the school practice (practicum). The effectiveness of the programs is measured by the achievements of the students of the second career teachers (Cochran-Smith & Fries, 2001; Darling-Hammond, 2006). These programs are expected to become magnets for quality candidates who, at some stage in life, have decided to regard education as a challenging field that allows for personal and professional growth (Sinclair, 2008).

The adjustment of these programs both to the needs of the trainees and of the system of education is done in various ways:

- a. Many of the courses are intensive (Tigchelaar, Brouwer & Korthagen, 2008). The training period is short and the trainees already teach in schools during their training or have received a very short period of training before entering schools.
- b. Many of the programs are carried out predominately through distance learning apart from the component of school practice (Guernsey, 2005).
- c. In some of the programs, the prominent feature is practical with emphasis on the psychology of the learner, the chapters to be taught in class, assessment and reflection. Another prominent feature in these programs is the internship component which is accompanied by mentor teachers in school (Morton, Williams, & Brindley, 2005).

Due to the shortage of teachers and of the change in the profile of the applicants to teaching, there is a growing need to understand the motivations of the applicants to embrace teaching as a second career (NCES, 2005; Richardson & Watt, 2006; Watt & Richardson, 2007; Watt, Richardson, Klusmann Kunter, Beyer, Trautwein & Baumert, 2012).

### **Motivations for Choosing Teaching as a Second Career**

Change of career or professional retraining refers to an exchange of jobs or specialization in a certain profession that requires new learning. In the past, when the number of professions was small, and opportunities for social mobility through change of occupations were limited, it was a custom to choose one profession and stick to it for a lifetime (Lee & Lamport, 2011). However, in the current millennium, there is a trend of changing a number of professions through a lifetime (Arthur & Rousseau, 1996; Valcour & Tolbert, 2003). For Generation Xers (aged 35) and Gen-Y (aged 25), the assumption is that they will change professions during their lives several (Watt & Richardson, 2008). Among the central causes to this phenomenon, the researchers cite technological developments, globalization and economic changes on a global scale (Chope, 2001; Sullivan & Emerson, 2003). Motivations of the career switchers provide a great degree of challenge and interest among researchers (Lee & Lamport, 2011). It was found that the motivations are connected to aspirations for self realization, a desire to devote more time to the family and to contribute to the community (Chope, 2001).

As for the desire to choose teaching as a profession, one can identify three categories of considerations (Auster & Feigin, 2010; Lovett, 2007; The Pool of Potential Second-Career

Teachers, 2008): altruistic, intrinsic and extrinsic considerations. The altruistic considerations are based on the presupposition that teaching and education advance children, contribute to the betterment of society and create a sense of mission to serve society (Theriot, 2007). The intrinsic considerations are connected to a 'spiritual' benefit of obtaining pleasure, interest and a realization of creativity. The extrinsic considerations are connected to aspects of material benefit, such as working conditions, economic security, etc.

Watt & Richardson (2007; 2008) have developed an instrument to test the motivations for choosing the teaching career (Factors Influencing the Teaching choice scale – FIT choice scale). On the scale there are the following factors:

- Influences of socialization
- Motivations connected to the perception of teaching
- Motivations connected to self perception
- A variety of inner values (Watt & Richardson, 2008, p. 414)

The influences of socialization include previous learning/teaching experiences (good or bad) and role models. Motivations included in the perceptions of teaching are the expertise expected from the teacher and side benefits such as social and economical status. The self perception is the teacher's evaluation of the extent to which he can perform the job. The inner values are divided into values for personal benefit and values for the benefit of society. The first one is the occupational security and chances of social mobility. The latter values are the possibility to shape the future of children and grownups and to promote social equity.

Watt et al. (2012) used the instrument in order to perform an international comparative study between Australia, the USA, Germany and Norway- in connection with motivations to choose teaching as a career. The findings about motivations were similar in all four countries except for those connected to the perceptions of teaching.

As for the motivations of choosing teaching as a second career, Chambers (2002) found that the most common motivation of switchers is altruism and only afterwards come motivations of personal benefit. Crow, Levine & Nager (1990) divided those switchers into three categories that indicate their motivations: The Home-comers; The Converted; The Unconverted. In the first group, one can find the people who had aspired to become teachers from the beginning, but they could not realize their aspiration sooner. The second group includes people who had been reconsidering their professional plans due to certain interactions with others or due to a turning point in their lives. In the third category, there are people who had exhausted previous careers (which had been successful at the time) and who seek in the teaching career an opportunity for personal growth, creativity, autonomy, occupational security, like in every new occupation, with no particular solidarity with the field of education.

The types of motivation that direct the choice of teaching as a second career can be divided into two central periods of time: motivations that were prevalent between the sixties and the nineties and those typical of the nineties until the present time (Sinclair, 2008). The motivations in the past were social mobility, family pressure, the need to find a career, ability to influence others, desire to work with children and teenagers, desire to work in a people oriented profession and occupational security. The motivations have changed considerably over time (Watt & Richardson, 2007), mainly in social and multi-cultural aspects that are anchored in the need to generate a beneficial influence on children and youth. These motivations, paradoxically, are unknown to the capitalistic reality of our times (Beck, 2000).

### **Second Career in Education to Former Military**

Applicants to academic teacher training programs in recent years in Israel show a growing tendency of hi-tech and military people to choose teaching for a second career although the teaching

profession is neither perceived as prestigious, nor lucrative like jobs in the hi-tech or assignments in the civilian and military domains. Career military personnel are requested to retire from the IDF around the age of 45. The exit from service is organized and the retired personnel do not suffer from any economic pressure, since they are entitled to a pension. These conditions enable part of the applicants to realize intentions whose economic motivations are marginal compared to other motivations.

The trend of retired military people who want to integrate into the education profession is not only typical of Israel. In the US, there are special training programs that prepare army pensioners for working in the system of education. The courses are sponsored by the Federal authorities and some of the states. The initiative started in 1992, and it was called TTT (Troops to Teachers – Siekkinen, 2008). The program enables the various districts to address military personnel, to interview them and employ them in the system of education up to three years before their retirement. During this period of time, they will have completed education studies, practiced teaching and acquired a teaching license. This program especially helps recruit Mathematics, Science and Special Education teachers and support them during their integration into the teaching profession (Defense Activity for Non-Traditional Education Support - DANTES, 2008). This population is different from the one that traditionally embraces education (Feistritzer, 2005), most of them are men (80% as opposed to only 20% in the regular population), 37% belong to minority groups, as opposed to only 18% in the regular population. In interviews conducted with participants in such a special course in Georgia, (Siekkinen, 2008); it was found that their majority had come to the program for ideological reasons, such as the desire to generate social change and to work with children. Only a small group had arrived for occupational security. In addition, it was found that they attributed great value to the issue of leadership in school and in the classroom. Owings and his co-authors (Owings, Kaplan, Nunnery, Marzano, Myran & Blackburn, 2005) compared the graduates of the program from 49 states of the US with their colleagues who had been trained traditionally and found that the TTT graduates were more efficient in classroom management and discipline. They also had a stronger effect on students' achievements.

Bar Zohar (1997) conducted a research study among officers (250) in Israel who had retired from the IDF and turned to teaching as a second career. He found that the retired officers had a full academic education and were highly motivated to contribute to society. Their main motivation was connected to their aspiration to express their experience, their ability to lead, their influence and their desire to generate change. In addition, the researcher has found that 64% from the graduates who were IDF pensioners integrated into the system of education, in contrast to less than 50% of the regular graduates..

The characterization of applicants to teaching as a second career, along with their motivations, was analyzed on the ideological and functional levels in parallel and in correlation with their self-efficacy to carry out the tasks expected from them (Caprara, Barbaranelli, Steca & Malone, 2006). It was found that the desire to understand the students encouraged the teachers to set the foundations for self-efficacy during encounters with those students (Rushton, 2000). It also diminished elements of burnout that counteract the development of self-efficacy (Cornelius-White & Harbaugh, 2010).

### **The Sense of Efficacy in Teaching**

Bandura (1997) defined 'self-efficacy' as a belief of the individual that he can act successfully. Later, Bandura (2007) explained that efficacy is not an ability that the teacher has, but a belief that he can do it. The complexity of demands from teachers influences the way they cope with daily challenges (Klassen, Chong, Huan, Wong, Kates & Hannok, 2008). Beliefs of efficacy change according to their strength, level and their extent of inclusion (Goddard, Hoy, & Woolfolk-Hoy,

2000). The strength expresses how powerful the belief about carrying out the task is; the level is the perception of the difficulty of the task and the inclusion refers to the extent to which the belief in the efficacy to carry out a certain task is included in a larger range of tasks and activities. These beliefs are perceived as a personal and dynamic component that mediates between knowledge and behaviors (Dellinger, Bobbett, Olivier, & Ellet, 2008). Self-efficacy is not necessarily an innate quality or set of qualities (Bandura, 1997; Maddux, 1999), but a dynamic acquired system of beliefs possessed by the individual, that stems from experimentation in a unique and specific context. Research studies on self-efficacy of teachers show that the characteristics of GRP teachers, such as age, gender, life experience, education, level of preparation for teaching, motivation for teaching and other variables, are relevant to perceptions of self-efficacy, though their influence is not always clear and consistent (for instance, Friedman, 2003; Liu, 2007).

Growing evidence in research, points to the influence of self efficacy of teachers on their satisfaction from work (Caprara et al, 2006), efforts, perseverance, enthusiasm (Allinder, 1994; Bandura, 1997), commitment and behavior (Coladarci, 1992). It was found that teachers with a high self-efficacy are more innovative in pedagogy and control classroom management better. These teachers feel confident in their teaching strategies and believe in their success and the success of their students; they also allow their students take part in decision making about learning processes (Shore, 2004). Moreover, they tend to be more tolerant towards errors and mistakes of their students (Ross, Cousins, & Gadalla, 1996). Accordingly, students of teachers with a high self-efficacy were more motivated (Midgley, Feldlaufer, & Eccles, 1989), and had higher achievements (Moore & Esselma, 1992; Ashton & Webb, 1986).

