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## FAIRSTEIN ESTHER

## DEVELOPING NOVICE TEACHERS' PROFESSIONAL IDENTITY THROUGH MENTORING

## **SPECIALTY: 531.01. GENERAL THEORY OF EDUCATION**

Doctoral thesis in Pedagogy

Scientific supervisor:

SILISTRARU Nicolae, habilitated doctor, university professor

**FAIRSTEIN Esther** 

Author:

NO

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## FAIRSTEIN ESTHER

## DEZVOLTAREA IDENTITĂȚII PROFESIONALE A PROFESORILOR DEBUTANȚI PRIN MENTORAT

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Teză de doctor în științe pedagogice

Conducător științific:

SILISTRARU Nicolae, dr. hab. în șt. ped., prof. univ.

Autor:

NO

**FAIRSTEIN Esther** 

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#### ADNOTARE

#### Fairstein Esther

Dezvoltarea identității profesionale a profesorilor debutanți prin mentorat,

teză de doctor în științe pedagogice, Chișinău, 2016

**Structura tezei:** introducere, trei capitole, concluzii generale și recomandări expuse în 142 pagini text de bază, bibliografie din 235 surse, 13 anexe, 23 tabele și 15 figuri.

**Publicații la tema tezei**. Rezultatele cercetării sunt reflectate în 9 lucrări științifice, inclusiv: 5 articole în culegeri și reviste recenzate, 4 comunicări la conferințe naționale și internaționale.

**Cuvinte cheie:** profesori debutanți, identitate profesională, dificultăți, mentorat, inducție, mentor, strategii de mentorat, teoria autodeterminării, factori, principii de dezvoltare a identității profesionale a profesorilor debutanți. **Domeniul cercetării: Teoria și Metodologia educației** 

**Scopul cercetării** rezidă în stabilirea reperelor psihopedagogice ale dezvoltării identității profesionale a profesorilor debutanți și elaborarea *Modelului pedagogic de dezvoltare a identității profesionale a profesorilor școlari debutanți prin mentorat.* 

**Obiectivele cercetării:** analiza teoretică a literaturii de specialitate; stabilirea reperelor epistemologice privind dezvoltarea profesională a profesorilor debutanți sub aspectul dificultăților sistemice, pedagogice și emoționale; relevarea specificului programelor de inducție pentru profesorii debutanți; analiza particularităților identității profesionale a cadrelor didactice școlare și sublinierea rolului culturii emoționale a profesorilor debutanți în dezvoltarea acesteia, determinarea dimensiunii formative a procesului de mentorat și stabilirea profilului psihopedagogic al mentorului; elaborarea și validarea experimentală a Modelului pedagogic de dezvoltare a identității profesionale a profesorilor debutanți prin mentorat.

Noutatea și originalitatea științifică este obiectivată de: stabilirea specificului și rolului identității profesionale a profesorilor în dezvoltarea eficacității lor didactice; demonstrarea corelației pozitive dintre suportul acordat de către mentori sub aspect sistemic, pedagogic și emoțional și componentele identității profesionale în timpul primilor trei ani de inducție; delimitarea caracteristicilor profilului psihopedagogic al mentorilor; elaborarea modelului pedagogic ce corelează factorii, condițiile, formele și metodele de dezvoltare a identității profesionale a profesorilor debutanți prin mentorat.

**Problema științifică soluționată** rezidă în fundamentarea teoretico-aplicativă a funcționalității *Modelului pedagogic de dezvoltare a identității profesionale a profesorilor debutanți prin mentorat*, fapt care a condus la eficientizarea competenței profesionale a cadrelor didactice, pentru asigurarea calității educației în școlile din Izrael.

**Semnificația teoretică a cercetării** este argumentată de relevarea fundamentelor teoretice ale conceptului de identitate profesională a cadrelor didactice; argumentarea importanței mentoratului pentru integrarea tinerilor specialiști în sistemul educațional și pentru stimularea dezvoltării lor profesionale; elaborarea instrumentelor de cercetare a identității profesionale în planul dezvoltării acesteia prin mentorat.