#### **The Personal and Collective Contexts of Self-Efficacy of Teachers**

Continuing his definition of efficacy, Bandura (1997) distinguishes between 'self-efficacy' and 'collective efficacy', when the latter he defines as a collective set of beliefs of a group about its ability, with combined forces, to organize a task, carry it out and reach a certain level of achievement. These different kinds of efficacy were identified and discussed in the educational context, as well (See Dellinger, 2005; Dellinger et al, 2008; Klassen et al, 2008). Self-efficacy of teachers refers to their ability to carry out specific teaching/learning tasks, in their classes (Dellinger et al, 2008), and was defined as an ability to influence their students' achievements, including those with learning difficulties (Tschannen-Moran & Wolfolk-Hoy, 2001). An important component of self-efficacy of teachers is their sensation about classroom management and discipline (Bordelon, Phillips, Parkison, Thomas & Howell, 2012), and their ability to involve 'challenging' students. Success or failure in this domain, determines the development of efficacy of the teacher (Cornelious-White & Harbaugh, 2012). If so, the sense of efficacy of the teacher depends on the teaching behavior of the teacher and the learning behavior of the student (Tschannen-Moran, Wolfolk-Hoy, & Hoy, 1998).

The collective efficacy of teachers refers to the belief that the school staff, as a group, cooperatively, can influence students' achievements (Goddard et al, 2000; Klassen et al, 2008). Kass & Friedman (2005), side with the broader definition of the term and suggest including in it not only the classroom context but also the organization/community context of school. This field refers to the teacher as part of an organization and a community and describes his mutual relations with parents, colleagues and the school principal. Goddard & Goddard (2001) support this point of view and prove that teachers who work in two schools at the same time, experience two different sensations of self-efficacy.

### **Self-Efficacy among Beginning Teachers and Teacher Trainees: Influences**

Various factors were found to contribute to the development of self-efficacy among graduates of teacher-training programs, some generic and some contextual (Knoblauch & Woolfolk Hoy, 2008). From the generic point of view, this efficacy is connected to the acquisition of knowledge of the graduates and the number of years they have taught in school (Hoy & Spero, 2005). The most prevalent argument is that self-efficacy of a teacher grows stronger with the accumulation of experience in the classroom, his ongoing professional development and his passage from the status of novice teacher to expert teacher. Hoy & Spero (2005) claim that the self-efficacy of teachers is likely to develop significantly during the first years of training and point out the training stage before going into school as critical for its development. In contrast, the research study conducted by De la Torre-Cruz & Casanova-Arias (2007) contradicts Hoy & Spero's study. Their study compares veteran teachers to GRP novice teachers in connection to self-efficacy. The findings point out significant differences concerning classroom management and discipline in favor of the veteran teachers, but in the general dimension of teaching, the advantage was on the side of the GRP. In addition, the study found that the dimension of classroom management and discipline depended on the seniority of the veteran teachers. In general, it seems that a high level of self-efficacy of teachers is not a direct function of the amount of practice and professional knowledge, but connected to experimentation previous to the training stage, during the training and during the integration into school.

In the contextual aspect, self-efficacy is connected to the specific training circumstances and conditions of the trainee (Labone, 2004). Researchers describe the connection between the development of self-efficacy of trainees and some factors that include the type and strength of the support offered by the site of the internship, the collective efficacy of the teachers in that particular school and the mutual support of the colleague trainees (Hamman, Olivarez, Lesley, Button, Chan, Griffith & Elliot, 2006; Knoblauch & Woolfolk Hoy, 2008). The teacher trainer's self-efficacy has an effect on the trainee's sensation that he can influence his students' learning (Catapano, 2006; Knoblauch & Woolfolk Hoy, 2008; Wang, Spalding, Odell, Klecka, & Lin, 2010). The mentor teacher in school also has a critical effect on the trainee's self-efficacy. It was found that the perception of the trainee concerning the mentor's self-efficacy is positively connected to the development of his own efficacy (Li & Zhang, 2000).

In conclusion, from this literature review, one can learn about the variety of motivations that influence people who are seeking a second career to choose teaching as a profession. In the review presented here, there is a large spectrum of motivations that have changed during the years. The most prominent motive for choosing teaching as a second career is the aspiration to generate a change and to influence children and youth. This motivation clarifies the need to research the sense of efficacy of GRP who enter school to become teachers. This sensation was clarified in the review, which includes attitudes towards teaching as a profession with complex demands, and it also includes the way GRP perceive of their abilities to influence their own success and to cope with future challenges of teaching. It was found that the sense of self-efficacy of teachers affects their enthusiasm and perseverance to teach in school for a long period of time. The experimentations and the perceptions shaped in the teacher training schools also have an effect on the self-efficacy of graduates about to become teachers in schools. Therefore, it is important to learn about motivations that contribute to the choice of teaching as a second career. It is equally important to learn the conditions under which graduates of these programs succeed in establishing self-efficacy in order to realize their aspiration to be able to cope with the challenges their future in education has in store.

## Methodology

### Research Approach

This is a mixed study that combines tools, methods, quantitative and qualitative approaches, in order to answer the research questions in an optimal manner (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Leech, 2004). Classen & Lopez (2006) claim that we are not speaking about a simple collection of qualitative and quantitative data, but of a combination, a comparison, a contrasting, and a synthesis, in a manner which leads to a fuller analysis than a data base.

### Contextual Characteristics of the Study

The Program of Retraining of Academics for high school has existed in one of the biggest academic teachers colleges in Israel for two decades. The number of participants in the program has been growing significantly and many of them have chosen teaching as a second career. The program is intended for people with an academic degree in one or more of the subjects that are learned in school (for example, Math, History, Science etc.). The program takes one year. The program focuses on relevant pedagogical and didactic contents for training and the emphasis is on experiential training close support, help and instruction. In the past five years, the program has been adjusted for participants who had chosen teaching as a second career.

### Participants of the Study

The participants include three groups of GRP (N=82), who have chosen teaching as a second career and are integrating into high schools: Academics of the Intensive Course of Technology Teachers (Int.Tec-Group) (N=31), whose purpose is teaching technology (electricity, electronics, mechanics and computer sciences in technological education). Their program was initiated by the Ministry of Education and the Ministry of Finances, along with The Higher Education Council, Employment Service and the GDP (Ministry of Education, 2011); Academics who have retired from the security forces (Tsevet-Group) (N=14), most of them are senior officers, mature and experienced.; and finally, Academics who have arrived from a variety of occupations (Aca-Group): lawyers, advertisers and managers (N=37).

**Age Average Among Groups:** The Int.Tec-Group around 45; the Tsevet-Group are the eldest, 49; and the Aca-Group are around 36 years of age.

**Education Data:** the Int.Tec-Group included 53% of BA graduates and 47% of MA graduates; the Tsevet-Group included 43% BA holders and 57% of MA holders; the Aca-Group included 17% certified teachers, 42% with a BA degree and 41% with an MA.

**The School Level in which they Teach:** In the Int.Tec-Group, 11% started teaching in Elementary Schools, 25% in Junior High and 64% in High Schools; in the Tsevet-Group, 36% started teaching in Junior High and 64% in High School. In the Aca-Group, 33% have started teaching in Elementary Schools, 39% in Junior High and 28% in High School.

### Study Layout and Research Tools

The study researched motivations of GRP trainees for choosing teaching as a second career and the sense of self-efficacy of the graduates at the beginning of their teaching career. Motivations were studied via a half-structured questionnaire and by the means of a depth interview. Self-



efficacy was investigated through a self-efficacy questionnaire, which also includes background variables, and a depth interview administered to a sample of the population. The research tools and their components will be described as follows:

**Motivation Questionnaire:** The questionnaire is semi-structured, composed of three questions. The first question checked the motivations for choosing teaching as career; the second question elucidated the perceptions of the characteristics of a good teacher and the third asked about the GRP's perception of his/her unique contribution to the teaching career brought from the experience he/she had acquired from the first. The questionnaire was passed expert validation by the heads of the special program units, and it was administered right before the end of the training programs and the entrance into internship in schools.

**Questionnaire that Measures Self-Efficacy of Teachers:** The questionnaire is based on the Questionnaire for Measuring the Sense of Self-Efficacy of the Teacher (Friedman & Kass, 2000). It is composed of 39 statements based on the Lickert Scale of 6 categories from 'always' to 'never'. The original questionnaire was designed and validated in Israel. It was adapted to the needs of novice teachers. Structural analysis yielded three factors that refer to dimensions of efficacy: Teaching Tasks (TT), Teacher-Student Relations (TSR), and Influence in the Organization (IO). TT refers to the teaching of the subject matter, ways of teaching and contextual aspects. Activities that were originally in the present were transcribed to the future to fit the time of the GRP's entrance in school. Example of change in formulation: 'I think I can connect the learning material to the everyday life of my students', was changed to, 'I think I will be able to connect the learning material to the everyday life of my students.'; TSR refers to relations of authority, closeness and influence between the teacher and his students. The statements in the questionnaire were changed as follows: 'I think I can allow my students to exchange jokes in class without feeling that I am losing control' was changed to 'will be able'; and IO refers to the teacher's position and influence on the school organizational system. The statement, 'I think I can have an influence when there is need to help with school-wide problem solving', was changed to, 'I think I will be able to...when there will be a need...'