Valoarea practică a cercetării este susținută de relevarea dificultăților profesorilor debutanți; analiza programelor de inducție din perspectiva dezvoltării identității profesionale a profesorilor debutanți; elaborarea și validarea ansamblului de instrumente pedagogice, concentrate în *Modelul pedagogic de dezvoltare a identității profesionale a profesorilor debutanți prin mentorat*, care oferă conceptorilor de politici educaționale/de curriculum psihopedagogic universitar și managerilor formării profesionale a cadrelor didactice repere epistemologice și modele praxiologice privind dezvoltarea identității profesionale a cadrelor didactice repere

**Implementarea rezultatelor științifice:** Instrumentarul didactic elaborat a fost implementat în cadrul seminarelor formative pentru profesori debutanți și mentori, în procesul educațional din cadrul școlilor experimentale din Izrael, precum și prin intermediul publicațiilor și comunicărilor științifice.

#### АННОТАЦИЯ

#### Фаершейн Эстер

#### **Развитие профессиональной идентичности начинающих преподавателей посредством наставничества,** докторская диссертация по педагогике, Кишинев, 2016

Структура диссертации: аннотация (на румынском, русском и английском языках), список сокращений, введение, три главы, библиография содержащая 235 источников, 142 страницы основного текста, 23 таблицы, 15 рисунков, 13 приложений. Публикации по теме диссертации: 9 научных работ (5 статьей в специализированных журналах, 4 тематических докладов). Ключевые слова: начинающие преподаватели, профессиональные трудности, наставничество, наставник, теория самоопределения, профессиональная идентичность, стратегии наставничества, индукция, факторы, принципы развития профессиональной идентичности начинающих преподавателей. Область исследования: Общая теория образования.

Цель: Создание психолого-педагогических основ для разработки Педагогической Модели развития профессиональной идентичности начинающих преподавателей посредством наставничества. Задачи исследования: теоретический анализ литературы по данной теме; определение эпистемологических основ профессионального развития начинающих преподавателей с точки зрения системных, образовательных и эмоциональных трудностей; определение специфики профессиональной идентичности преподавателей подчеркивая роль эмоциональной культуры начинающих преподавателей в ее развитии; разъяснение роли наставничества в развитии профессиональной идентичности начинающих преподавателей; выявление психо-педагогического профиля наставника; разработка И экспериментальное обоснование Педагогической Модели развития профессиональной идентичности начинающих преподавателей посредством наставничества.

Научная новизна диссертации состоит в разработке концепции развития идентичности преподавателей. профессиональной начинающих В демонстрации положительного соотношения между поддержкой начинающих преподавателей в трех областях (системной, педагогической и эмоциональной) в течение индукции (первые три года после вступления в должность) определение психо-педагогического профиля наставника, разработка педагогической модели, которая коррелирует факторы, условия, формы и методы развития профессиональной идентичности начинающих преподавателей посредством наставничества. Актуально-значимая научная проблема, решённая в данной области, состоит в обосновании теоретической и практической функциональности Модели развития профессиональной идентичности Педагогической начинаюших преподавателей посредством наставничества с целью улучшения профессиональной компетентности и обеспечения качества образования в школах Израиля.

**Теоретическая значимость** заключается в подчеркивании научных доводов по поводу значения развития профессиональной идентичности начинающих преподавателей, утверждение важности наставничества для начинающих преподавателей в процессе интеграции в систему образования и профессионального развития; разработка инструментов исследования профессиональной идентичности начинающих преподавателей в плане ее развития путем наставничества.

**Практическая значимость:** разработка и экспериментальное обоснование *Педагогической Модели развития профессиональной идентичности начинающих преподавателей посредством наставничества*, отражение факторов и условий развития профессиональной идентичности начинающих преподавателей, разработка стратегий развития профессиональной идентичности начинающих преподавателей посредством наставничества и практических рекомендаций.