In a factor analysis run on the three measures of the questionnaire, it emerged that these measures explained 38% of the total variance of the scale, so that TT explained 21.5%, IO 9.5% and TSR explained 7.3% of the variance. The inner reliability of the scale was assessed by alpha cronbach, which was .86. The inner reliabilities of the subscale measures are as follows: TT, .85, IO, .81 and TSR, .63. From the adapted questionnaire, it was found that the factors explained 52.15% of the total variance of the scale (TT, 31.8%; IO, 9.65%; TSR, 10.79%). The inner reliability of the subscales of the measures is as follows: TT, .90; IO, .77; TSR, .83. The adapted questionnaire includes background variables as well: age, gender, seniority, position in the system of education, training program, education, subjects of teaching, and participation in internship towards entrance in school.

**Depth Interviews:** 15 semi-structured depth interviews were conducted at the completion of the training period and the entrance into school. Five participants were sampled out from each group. The sampling took into account background variables (such as gender), and fair representation of subjects of teaching (Science, Social Science and Humanities). The purpose of the interviews was to deepen and sharpen the understanding of the perceptions of the subjects concerning motivations to choose the teaching career, and of the specific contributions they are going to make in the new career. Moreover, they were interviewed about their perception of the sense of self-efficacy to cope with the challenges of teaching. Approximately an hour and a half was dedicated to each interview and every effort was made to conduct the interview under favorable conditions.

### Data Processing

The quantitative database was processed by statistical procedures. The data was processed by descriptive and deductive statistic analyses. The processing and the analyses included different

tests, such as: Two-way Analysis of Variance with Repeated Measures (F): this test was aimed at analyzing the differences between the three measures (TT, IO and TSR) in connection to the three GRP groups; The Bonferoni Test was administered for the investigation of the source of interactions in order to check the effect of the three measures on the extent of self-efficacy. Via the Bonferoni test, we could assess the variance of errors in the Analysis of Variance, while taking into consideration the number of comparisons made (Sankoh, Huque & Dobeve, 1997; Miller, 1981) when the results reported as significant stood on  $p < 0.005$ . The same test was applied to the investigation of the interactions between the groups and the background variables.

T-tests to two-way independent samples: this test was applied for the investigation of the differences among efficacy measures in connection with the motivations and the contributions that emerged from content analysis of the open questions.

Qualitative content analyses were conducted on the database that emerged from the interviews. They were anchored in the emic and etic categories. The qualitative data were based on a guiding framework for analysis by Strauss & Corbin (1994) that attribute importance to the data emergence as a basis for the grounded theory. The extraction of categories was based, on the one hand, on the research literature and was anchored on the other, in the database built from the 15 interviews with GRP students. The analysis units of the qualitative database included contextually independent statements and episodes referring to motivations to choose teaching, skills and assets the graduates brought with them to teaching. These were divided into categories and criteria whose frequency was analyzed and tested quantitatively (descriptive statistics). The summary was based on skeleton events taken from ideas taken from the text. The content analyses were conducted in rapport to the ground theory.

**Validity and Reliability:** steps were taken to achieve validity and reliability. Validity was achieved by triangulation of the three research tools mentioned above. The Categorical Database extracted from the Content Analyses was achieved by the three researchers until complete reliability.

## Findings

The research findings refer to motivations of GRP in the three research groups for choosing teaching as a second career, the assets they bring with them and their sense of efficacy as they enter school. The findings also refer to the correlations between the motivations, the assets and the sense of efficacy.

### Characterization of Motivations of GRP for Choosing Teaching as Second Career

Table 1 shows the frequency of motivations for choosing teaching as a second career in the three research groups. It is important to point out that 57 of the participants referred to motivations and part of them mentioned more than one motivation.

The table reveals that the most frequent motivation was the sense of ability to cope with challenges (46% of the responders). Additional prominent motivations: realization of a dream whose conditions are ripe (28%); desire to give to others and work with children (26%); and development of career (23%). Other less frequent motivations were: a sense of mission (17.5%); and an opportunity for creativity and interest (17.5%). Only 11% mentioned comfortable working conditions. The influence of a teacher was rarely mentioned directly (3.5%).

Motives	Frequency	Percentage of responders	Percentage of statements	Examples of statements
1.Sense of ability to cope with challenges	<u>26</u>	45.6%	24.1%	<i>'I can make my students love to study and research.'; 'I want to do a job which is enjoyable and challenging.'</i>
2.Dream come true and love for teaching	16	28.1%	14.8%	<i>L' said: 'I've been dreaming to become a history teacher since I was 19'</i>
3.Desire to give to others and work with children	15	26.3%	13.9%	<i>'I came to school with a new attitude and attributed importance to the student and not to learning. He should feel happy and wanted, free to learn.'</i> (LA)
4.Development of career	13	22.8%	12.0%	<i>ND: 'I quit hi-tech and want to influence science education'.</i>
5.Sense of mission in teaching	10	17.5%	9.3%	<i>IG: 'I came out of a sense of mission and a desire to generate social change.'</i>
6.Possibility of creativity, interest and pleasure	10	17.5%	9.3%	<i>R: I choose teaching because in my deep of my mind I that I can express my self and my intrinsic believes do something meaningfully.</i>
7.Convenient hours	6	10.5%	5.6%	<i>'I want to have a better balance between work and family.'</i> (KZ)
8.Influence of teacher/ significant person/ positive experience	2	3.5%	1.9%	<i>D: 'When I learned in the high school I had a special history teacher. I think that I got from him the drive to be a teacher'.</i>
9.Didn't answer	10	17.5%	9.3%	
Sum Total of statements	108		100.0%	

**Table 1: Frequency of motivations for choosing teaching as second career in the entire population (Absolute numbers) (N1- 57 participants; N2 – 108 statements)**

Deeper inspection of the findings enables a broader perspective over features of motivations: Psychological motivations connected to a sense of ability to realize personal abilities and dreams (categories 1 & 2); social and ideological motivations connected to the aspiration to influence society (categories 3 & 5); professional and career motivations connected to the broadening of occupational possibilities that offer opportunities for creative work (categories 4 & 6); practical motivations connected to the desire to obtain comfortable work's conditions (category 7).

Out of the four main categories above, the *psychological motivations* were the most prevalent (74%). The 15 interviews reinforce this category. For instance, A., a student in Int-Tec-Group, who acquired experience in education from the boarding school life, says, 'With time, I learned to specialize in rehabilitation and therapy boarding schools. In such schools, the emotional part is very important; the challenges are hard [...]. I can be mad with a child, but the conversation always ends with a hug and a kiss. Today, I am teaching in school and have the ability and the aspiration to stand before the youth and the children and create chemistry with them. I see the children and understand them; I have good communication with them.' The conclusion of the interviews is that the emotional support around the creation of the bond with the students is a strong incentive to the choice of teaching as occupation.

Approximately, 44% of the subjects who answered the questionnaire, referred to the *ideological and social motivations*. There is mention of these motivations in the interviews, as well.

For instance, R., interviewee from the Tsevet-Group, while referring to his value motivations, says, 'My background as a soldier and a pedagogue made me a man of values. Discipline is important, but also diligence [...] I have met strong populations who come from a world of affluence, I studied their needs – they need direction and support [...] I have a tendency to side with those who have difficulties even if it is not always politically correct'. A.M., another interviewee from Tsevet-Group, refers to his need to direct the youth towards social contribution: 'Ten years ago, I realized that high school children needed direction. It is important to invest in their education and to do beneficial things for them and for society.' From the interviews we learned that this group of motivations focuses mainly on generating social influence and change. Many of the subjects from this group of motivations believe that, thanks to their past experience, they can have a beneficial educational effect on the children they come in contact with.

About 39% mentioned *professional-careerist* motivations. This group referred to the complex of professional and developmental considerations of choosing the teaching profession and its uniqueness. M. from the Int-Tec-Group says: 'I felt my head degenerated, I wanted to study Law, but I moved over to teaching. When my son went up to first grade I encountered the system of education for the first time. I was chairperson of the parents' committee, I became more involved, I decided to study teaching for the soul, but also in order to understand the system better. I want to become a teacher, but I haven't found the way to go about it yet, I have just turned 40 and I'm looking for a change. In the future, I am also considering being school principal.'

Only 11% have referred to *the practical motivations*. Also some of the interviewees have referred to this issue. For example, R. from the Aca-Group says, 'I have decided to put the family in the center and it seems that education will enable it.' M., also from the Aca-Group, refers to convenience and financial reasons: 'It fits very well with my other activities such as the private business and my other studies.'

In conclusion, one may say that most candidates for teaching as second career refer to psychological and socio-ideological aspects. Low priority is attributed to professional motivations. The motivations with the lowest frequency belong to practical considerations of convenience at work.

### Comparison of GRP Groups in Connection to Motivations to Embrace Teaching

The comparison was based on questionnaire (part B) and interviews. Table 2 shows motivations for choosing teaching as second career that refer to the three research groups.

The table shows that the Tsevet-Group stands out in its mention of motivations of challenge, sense of self-efficacy and personal ability (72.7% of the population) and in its desire to fulfill a dream of love for teaching (54.5%). In the Int-Tec-Group there was also reference to the motivations mentioned above, but with lower frequency (55.6% and 33.3% in the same order). In the Aca-Group there was reference to self-efficacy and to self-fulfillment, along with realization of dream, but with lower frequency than in the previous groups. The most prominent motivation in the Int-Tec-Group was professional development and expansion (44.4%), while the same motivation in Tsevet-Group and Aca-Group was less frequent (27.3% and 16.2%). In the Aca-Group the answers are spread out and they touch upon every motivation, while in the other two groups, there is unity around one motivation. In the Tsevet Group, the answers focus on a sense of self-efficacy and ability and the desire to fulfill a dream, while in the Retraining of Academics the focus is on challenges and career development.