**Внедрение научных результатов.** Результаты исследований были утверждены в рамках научных конференций, симпозиумов и научных журналах и были протестированы в доуниверситетских учреждениях Израиля.

#### ANNOTATION

**Fairstein Esther** 

Developing novice teachers' professional identity through mentoring,

Doctoral thesis in Pedagogy, Chisinau, 2016

**Thesis structure:** Annotation (Romanian, Russian and English), abbreviations list, introduction, bibliography containing 235 references, 142 pages of basic text, 23 tables, 15 figures, 13 appendices. **Publications**: the research results are reflected in 9 scientific articles, including 5 articles in educational journals, and 4 communications exposed at national and international conferences.

**Keywords:** novice teachers, professional identity, mentoring, mentoring strategies, novice teacher's difficulties, novice teacher's support, induction, factors, self-determination theory.

Field of the research: Theory and methodology of education

**Research goal** consists in establishing the psycho-pedagogic premises of novice teachers' professional identity development and in elaborating the *Pedagogic model for developing novice teachers' professional identity through mentoring*.

**Research objectives:** analyze professional literature; establish epistemological highlights of novice teachers' professional development in terms of systemic, pedagogic and emotional difficulties, reflect the aspects of induction programs for novice teachers, analyze the peculiarities of teachers' professional identity; underline the role of novice teachers' emotional culture in shaping their professional identity; point out the formative dimension of the mentoring process; outline mentor's profile, elaborate and validate the *Pedagogic model for developing novice teachers' professional identity through mentoring*.

**Scientific novelty and originality** are objectified by the theoretical and practical substantiation of novice teachers' professional identity development, by proving the positive correlation between the support provided to novice teachers by mentors at systemic, pedagogic and emotional levels during induction, by establishing the characteristics of mentors' psycho-pedagogic profile, by elaborating the Pedagogic model correlating the factors, conditions and methods for developing novice teachers' professional identity through mentoring.

Substantiating the theoretical and applicative functionality of the *Pedagogic model for developing novice teachers' professional identity through mentoring*, aimed at improving professional competence in line with professional standards, in order to ensure education quality in Israeli schools, constitutes the **scientific problem solved** in our research.

The theoretical significance of our research consists in highlighting the scientific arguments as related to the importance of developing teachers' professional identity; in explaining the importance of mentoring for integrating novice teachers in the system of education and for stimulating their professional development, in elaborating the tools for investigating the development of novice teachers' professional identity through mentoring.

The practical value of the work is supported by the establishment of novice teachers' difficulties at their admission in the educational system, the analysis of induction programs aimed at facilitating novice teachers' professional development, elaboration and validation of a set of pedagogical tools concentrated in the *Pedagogic model for developing novice teachers' professional identity through mentoring*, and by the formulation of practical recommendations.

**Implementation of scientific results:** The didactic materials elaborated during the investigation were implemented in the frame of formative seminars for novice teachers and mentors, in the educational process carried out in Israeli schools, as well as by means of publications in educational journals and scientific communications.

### **ABBREVIATIONS LIST**

ALACT	—	Action, Looking back, Awareness of, Creating alternatives, Trial
DCC	_	District Counsellor and Coordinator
EC	_	European Commission
EU	_	European Union
NCTAF	_	National Commission on Teaching and America's Future
NTC	_	Novice Teacher Centre
OECD	_	Organisation for Economic Co-operation and Development
UCLA	-	University of California, Los Angeles
USA	-	United States of America

#### **INTRODUCTION**

Theme relevance: Educational experts have defined teaching as the most important component of education. In this context the journal *A Handbook for Policy Makers*, issued by the European Commission, emphasizes that the teacher is the most influential factor determining the quality of education in schools [47]. Policymakers and education specialists underscore the fact that pupils' achievements depend directly on teachers' qualifications and on the teaching methods used, the latter being based on the knowledge, skills and commitment they bring to the professional field [47], [55], [74]. Therefore, the need for qualified teachers who are properly trained is as timely as ever, for schools make great efforts to hire the most talented teachers. At the same time, great importance is attached to curriculum and to the training of prospective teachers [184]. In parallel with teacher training, it is important that national strategy focus on developing a coherent policy with decent resources and guaranteed quality, during the induction stage.