In conclusion, the following categories are dominant in each of the groups: Tsevet-Group – psychological and socio-ideological motivations; the Int-Tech-Group – psychological, personal and career motivations; the Aca-Group - personal motivations, a bit of every motivation and practical motivations.

Motives	Tsevet-Group			Intens- Tech-Group			Aca. Group		
	Frequency	Responders (%)	Statements (%)	Frequency	Responders (%)	Statements (%)	Frequency	Responders (%)	Statements (%)
1. Sense of ability to cope with challenges	8	72.7%	34.8%	5	55.6%	29.4%	13	35.1%	19.1%
2. Dream come true and love for teaching	6	54.5%	26.1%	3	33.3%	17.6%	7	18.9%	10.3%
3. Desire to give to others and work with children	2	18.2%	8.7%	2	22.2%	11.8%	11	29.7%	16.2%
4. Development of career	3	27.3%	13.0%	4	44.4%	23.5%	6	16.2%	8.8%
5. Sense of mission in teaching	3	27.3%	13.0%	1	11.1%	5.9%	6	16.2%	8.8%
6. Possibility of creativity, interest and pleasure	1	9.1%	4.3%	0	0.0%	0.0%	9	24.3%	13.2%
7. Convenient hours	0	0.0%	0.0%	0	0.0%	0.0%	6	16.2%	8.8%
8. Influence of teacher/ significant person/ positive experience	0	0.0%	0.0%	0	0.0%	0.0%	2	5.4%	2.9%
9. Didn't answer	0	0.0%	0.0%	2	22.2%	11.8%	8	21.6%	11.8%
Sum Total of Subject Sum Total of statements	11 23	100.0%	100.0%	9 17	100.0%	100.0%	37 68	100.0%	100.0%

**Table 2: Motivations and reasons for choosing teaching for second career referred to the three research groups (absolute numbers and percent) (N1=57 subjects; N2=108 statements)**

In order to elucidate the term 'a sense of ability to cope with the challenges of teaching', there was use of the second questionnaire, the structured part that checked the perceptions of the subjects of their potential contribution to the field of education. These contributions are the result of previous experimentations and life experience which had developed in previous careers. Table 3 describes the frequency of statements of the 57 participants in connection to the unique contributions. Table 4 presents a comparison of contributions and assets according to the 3 groups.

In tables 3 & 4, it appears that a considerable part of the perceptions of contribution pointed out by the participants refers to the ability to develop a climate and social values (19.8% of statements, table 3), this contribution being especially prominent with Tsevet-Group (31.6%, table 4). Another significant motivation is answering student diversity from the methodological point of view (15.3% of statements, table 3), particularly prominent in the Aca-Group (16.9%, table 4). One more contribution is the professional background and life experience that is reflected in important decisions taken in teaching and education (15.3% of all statements, table 3). Tsevet-Group, again, makes the highest percentage of this contribution (31.6%, table 4). Average contribution is made in communication skills, personal regard empathy, caring and help with studies (14.4%, table 3) and it is prominent in the Aca-Group (18.3%, table 4). An additional average contribution is in the ability to develop motivation and efficacy in children (11.7% of all statements, table 3) and it is prominent in the Aca-Group (14.1%, table 4). Moreover, a very small part of the statements referred to contribution to the system and the organization (1.8%, table 3) and to the subject matter knowledge (0.9%, table 3) and only in the Int-Tec-Group.

Unique contribution	Sum		
	Frequency	Percent of responders	Percent of statements
1. Ability to develop climate, values, respect for students	22	38.6	19.8
2. Methodic teaching and response to diversity	17	29.8	15.3
3. Professional background and life experience	17	29.8	15.3
4. Communication skills, personal relations, caring and help with studies	16	28.1	14.4
5. Development of motivation and efficacy	13	22.8	11.7
6. Special personal characteristics	6	10.5	5.4
7. Current events, relevance and integrative linkages	6	10.5	5.4
8. Systematic contribution	2	3.5	1.8
9. Knowledge of subject matter	1	1.8	9.0
10. Didn't answer	11	19.3	9.9
<b>Sum-total responders</b>	<b>57</b>		100
<b>Sum-total statements</b>	<b>111</b>		

**Table 3: Unique contributions and assets brought to teaching by all GRP together (Absolute numbers and percent) (N1- 57 participants; N2 – 111 statements)**

unique contributions	Tsevet-Group			Int- Tec-Group			Aca-Group		
	Frequency	Responders (%)	Statements (%)	Frequency	Responders (%)	Statements (%)	Frequency	Responders (%)	Statements (%)
1. Ability to develop climate, values, respect for students	6	60.0%	31.6%	4	40.0%	19.0%	12	32.4%	16.9%
2. Methodic teaching and response to diversity	2	20.0%	10.5%	3	30.0%	14.3%	12	32.4%	16.9%
3. Professional background and life experience	6	60.0%	31.6%	4	40.0%	19.0%	7	18.9%	9.9%
4. Communication skills, personal relations, caring and help with studies	1	10.0%	5.3%	2	20.0%	9.5%	13	35.1%	18.3%
5. Development of motivation and efficacy	1	10.0%	5.3%	2	20.0%	9.5%	10	27.0%	14.1%
6. Special personal characteristics	0	0.0%	0.0%	2	20.0%	9.5%	4	10.8%	5.6%
7. Current events, relevance and integrative linkages	2	20.0%	10.5%	0	0.0%	0.0%	4	10.8%	5.6%
8. Systematic contribution	0	0.0%	0.0%	0	0.0%	0.0%	2	5.4%	2.8%
9. Knowledge of subject matter	0	0.0%	0.0%	1	10.0%	4.8%	0	0.0%	0.0%
10. Didn't answer	1	10.0%	5.3%	3	30.0%	14.3%	7	18.9%	9.9%
<b>Sum Total of Subject</b>	10			10			37		
<b>Sum Total of statements</b>	19		100%	21		100.0%	71		100.0%

**Table 4: Comparison of unique contributions and assets brought to teaching by three GRP groups (Absolute numbers and percent) (N1 – 57 responders; N2 – 111 statements)**

#### The Sense of Self-Efficacy that Characterizes the GRP in the Different Groups

The findings of the self-efficacy were based on the first part of the efficacy questionnaire that was administered to all participants. In addition, there are supportive statements from the interviews conducted with a sample from the participants. Table 5 presents averages and standard deviations of efficacy measures in the whole population marked on a scale from 1 (low measure) to 6 (high measure).

Measure (df)	Average (1-6)	SD
"Teaching Tasks (TT)	4.41	0.56
Teacher-Student Relations (TSR)	3.90	1.20
Influence in the Organization (IO)	3.54	0.89

**Table 5: Averages and standard deviation of efficacy measures in all groups (N= 82)**

Table 5 shows that all three measures of efficacy are on an average to high level. One can see that the measure of TT is the highest (4.41), the TSR measure comes next (3.90) and the lowest measure is the IO (3.54). It is important to mention that the standard deviation of the TSR measure is high (1.20 which is 31%) that hints at a large spread of answers and no agreement among participants.

Also in the interviews with part of the participants, there was mention of a sense of efficacy. For instance, M. from the Aca-Group says the following, referring to TT: 'I am strong in the field of instruction, I can make them listen, and I can present a topic very well. I have made numerous installations for the Director General and I feel it helps. I have good verbal and dynamic abilities. I am able to learn new material. I have management skills and I also know how to give reinforcements. I demand when it's necessary. I know how to empower. I operate on the emotional side very well, but at the same time, I am target oriented.' As for the TSR, A. from the Int-Tec-Group remarks, 'My power is in my ability to influence children and youth. I can do it in school as well'.

In order to compare among the three groups in reference to efficacy perception measures, an analysis of variance (F-Test) on the findings of the efficacy questionnaire was performed. Table 6 describes average, standard deviation and F values referred to the three efficacy measures in the three training groups.

Table 6 shows that only on the TSR measure the difference among groups was significant ( $P < 0.000$ ;  $F = 19.6$ ). The members of the Int-Tec-Group showed lower results in comparison to the other two groups. The low results in this group were visible in the interviews as well. For example, G. from this group says, 'It was a nightmare to teach in School. It is difficult to reach the children and develop cooperation with them [...] classroom interaction is complex [...] it's difficult to recognize the differences – in fact, application of theories is difficult.'

	<b>Group</b>	<b>N</b>	<b>Average</b>	<b>SD</b>	<b>F*</b>
TT	Aca-Group	37	4.33	0.55	0.83
	Int-Tec-Group	3	4.50	0.56	
	Tsevet-Group	14	4.47	0.56	
TSR	Aca-Group	37	4.50	0.82	<b>*19.06</b>
	Int-Tec-Group	31	3.03	1.15	
	Tsevet-Group	14	4.15	1.04	
IO	Aca-Group	37	3.50	0.84	1.09
	Int-Tec-Group	31	3.45	0.87	
	Tsevet-Group	14	3.86	1.04	

\* $p < 0.000$       **Table 6: Analysis of variance (F-Test) of efficacy measures by GRP groups (N=82)**



On the other hand, H. from the Tsevet-Group contradicts the GRP from the Int-Tec-Group by expressing a high sense of efficacy in the same measure: 'I have the ability to connect with children, to touch them. In the past, I had a hard experience in school; I was miserable due to learning disabilities. Due to my background and to my studies, I understood that I could cope with children's disabilities and difficulties [...] during my internship in high school; I taught 12<sup>th</sup> Grade and tutored a student with difficulties. I felt that I was always attracted, like a magnet, towards 'lost' children... Today, I teach in the slow learners' class. [...] During my work with them, I must see the flicker in their eyes'.