Novice teachers set out with high hopes and motivation in education. They exhibit a sense of mission, love for children and for their profession, and believe in the importance of education. They usually enter the classroom with high expectations from themselves and from their students, feeling that through their influence they can make a change in society [22], [83], [205]. The higher their expectations and dreams, the greater their disappointments. Novice teachers who had only a few months earlier completed their training are now required to demonstrate impressive results with their students, maintain good work relations and communication with their colleagues, face demanding and complaining parents, be under principals and inspectors' watchful eye, and fulfil all responsibilities of a regular teacher [22], [122]. As a result, the novice teachers deal with various difficulties: difficulties in adapting to the educational system, pedagogic difficulties, difficulties in interacting with students, and difficulties in developing their professional identity [5], [102], [122], [171], [214, p.78]. The range of difficulties create a situation of "classroom shock", characterized by the struggle to survive and loss of ideals [56], [88], [198], [205], leading to frustration, isolation, alienation and loss of self-confidence from the professional point of view [2], [47], [63], [222, p.35]. The above mentioned factors create an emotional load, affecting teachers' decision as to whether stay in the system and making them wonder about the kind of teachers they will be [100]. Consequently, the actuality of our research ensues from: the need to motivate novice teachers to stay in the system [32]; the responsibility to enhance novice teachers' didactic activity [21]; the deficient valuation of mentoring in developing novice teachers' professional identity; the need to stimulate collaboration between novice teachers and their mentors [34]; the necessity to empower mentors towards novice teachers' efficacy and pupils' achievements.

Documentation on the development of teachers' professional identity through mentoring revealed *several contradictions* between:

- the emotional difficulties experienced by novice teachers and their professional obligations;
- the pedagogical knowledge gained by novice teachers during initial training and their needs on the ground;
- the experiential support related to the system and novice teachers' needs.

Many countries deal with these contradictions using special induction programs where all of them emphasize mentoring. However, the contradictions listed above, along with the references that are almost general rather than specific to the nature of assistance and the strategies the mentor uses, the dynamics formed between the two, the fields in which the mentor assists the novice teacher, and the impact of assistance beyond here and now, lead to the *research problem* that consists in substantiating the conditions and factors of developing novice teachers' professional identity through mentoring, so as to improve their professional competence in line with professional standards.

Often, because of emotional distress, novice teachers attach great importance to emotional support and are not always aware of the tools, directions, advice and guidance that mentors provide them with.

For better understanding the mentor's role and for preventing misinterpretations, we'll start by defining the meaning of the word mentor. According to the explanation offered by the EXD of Romanian language, the word mentor means "spiritual guide, advisor, preceptor, educator" [76, p. 620]. In Article 3 of the Education Code of the Republic of Modova the mentor appears as follows: "experienced teaching or management staff, with the role of guiding other debutant teaching and management staff; or experienced professional staff, who provides support for personal and professional development" [7]. Being made known by F. Fenelon [57], through his work "The adventures of Telemac", the mentor is defined by other authors as "a model that guides the student to become what he can actually become on the basis of his qualities and orients him towards the ways and experiences that lead to self-achievement" [71]. Other authors sustain the idea according to which "the mentor serves as an expert and guide that can determine a young person to become what he should be and offer the tools necessary to reach this goal."

C. Schifirnet [12] urges us to differentiate between mentor and model, stating that a model can be any historical or scientific personality (even from different epochs), whereas the mentor is a living personality with whom the student/novice teacher communicates on a permanent basis. According to the same author, mentoring is a way of protecting the young from inappropriate influences and from straying in ways that could be dangerous for their spiritual

*evolution*. Article 5 also emphasizes the difference between experienced and novice teachers: "Practical mentoring shall be carried out through guiding by an experienced teaching staff of the trainee" [7].

**Description of the situation in the research field and identification of research problems.** The literature of the field outlines several directions conceptualizing the notion of initial training that served as a foundation of the present research. The issue of novice teachers' professional identity was addressed by various researchers: theoretical approaches in valuing the concept of *induction* courses are presented by P. Hudson, C.A. Bartell, A. Fenwick, M. Marable, L.Goldrick; methodological approach to *teachers' professional competence*: D. Maskit, S.P. Nahal, C. Rodgers, K. Scott; *mentor's educational role* during tenure was reflected in the works of G. Goldenberg, A. Shaz-Openheimer, S. Fisherman, Patrick F., E. Fairstein etc

In the Republic of Moldova, there have been studies related to teachers' professional training on different dimensions: N. Silistraru, M. Cojocaru-Borozan studied teachers' cultural and emotional intelligence; T. Callo, L.Pogolşa, V. Andriţchi, O. Dandara- career design, independent learning as a way of forming professional competence; V. Gh. Cojocaru, Dm. Patraşcu, N. Garştea- novice teachers' professional competence development; A. Cara, Vl. Gutu, Dm. Patraşcu - Standards of teachers' continuous training, N. Globu- postmodernist paradigms in initial training; V. Goraş-Postică, R. Bezede - educational leadership etc.

Considering the value of investigations objectified in the works of the nominated researchers, we mention that the aspects of novice teachers' professional identity development through mentoring, with openings to scientific substantiation of a theoretical and practical character have not been subject to particular studies in Israel and Moldova.

**Research goal** consists in establishing the psycho-pedagogic premises of novice teachers' professional identity development and in elaborating the *Pedagogic model for developing novice teachers' professional identity through mentoring*.

**Research objectives:** analyze professional literature; establish epistemological highlights of novice teachers' professional development in terms of systemic, pedagogic and emotional difficulties, reflect the aspects of induction programs for novice teachers, analyze the peculiarities of teachers' professional identity; underline the role of novice teachers' emotional culture in shaping their professional identity; point out the formative dimension of the mentoring process; outline mentor's profile, elaborate and validate the *Pedagogic model for developing novice teachers' professional identity through mentoring*.

Scientific novelty and originality are objectified by the theoretical and practical substantiation of novice teachers' professional identity development, by proving the positive correlation between the support provided to novice teachers by mentors at systemic, pedagogic

and emotional levels during induction, by establishing the characteristics of mentors' psychopedagogic profile, by elaborating the pedagogic model correlating the factors, conditions and methods for developing novice teachers' professional identity through mentoring.

Substantiating the theoretical and applicative functionality of the *Pedagogic model for developing novice teachers' professional identity through mentoring*, aimed at improving professional competence in line with professional standards, in order to ensure education quality in Israeli schools, constitutes the **scientific problem solved** in our research.

The theoretical significance of our research consists in highlighting the scientific arguments as related to the importance of developing teachers' professional identity; in explaining the importance of mentoring for integrating novice teachers in the system of education and for stimulating their professional development, in elaborating the tools for investigating the development of novice teachers' professional identity through mentoring.

The practical value of the work is supported by the establishment of novice teachers' difficulties at their admission in the educational system, the analysis of induction programs aimed at facilitating novice teachers' professional development, elaboration and validation of a set of pedagogical tools concentrated in the *Pedagogic model for developing novice teachers' professional identity through mentoring*, and by the formulation of practical recommendations.