#### *Analysis of Sources of Difference among Groups*

In the Two-way Analysis of Variance with Repeated Measures, an interaction was found between self-efficacy by group and the efficacy measure  $F(4,158)=11.88$ ,  $p<0.001$ ,  $\eta^2_p=0.23$ . The source of the differences was discovered by the Bonefroni-Test and is presented in Figure 1. That supports the evidence referring to the measure of TSR. The results presented as significant in the figure are on a level of  $p<0.05$ . The diagram of Figure 1 shows that in the Int-Tec-Group, the two other measures of efficacy, TT and IO, do not present any significant difference among the groups. Nevertheless, regarding the aspect of TT, the results in all three groups were high (average 4.5-4.6; SD 0.55-0.56), while in the aspect of IO, findings of all three groups were low. A qualitative expression of the findings above can be found in the interviews in the three groups. Referring to the TT, M. from the Aca-Group says, 'I have good illustration abilities in the Sociology class [...] I am coping with what is demanded from me in the Curriculum and I have acquired the notions of Psychology of Adolescence [...]'. In the Int-Tec-Group, Z., who teaches Physics and Bio-technology, says, 'During the training period, I succeeded in making a contribution in twelfth grade, which is a very weak class [...] I managed to make them believe in themselves, and they started to invest in their studies until they reached high achievements.

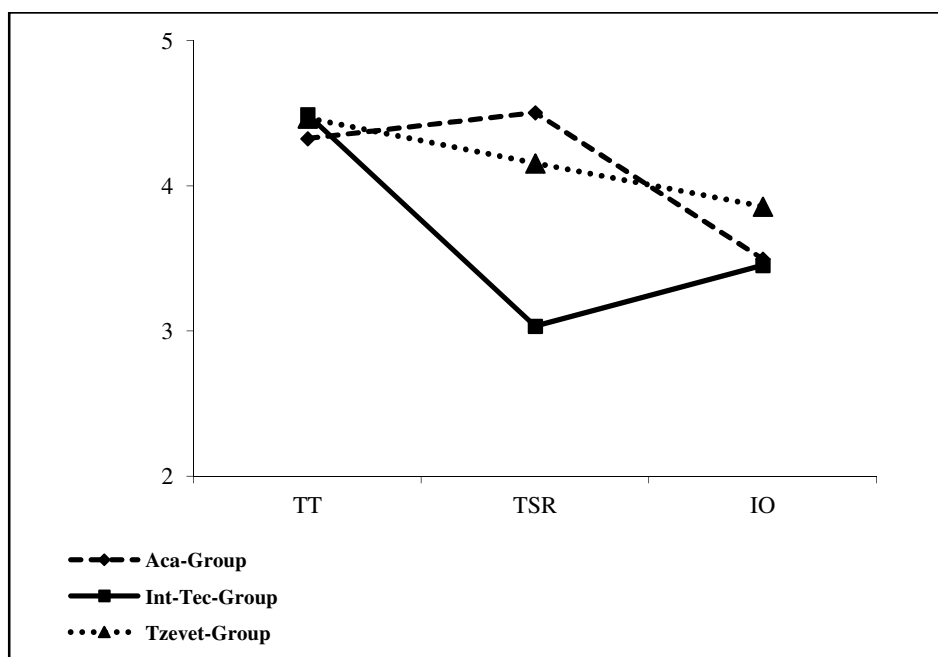


Figure 1: Investigation of the sources of interaction between the training groups by the Bonefroni test

In the Tsevet-Group, the regard to the TT measure is twofold: on the one hand, they refer to the illustration ability to present the material as concrete as possible and on the other hand, to the teaching effort, the success in motivating the students and in making them love the subject. 'During my internship, I discovered I could convey complex issues in Physics in an interesting and concrete way, along with a reasonable dose of classroom management. I created an enjoyable learning atmosphere and children started loving Physics.' (H. Tsevet-Group).

In reference to the organizational aspect (IO) which is connected to a sense of efficacy to get involved and to influence, the findings of the interviews show support for the sense of efficacy which is weak in the beginning. For example, D. from the Aca-Group who teaches Mathematics in junior high: 'I have hard cases of violence and I feel helpless to influence the management who acts in an inhuman way and with lack of support towards my problems in school.' N. from the Int-Tec-Group also says, 'School regulations are not always clear to me, when am I allowed to be flexible with the laws and when am I not? Responsibility for the students' behavior should be shared with the parents, and I feel that the management does not favor this connection and it does not support me either.' More reinforcement for this position can be found in the Tsevet-Group, where four out of five expressed the opinion that it is hard to work in an organizational culture so different from the one in the army. H., who comes from most senior military ranks, says, 'My big fear is from burnout from the system. Under the conditions of the system of education, they often reject your initiative and your influence and this arouses my fears. There are people from the army who have tried to reach a position of teaching and management and got burnt out in the process.' From the words of people from this group, there was a general sensation that they had difficulty to influence the system in the direction of change and renewal. In the reality of school with its organizational culture, there is a difficulty to absorb new teachers from a different organizational culture (military).

In summary, one can say that the only significant difference is in the measure of TSR. The group with the significantly lowest measure in TSR among the three groups is the Int-Tec-Group. There was no significant difference among the groups in the other two measures, but the TT is high in all three groups and the IO gave relatively low results.

### **Links among Motivations, Contributions and Self-Efficacy in the Three GRP Groups**

#### ***Differences among Groups in Reference to Measures of Self-Efficacy and Motivations for choosing teaching***

In order to investigate differences among groups in reference to measures of self-efficacy (TT, TSR and IO) and motivations for choosing teaching (see 8 categories of motives in table 1) a T-Test was applied for two-side independent samples. No different was found among the groups regarding the choosing motivations.

#### ***Differences among Groups in Reference to Measures of Self-Efficacy and contributions Bringing to the Career in Education***

An investigation was conducted in the differences of measures referring to self-efficacy and contributions evolved from the open questions (see 10 contributions' categories in table 3). In order to check the differences, a T-Test was applied for two-side independent samples. The only significant difference in self-efficacy measures was detected with the *background and life experience* category. Whoever mentioned this variable as contribution he brings with him to the field was characterized as person with a level of self-efficacy which is higher in all three measures of efficacy as follows:

- a. *Measures of TT and how they are carried out* -  $t(55)=2.64$ ,  $p=0.01$ . Among teachers who mentioned the variable of background and life experience as contribution they bring to the

- field, the average of the measures of TT was high ( $M=4.63$ ;  $SD=0.51$ ) in comparison to the teachers who did not mention this variable ( $M=4.24$ ;  $SD=0.51$ ).
- b. *Measures of TSR* -  $t(55)=2.65$ ,  $p=0.01$ ). Among those who mentioned the background and life experience variable as contribution they bring to the field, the average of the measure of self-efficacy in TSR was high ( $M=4.85$ ,  $SD=0.58$ ) as opposed to those who haven't mentioned it ( $M=4.26$ ,  $SD=0.84$ ).
  - c. *Measure of IO* - among the teachers who mentioned the variable background and life experience as contribution they bring to the field, this measure was high ( $M=4.82$ ,  $SD=0.95$ ) in comparison to the teachers who did not mention this variable ( $M=3.34$ ,  $SD=0.78$ )

In conclusion, the links between motivations, contributions and self-efficacy of the three GPR groups, did not show any significant results between motivations to the choice and sense of self-efficacy in all their measures. In contrast, a significant correlation was found between one measure, background and life experience, and the results of the three measures of self-efficacy.

## Discussion

This study has emerged from a background of scarcity of quality teachers in order to investigate the trend of new teachers who are choosing teaching as a second career. The study researched the motivations for choosing the teaching career and the self-efficacy of the three GRP groups who had applied to study teaching as a second career. The profile of the GRP is characterized by a relatively high age section (36-49) as opposed to the young people who used to apply in the past (22-30) (Peterson, 2006). That means that at a certain stage in their lives, when they feel more mature, the applicants for teaching want to have influence on children and youth (Lovett, 2007; Richardson & Watt, 2006). However, the analysis of characteristics of the three GRP groups' profile shows personal-demographic differences. The age average of the Aca-Group is ten years younger than that of the Int-Tec-Group or the Tsevet-Group. Beyond age characteristics, the findings show special and common characteristics that refer to motivations to the choice of the teaching career, assets the GRP contribute to teaching and the self-efficacy when they enter school.

### Motivations for Choosing Teaching and Consequences for the GRP

From the analysis of the findings, it emerges that the most prevalent motivation for choosing teaching as second career is personal and social challenge feeling. Another motivation was the desire to realize a heart-desire and dream when the right occupational conditions arrived. These findings are consistent with those of Chambers (2002), who had found that there is a visible line among the motivations of applicants to teaching that connects tendencies anchored in values and altruism as opposed to a much less visible line of tendencies anchored in economical benefit and practical considerations. The fact that a third of the applicants to teaching, when asked about their motivations for choosing teaching, reiterated the motive of the dream come true, enabled us to call them 'home-comers' to education and teaching whose motivations, according to Crow et al. (1990), stem from early unfulfilled biographical aspirations. Another group detected by Crow et al. (1990) is 'The Converted'; it includes people who have reconsidered professional choices due to significant interactions with others or a turning point in life that led them to a change of career. In this study, such cases could be detected among the participants of the Int-Tec-Group. The third group in the study of Crow et al., (1990) is called 'The Unconverted', people who have exhausted the possibilities of a previous successful career, but they are seeking personal growth, creativity,

autonomy and occupational security, like in every other new job. This type of motivation is mainly present in the Aca-Group, but all three types of motivation appear in all three groups.

In a different type of categorization, different from the biographic one, one can divide the motivations to four functional measures, *psychological*, *socio-ideological*, *professional-career-oriented* and *practical*. We found that out of the four types of motivation, the most prominent one was the psychological one. 74% of the subjects referred to this motivation and emphasized that the emotional aspect is most important for establishing the ability to influence students and offer them warm support. The psychological motivation is intrinsic by nature (Theriot, 2007) and connected to the spiritual and emotional benefits extracted from teaching: pleasure, interest, creativity and the ability to influence, which present a sense of socio-psychological power. These answers can also be related to socio-ideological motivations expressed by 44% of the responders to the questionnaire, who focused on an intention to generate social influence and change. Many of the GRP, who belong to this group, believe, based on prior experience, they can have an educational impact on their students. Maybe the GRP are novice teachers, but not novice at all in their belief that they can influence others. Many of them, in previous jobs and personal responsibilities, had managed to shape and determine the paths of others (like in the army and in technological institutions, where they had promoted their employees). 39% referred to professional-career-oriented motivations. These motivations belong to the functional-developmental aspects of teaching and its uniqueness. Some, at a certain point in their life (as parents) expressed the desire to study teaching and the system of education in order to understand how it operated and how to improve it. This group of motivations can also be related to intrinsic motivations and to social ones as well. Only 11% of the responders to the questionnaires mentioned practical motivations and emphasized convenience, working conditions and salary and the fact that they can take another job on the side. This type of motivation has mainly an extrinsic character.

In the comparison of the three GRP groups in reference to motivations for choosing the occupation of teaching as second career, there is a certain difference among the groups. In the Tsevet-Group, there is strong dominance of psychological motivation and of socio-ideological ones; these are mainly intrinsic and socio-altruistic motivations. In the self-concept of this group's members, there is emphasis on intrinsic values and social benefits embedded in teaching (Watt et al, 2012). In the Int-Tec-Group, the prominent motivations are personal-psychological and the professional-career-oriented ones that could be explained by the unhappiness with the employment crises in the technological field. In the same group, motivations were detected of self-concept as experts in the field, expertise they are bringing as contribution to teaching. In addition to the motivations mentioned above, there is also the need for seeking job security.

As opposed to the homogeneity that was found in motivations for choosing teaching as career in the two groups above, in the third group, the Aca-Group, the results were scattered. In addition, the practical motivations are prominent; they are extrinsic by nature and include comfortable working conditions, balance between work and family life and expectations for a worthwhile reward. This group regards teaching like a regular career and therefore applies normative employment considerations to it, acceptable in any other profession.

The differences among the three GRP groups regarding the motivations for choosing teaching show us the chances they have to be absorbed into the system successfully and point out special ways of support and empowerment to ensure the GRP's optimal conditions. Thus, the Tsevet-Group that is characterized by its socio-altruistic motivations has been researched (Auster & Feigin, 2010; Siekkinen, 2008) as the group whose percentage of graduates that was absorbed into the system was higher than the Aca-Group. However, in order to establish its position in the system and to persist in school, they need to be offered opportunities of promotion and leadership in order to be able to lead and produce a change in the system. The Int-Tec-Group's members are characterized by professional-career-oriented motivations. They will probably need a combination of conditions at work that will be an answer to the need for challenge and interest on the one hand with stability and

financial rewarding on the other. This condition is necessary to establish safe transition for people whose previous careers have been more lucrative with better conditions, but with insecure employment. As opposed to the two other groups, the Aca-Group will probably need special conditions of rewarding and support in order to establish their hold in the teaching career, to make it durable and stable. It is possible that there might be moments of frustration and of dissatisfaction of the working conditions, the contact with the parents, the students and other overshadowing elements from the school culture which might cause difficulties in absorption and thoughts of leaving school altogether.

Along with the picture of GRPs' motivations to choose teaching as a second career, there is another issue which was investigated in this study: Self-efficacy prior to the entrance into school.

### **The Self-Efficacy and Contributions that Influence the Way of Coping in School**

The analysis of the findings concerning self-efficacy in the GRP detected three measures of efficacy: Teaching Tasks (TT), Teacher-Student Relations (TSR) and Influence in the Organization (IO). The last measure emphasizes the necessity of the teacher's functioning in a broader context that belongs to school culture (Kass & Friedman &, 2005). All groups feel that their ability to cope with teaching challenges is relatively high, when the specific measure of TT (Dellinger et al, 2008) is the highest of the three. Most graduates expressed their belief they would be able to motivate students to get involved in learning and to achieve desirable results, even the unmotivated ones. Similar findings are also found in several research studies which have investigated the way teachers encourage students with learning disabilities, difficulties and those achieving below their potential (Guskey & Passaro, 1994). Many GRP reported they could get 'challenging' children involved and this had been a goal they had wanted to achieve even during the pre-service training. Another aspect that refers to the self-efficacy is connected to classroom management. Here, too, like in other studies (Bordelon et al., 2012) the findings show that the graduates have a medium to high self-efficacy to introduce clear norms of discipline and working procedures in their class. The TSR measure has given medium-high results. The significance of this result is that most GRP feel they have good ability to create relations with their students and to answer their needs. This ability is also connected to the gathering of influence and authority in order to promote goals in the learning, social and personal domains.

The lowest self-efficacy measure found among the GRP is IO. This measure is based on the belief that the school staff in cooperation can have an impact on student achievement and production. (Klassen et al, 2008). In order to establish this efficacy, new teacher needs long term experience with the school organization and the teaching culture existing in it. Teachers accepted into an organization need to have developed organizational schemata with clear codes and rules which are different from those of the organization from the first career. During the interviews, we came across heavy fears from the lack of opportunity to promote influence and novelty in the high school organization, which is sometimes perceived as closed and unwilling to open for change initiated by novice teachers with low position. Hoy & Spero, (2005) found on the same issue, that trainees' self-efficacy increases during the training, while they teach and tutor students, and decreases during the first year of teaching, when the school organization does not offer the right support to facilitate their absorption.

The self-efficacy in all its dimensions might be connected to previous life experience of the GRP, which has developed during previous careers and occupations. During those careers, they have accumulated assets they can contribute to the system of education, fact that might promote their absorption into the system. The central assets that have come up during the interviews with the GRP are: Their ability to develop social climate and values; ability to address student diversity;

professional background and communication skills and caring along with the opportunity to offer help with studies.

In the asset analysis, the parental perspective of GRP was prominent; it plays an important role in the establishment of self-efficacy and of empathy for the children. The GRP contributions described above help broaden the understanding of TT and TSR contexts; it would be appropriate to take them into account in the process of absorption of teachers into school.

When we examine similarities and differences among GRP programs concerning self-efficacy we found that only the measure TSR was found significant. The participants of the Int-Tec-Group reported on lower efficacy of this measure as opposed to the other two groups. In contrast, the Tsevet-Group reported on a high self-efficacy concerning this measure and pointed out a parallelism to the commander-soldier relationship. They reported that in the army they had opportunity to foster under-privileged soldiers; they also felt the need to enhance a sense of brotherhood and to strengthen the bonds among the soldiers during military missions.

The investigation of the source of differences among the GRP groups yielded an interaction by group and by measure of efficacy. It transpired that in the Int-Tec-Group there was a higher sense of self-efficacy in TT, higher than the self-efficacy in TSR and of the self-efficacy to get involved in school (IO). This group is mainly self-confident due to its mastery of subject matter, mastery of physics, mathematics and geometry that had been recognized in the technological work places and in industry where they had worked before. That is how the sensation that they could fill the teaching role in the best way developed. In contrast, in the measures of creating a relationship with the students, and of exerting influence in school, the self-confidence was low, and the opportunities to have an impact were considered limited. In the other two groups, Aca-Group and Tsevet-Group no significant differences were found between the sense of efficacy and the three different measures.

In the investigation of the differences among the GRP groups with reference to measures of perceptions of efficacy and types of motivation, no differences were found. In contrast, difference was found in reference to contribution of life experience in all its measures (TT, TSR and IO). The GRP graduates regard the life experience contribution they bring as very meaningful: it includes experiencing and skills that might be meaningful at the starting point of their teaching career. Their address to school principals and influential leaders of the education system is to take into account this contribution.

The research findings emphasize the fact that the motivations of the GRP at the outset of their teaching career have an effect on the first stages of teaching and on their sense of self-efficacy to face the challenges of education. Therefore, our recommendations are both for the special training programs designed for these teachers and for the accompanying staff that are meant to offer support to the novice teachers who are making their first steps in their teaching as a second career.

### **Consequences and Recommendations**

The consequences and recommendations relates to the: curriculum designers of the teacher education programs; staff that accompanies the absorption of the novice second career teachers; principals and mentor teachers of the GRP at schools; policy makers who lead the teacher education system.

The curriculum designers of teachers' education programs should adjust the programs to the various applicants who have chosen teaching as a second career. They need to analyze the kinds of motivations and map them. A mapping of the different motivations and their categorization, might point out the degree of suitability of the candidate for teaching and the points where he needs special support during his training. The special assets brought by the GRP might present a resource of foundation and consolidation during the training period (for instance, attitudes towards social values and good leadership and communication skills). It is recommended to create conditions for

the utilization these assets for purposes of designing adjusted activities and tasks. Nevertheless, it is important to also refer to vulnerabilities that have emerged, such as grasping the complexity of the system of education.

The staff that accompanies the absorption of the novice second career teachers should be aware of the sequence between training, absorption and integration of the graduate. The transition from training to teaching needs to be investigated thoroughly with regard to a sense of efficacy that exists during the training, but does not always remain with the novice teacher during his integration in school. This factor should be taken into consideration constantly from the support workshops in the first year of internship, during the occasional support encounters of the school staff either before or during the academic year.

The school principals and mentors should direct the new teachers to an empowering process that will strengthen them to fulfill tasks and responsibilities that will only grow with time. It is important to amplify the arenas of experience of the novice teacher within the organizational array. It is important to note that the mentoring of these graduates has nothing in common with that of novice or regular teachers who are described to be young of age. Part of the graduates here could be considered older and more experienced than the mentors. The communicative dynamics between them requires a different bout. It is more typical of a relationship between colleagues. It is important to provide these groups, with their inner diversity, a proper answer both psychological and social. It is important that the process of integration into the organization should open before the GRP a new horizon, flexible and open to experiencing and growing, where he can grow and expand. It is possible that when one gets in contact with the graduates, they would develop a tendency to compare things with the previous working place and tasks they had fulfilled. This should be regarded as an opportunity for mutual inspiration and learning from other organizations and might help school to cope more efficiently with its own challenges.

Renewed policy making is necessary, in the light of a nationwide perspective as to the planning of human resources and the understanding of the kinds of long term support to be accorded to GRP. The special state programs that developed in recent years create a special opening towards enrichment and diversifying of the teaching body. This is a positive trend, full of potential. In contrast, if the understanding of the motivations and efficacy to cope with the challenges of teaching is not developed, the promising change might turn into bitter disappointment both for the new teachers and for the staffs that are absorbing them. National planning of types of programs and recognition of their advantages will create a rich and interesting mixture of teaching forces the students will be able to benefit from.

In addition to the recommendations above, it is important to continue researching and following the special GRP Programs and conduct a longitudinal follow up of the persistence of the GRP graduates in the system of education. We hope that this new resource will bring about a diversification of teaching and advance quality education.

## References

- Allinder, R.M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education*, 17(2), 86 – 95. <http://dx.doi.org/10.1177/088840649401700203>
- Arthur, M.B., & Rousseau, D.M. (1996). A career lexicon for the 21<sup>st</sup> century. *The Academy of Management Executive*, 10(4), 28-39.
- Ashton, P. T., & Webb, R.B. (1986). *Making a difference: Teacher sense of efficacy and student achievement*. New York: Longman.
- Auster-Lointz, A. & Feigin, S. (2010). Perceptions of teacher trainees, students of computer science teaching, as a second career, after first career in the hi-tech industry and the Israeli Defense Force (IDF). *Dapei Yozma*, 62-74. (In Hebrew)
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bandura, A. (2007). Much ado over a faulty conception of perceived self-efficacy grounded in faulty experimentation. *Journal of Social and Clinical Psychology*, 26(6), 641-658. <http://dx.doi.org/10.1521/jscp.2007.26.6.641>
- Bar-Zohar, J. (1997). *Midlife transition of retired Israeli Defense Force (IDF) army officers to a second career in education: Research report*: Evaluation and research department of Academic of Beit-Berl Colleg in Israel. (In Hebrew).
- Beck, U. (2000). *The brave new world of work* (R. Camiller, Trans.). Malden, MA: Polity.
- Bordelon, T.D., Phillips, I., Parkison, P.T., Thomas, J., & Howell, C. (2012). How teachers rate themselves and how students rate their teachers. *Action in Teacher Education*, 34(1), 14-25. <http://dx.doi.org/10.1080/01626620.2012.642282>
- Caprara, G.V., Barbaranelli, C., Steca, P., & Malone, P.S. (2006). Teachers' self-efficacy beliefs as determinants of teacher's job satisfaction and students' academic achievement: A study at the school level. *Journal of Educational Psychology*, 44(6), 473-490.
- Catapano, S. (2006). Teaching in urban schools: Mentoring pre-service teachers to apply advocacy strategies. *Mentoring & Tutoring*, 14(1), 81-96. <http://dx.doi.org/10.1080/13611260500432756>
- Chambers, D., (2002). The real world and the classroom: Second-Career teachers. *ProQuest Education Journals*, 75(4), 212-217.
- Chope, R.C. (2001, November). *Exploration of the emotional avenues of career change*. Paper presented at the meeting of International Career Development Conference, Seattle, WA.
- Classen, S., & Lopez, E. D. S. (2006). Mixed methods approach explaining process of an older driver safety systematic literature review. *Topics in Geriatric Rehabilitation*, 22(2), 99-112. <http://dx.doi.org/10.1097/00013614-200604000-00002>
- Cochran-Smith, M., & Fries, M.K. (2001). Sticks, stones and ideology: The discourse of reform in teacher education. *Educational Researcher*, 30(8), 3-15. <http://dx.doi.org/10.3102/0013189X030008003>
- Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education*, 60(4), 323-337. <http://dx.doi.org/10.1080/00220973.1992.9943869>
- Cornelious-White, J.H., & Harbaugh, A.P. (2010). *Learner-centered instruction: Building relationships for student success*. Thousand Oaks, CA: Sage. <http://dx.doi.org/10.4135/9781483349183>
- Crow, G.M., Levine, L., & Nager, N. (1990). No more business as usual: Career changers who become teachers. *American Journal of Education*, 98 (3), 197-223. <http://dx.doi.org/10.1086/443956>
- Darling-Hammond, L. (2001). The challenge of staffing our schools. *Educational Leadership*, 58(8), 12-17.



- Darling-Hammond, L. (2006). Construction of 21<sup>st</sup> century teacher education. *Journal of Teacher Education*, 57(3), 300-314. <http://dx.doi.org/10.1177/0022487105285962>
- Darling-Hammond, L., & Berry, B. (2006). Highly qualified teachers for all. *Educational Leadership*, 58(8), 12-17.
- Darling-Hammond, L., & Bransford, J. (2005). Introduction, in L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 1-40). San Francisco CA: Jossey Bass.
- Defense Activity for Non-Traditional Education Support (DANTES). (2008). Program goal statement for the Troops to Teachers Program. Retrieved 3 April, 2008, from: [http://www.dantes.doded.mil/dantes\\_web/troopstoteachers/overview.asp](http://www.dantes.doded.mil/dantes_web/troopstoteachers/overview.asp)
- De la Torre-Cruz, M.J., & Casanova-Arias, P.F. (2007). Comparative analysis of expectancies of efficacy in in-service and prospective teachers. *Teaching and Teacher Education*, 23(5), 641-652. <http://dx.doi.org/10.1016/j.tate.2007.02.005>
- Dellinger, A.B. (2005). Validity and the review of literature. *Research in the Schools*, 12(2), 41-54.
- Dellinger, A.B., Bobbett, J.J., Olivier, D., & Ellet, C.D. (2008). Measuring teachers' self-efficacy beliefs: Development and use of the TEBS-Self. *Teaching and Teacher Education*, 24(3), 751-766. <http://dx.doi.org/10.1016/j.tate.2007.02.010>
- Feistritz, C.E. (2005). *Profile of Troops to Teachers in the U.S.* Washington, D.C.: National Center for Education Information.
- Friedman, I.A. (2003). Self-efficacy and burnout in teaching: the importance of interpersonal-relations efficacy. *Social Psychology of Education*, 6(3), 191-215. <http://dx.doi.org/10.1023/A:1024723124467>
- Friedman, I. & Kass, E. (2000). *Teacher's Self-Efficacy: The construct and its measurement*. Jerusalem: Henrieta Sold Institute. (In Hebrew).
- Friedman, I. & Kass, E. (2001). Teacher self-efficacy: Task and relationship model. *Megamot*, 3 (41), 322-348. (In Hebrew).
- Goddard, R.D., & Goddard, Y.L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education*, 17(2001), 807-818. [http://dx.doi.org/10.1016/S0742-051X\(01\)00032-4](http://dx.doi.org/10.1016/S0742-051X(01)00032-4)
- Goddard, R., Hoy, W., & Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37(2), 479-507. <http://dx.doi.org/10.3102/00028312037002479>
- Guernsey, L. (2005, July, 31). There's always teaching. *New York Times*, p. 29.
- Guskey, T.R., & Passaro, P.D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31(3), 627-643. <http://dx.doi.org/10.3102/00028312031003627>
- Hamman, D., Olivarez, Jr. A., Lesley, M., Button, K., Chan, Y. M., Griffith, R., & Elliot, S. (2006). Pedagogical influence of interaction with cooperating teachers on the efficacy beliefs of student teachers. *The Teacher Educator*, 42(1), 15-29. <http://dx.doi.org/10.1080/08878730609555391>
- Harrell, P.E., & Harris, M. (2006). Teacher preparation without boundaries: A two-year study of online teacher certification program. *Journal of Technology Education*, 14(4), 755-774.
- Hoy, A., & Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: a comparison of four measures. *Teaching & Teacher Education*, 21(4), 343-356. <http://dx.doi.org/10.1016/j.tate.2005.01.007>
- Johnson, S.M., Birkeland, S.E. (2003). Pursuing a "sense of success": New teachers explain their career decisions, *American Educational Research Journal*, 40(3), 581-617. <http://dx.doi.org/10.3102/00028312040003581>

- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research Paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.  
<http://dx.doi.org/10.3102/0013189X033007014>
- Kass, E., & Friedman, I. (2005). Between the private and the professional family: Constructing the sense of self-efficacy of women teachers. *Megamot*, 43(4), 699-728. (In Hebrew).
- Kee, A.N. (2012). Feeling of preparedness among alternative certified teachers: What is the role of program features? *Journal of Teacher Education*, 63(1), 23-38.  
<http://dx.doi.org/10.1177/0022487111421933>
- Kfir, D. (2008). Recruiting into the teaching profession mature graduates, seeking a second career and their high standard alternative teacher training program. In D. Kfir & T. Ariav (Eds.). *The crisis in teaching: Towards better teacher training* (pp. 176-197). Jerusalem, Israel: Van Leer Institute Publications and Kibbutz Meuhad Publications. (In Hebrew).
- Kfir, D. & Ariav, T. (2008). Preface. In D. Kfir & T. Ariav (Eds.). *The crisis in teaching: Towards better teacher training* (pp. 8-18). Jerusalem, Israel: Van Leer Institute Publications and Kibbutz Meuhad Publications. (In Hebrew).
- Klassen, R.M., Chong, W.H., Huan, V.S., Wong, I., Kates, A., & Hannok, W. (2008). Motivation beliefs of secondary school teachers in Canada and Singapore: A mixed methods study. *Teaching and Teacher Education*, 24(7), 1919-1934.  
<http://dx.doi.org/10.1016/j.tate.2008.01.005>
- Knoblauch, D., & Woolfolk-Hoy, A. (2008). "Maybe I can teach those kids": The influence of contextual factors on student teachers' efficacy beliefs. *Teaching and Teacher Education*, 24(1), 166- 179. <http://dx.doi.org/10.1016/j.tate.2007.05.005>
- Labone, E. (2004). Teacher efficacy: Maturing the construct through research in alternative paradigms. *Teaching and Teacher Education*, 20(4), 341-350.  
<http://dx.doi.org/10.1016/j.tate.2004.02.013>
- Lee, D.J., & Lampert, M.A. (2011). Non-Traditional entrants to the profession of teaching: Motivations and experiences of second-career educators. *Christian Perspectives in Education*, 4 (2) 1-39. Retrieved 15.1.2013 <http://digitalcommons.liberty.edu/cpe/vol4/iss2/3>
- Li, X., & Zhang, M. (2000). *Effects of early field experience on pre-service teachers' efficacy beliefs- A pilot study*. ERIC Document Reproductive Service No. ED 444073.
- Liu, X.S. (2007). The effect of teacher influence at school on first-year teacher attrition: A multilevel analysis of the schools and staffing survey for 1999-2000, *Educational Research and Evaluation* 13(1), 1-16. <http://dx.doi.org/10.1080/13803610600797615>
- Lovett, S. (2007). "Teachers of Promise": Is teaching their first career choice? *New Zealand Annual Review of Education*, 16, 29-53.
- Luekens, M.T., Lyler, D.M., & Fox, E.E. (2004). *Teacher attrition and mobility: Results from the teacher follow-up survey, 2000-2001*. National Center for Educational Statistics. U.S. Department of Education. Retrieve December 14, 2007 from <http://nces.ed.gov/pubinfo>
- Maddux, J.E. (1999). Expectancies and the social-cognitive perspective: Basis principles, processes, and variables. In I. Kirsch (Ed.), *How expectancies shape experience*. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10332-001>
- Midgley, C., Feldlaufer, H., & Eccles, J. (1989). Change in teacher efficacy and student self-and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology*, 81(2), 247-258. <http://dx.doi.org/10.1037/0022-0663.81.2.247>
- Miller, R.G., (1981) *Simultaneous Statistical Inference*, 2nd ed, Springer Verlag, pp. 6-8.  
<http://dx.doi.org/10.1007/978-1-4613-8122-8>
- Morton, M.L., Williams, N.L., & Brindley, R. (2005). Seeking alternatives to alternative certification: The challenge and opportunity of preparing second-career elementary school teachers. *International Journal of Education Reform*, 14(2), 192-206.

- Moore, W., & Esselman, M. (1992). *Teacher efficacy, power, school climate and achievement: A desegregating district's experience*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- National Center for Educational Statistics NCES (2005). *Mobility in the teacher workforce: Findings from the condition of education 2005*. (NCES 2005-114). Washington, DC: U.S. Department of Education Institute of Education Sciences.
- Ofsted. (2001). *The annual report of her majesty's chief inspector of schools: Standards and quality in education 2000/01*. London, England: Office of Standards in Education.
- Onwuegbuzie, A. J., & Leech, N. L. (2004). Enhancing the interpretation of “significant” findings: The role of mixed methods research. *The Qualitative Report*, 9(4), 770-792.
- Organization for Economic Co-operation and Development (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris: OECD.
- Organization for Economic Co-operation and Development, (2011). *Building a high-quality teaching profession: Lessons from around the world. Background report for the international summit on the teaching profession*. Paris, France: OECD.
- Owings, W., Kaplan, L., Nunnery, J., Marzano, R., Myran, S, & Blackburn, D. (2005). *Supervisor's perception of the quality of Troops to Teachers program completers and programs completer perceptions of their preparation to teach: A national survey*. Old Dominion University, College of Education.
- Peterson, K. (2006). *Fewer Choosing to Teach*. Retrieved April 4, 2008 from [www.teaching-point.net/fewer\\_choosing\\_teaching\\_jobs.pdf](http://www.teaching-point.net/fewer_choosing_teaching_jobs.pdf)
- Richardson., P., & Watt., H.M.G., (2006). Who chooses teaching and why? profiling characteristic and motivation across three Australian universities. *Asia-Pacific Journal of Education*, 34(1), 27-56. <http://dx.doi.org/10.1080/13598660500480290>
- Ross, J.A., Cousins, J., & Gadalla, T. (1996). Within teacher predictors of teacher efficacy. *Teaching and Teacher Education*, 12(4), 385-400. [http://dx.doi.org/10.1016/0742-051X\(95\)00046-M](http://dx.doi.org/10.1016/0742-051X(95)00046-M)
- Rushton, S. (2000). Student teacher efficacy in inner-city schools. *The Urban Review*, 32(4), 365-383. <http://dx.doi.org/10.1023/A:1026459809392>
- Sankoh, A.J., Huque, M.F., & Dubey, S.D. (1997). Some comments on frequently used multiple endpoint adjustments methods in clinical trial, *Statistics in Medicine*, 16, 2529-2542. [http://dx.doi.org/10.1002/\(SICI\)1097-0258\(19971130\)16:22<2529::AID-SIM692>3.0.CO;2-J](http://dx.doi.org/10.1002/(SICI)1097-0258(19971130)16:22<2529::AID-SIM692>3.0.CO;2-J)
- Shore, J. (2004). Teacher education and multiple intelligence: A case study of multiple intelligences and teacher efficacy in two teacher preparation courses. *Teacher College Record*, 106(1), 112-139. <http://dx.doi.org/10.1111/j.1467-9620.2004.00323.x>
- Siekkinen, M., (2008). *Military veterans in Georgia public school classrooms*, Doctoral study submitted in partial fulfillment of the requirement for the degree of the education doctorate in teacher leadership. Walden University Pro Quests Dissertations and Theses, 102-n/a. Retrieved from [http://search.proquest.com/docview/304381911?accountid=4122.\(304381911\)](http://search.proquest.com/docview/304381911?accountid=4122.(304381911))
- Sinclair, C. (2008). Initial and changing student teacher motivation commitment to teaching. *Asia-Pacific Journal of Education*, 36(2), 97-104.
- Strauss, A.L & Corbin, J. (1994). Grounded theory methodology: An overview. In: N.K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research*, (pp. 273-285). Thousand Oaks, CA: Sage.
- Suell, J.L., & Piotrowski, C. (2007). Alternative teacher education program: A review of the literature and outcome studies. *Journal of Instructional Psychology*, 34(1), 54-58.

- Sullivan, S.E., & Emerson, R. (2003, April). *Recommendations for successfully navigating the boundary less career: From theory to practice*. Paper presented at the annual conference of the Midwest Academy of Management, Columbus, OH.
- Tigheelaar, A., Brouwer, N., & Korthagen, F. (2008). Crossing horizons: Continuity and change during second-career teachers' entry into teaching. *Teaching & Teacher Education*, 24(6), 1530-1550. <http://dx.doi.org/10.1016/j.tate.2008.03.001>
- The Pool of Potential (Second-Career) Teachers (2008). Retrieved January 14, 2009, from <http://www.insidehighered.com/layout/set/print/news/2008/09/10/teaching>
- Theriot, S. (2007). Challenge and discussion of second career middle level pre-service teachers during teacher education process. *Current Issues in Middle-Level Education*, 13(1), 1-10.
- Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W.K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248. <http://dx.doi.org/10.3102/00346543068002202>
- Tschannen-Moran, M. & Woolfolk-Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education* 17(2), 783-805. [http://dx.doi.org/10.1016/S0742-051X\(01\)00036-1](http://dx.doi.org/10.1016/S0742-051X(01)00036-1)
- Valcour, P.M., & Tolbert, P. (2003). Gender, family and career in the era of boundary lessens: Determinants and effects of intra-and inter-organizational mobility. *International Journal of Human Resource Management*, 14(5), 768-787. <http://dx.doi.org/10.1080/0958519032000080794>
- Wang, J., Spalding, E., Odell, S.J., Klecka, C.L., & Lin, E. (2010). Bold ideas for improving teacher education and teaching: what we see, hear, and think. *Journal of Teacher Education*, 61(1/2), 3-15. <http://dx.doi.org/10.1177/0022487109349236>
- Watt, H.M.G., & Richardson, P.W. (2007). Motivation influencing teaching as a career choice: development and validation of the FIT-Choice Scale. *The Journal of Experimental Education*, 75(3), 167-202. <http://dx.doi.org/10.3200/JEXE.75.3.167-202>
- Watt, H.M.G., Richardson, P.W. (2008). Motivation, perceptions, and aspirations concerning teaching as a career of different types of beginning teachers. *Learning and Instruction*. 18(5), 408-428. <http://dx.doi.org/10.1016/j.learninstruc.2008.06.002>
- Watt, H.M.G., Richardson, P.W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U., & Baumert, J. (2012, in press). Motivation for choosing teaching as a career: An international comparison using the FIT-Choice scale, *Teaching and Teacher Education*, doi: 10.1016/j.tate.2012.03.003. <http://dx.doi.org/10.1016/j.tate.2012.03.003>
- Wilcox, D.R., & Samaras, A.P. (2009). Examining our career switching teachers' first year of teaching: Implications for alternative teacher education program design. *Teacher Education Quarterly*, 36(4), 173-191.
- Wolpert-Gawron, H. (2008). My brilliant second career. *Teacher Magazine*, 1-3.