**Approbation and implementation of research results:** The didactic materials elaborated during our investigation were implemented in the frame of formative seminars for novice teachers and mentors within Kaye College of Israel, in the educational process carried out in Israeli schools, as well as by means of publications in educational journals and scientific communications. The researcher participated in four international symposia: *Changing Reality through Education*, VI-th edition, Public Responsability in education, Constanța, 2014; *Measurement and Assessment in the Service of Learning*, Van Leer Institute, Jerusalem, Israel, 2014; *Актуальные научные исследования в современном мире*, Ukraine, 2015; *Prerogativele învățământului universitar în contextul societății bazate pe cunoaștere*, conferința științificometodică, UST, Vol. I, Republic of Moldova, 2014.

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**Thesis structure:** Annotation (Romanian, Russian and English), abbreviations list, introduction, bibliography containing 235 references, 143 pages of basic text, 18 tables, 13 figures, 13 appendices.

**Keywords:** novice teachers, mentoring, professional identity, strategies of mentoring, motivation, novice teacher's difficulties, novice teacher's support, induction etc.

**Publications**: the research results are reflected in 9 scientific articles, including 5 articles in educational journals, and 4 communications exposed at national and International conferences.

#### **Dissertation structure**

In **Introduction** it is described the relevance and the importance of the research problem, as well as the research purpose, objectives, novelty and research value. It also includes the research theoretical and practical significance, the main investigation results and the summary of thesis compartments.

CHAPTER 1, Theoretical approaches on the development of novice teachers' professional identity, opens with a general reference to the importance and need for good teachers on a global scale, followed by the presentation of the gap between the ideal and existing situations, i.e. between the feelings, aspirations and dreams of teacher trainees on the one hand, and the reality that greets them, on the other. This chapter presents the systemic and pedagogic difficulties that novice teachers have to cope with, and the impact that these difficulties have on them to the extent of profession dropout. Its second part presents the programs that have begun to be formulated in Europe, the USA and Israel with the intention to help novice teachers at this stage of their professional career. The third part of this chapter deals with the definition of the concept of "professional identity". It starts by presenting four basic assumptions made by C. Rodgers and K. Scott in connection to professional identity[129], and continues with the analysis of professional identity indicators (certainty in choice of profession, self-efficacy, sense of mission, and the prestige of the teaching profession), selected according to the definition of S. Fisherman and I. Weiss [179]. This is followed by the description of the incipient development of novice teachers' professional identity during their induction into the educational system, in keeping with the basic assumptions of C. Rodgers and K. Scott [129] and the indicators of professional identity according to S. Fisherman and I. Weiss [179]. The conclusions of this chapter deal with the link between induction programs and development of professional identity according to the stated parameters.

CHAPTER 2, The impact of mentoring on the absorption of novice teachers in the educational system, presents the recognition of the importance of mentoring, including an outline of mentor's characteristics. Following an in-depth look at mentor's traits, novice teachers' difficulties are revisited, with an emphasis on their difficulties in interacting with children, their emotional coping in all senses of the word, and the effect this has on the processes of professional identity development. This chapter attempts to position mentors in the processes of professional identity development due to their unique characteristics, tying this in with the basic assumptions that were presented in the first chapter and the indicators of professional identity according to S. Fisherman and I. Weiss [179], mentors' role and the way in which they can help novice teachers and guide them safely and surely during their entry into the teaching profession. It also describes different strategies used by mentors in the mentoring process and presents the pedagogical model of developing novice teachers' professional identity through mentoring. The chapter culminates with a summary presenting the correlation between desirable mentor's characteristics and the various components of professional identity. The recognition that every novice teacher finds himself in a different place has received support in the professional literature [29], [177], [199]. This leads to the conclusion that it is necessary to

judiciously match mentors to novice teachers, to adapt mentoring strategies to novice teachers under charge, based on the understanding of the importance attached to novice teachers' needs and mentors' role during novice teachers' induction processes.

CHAPTER 3, Methodology of developing novice teacher's professional identity through mentoring, is divided into two parts. The first part deals with the determination of novice teachers' professional identity level. It includes the presentation of research methodology, findings and discussion. The second part exposes the formative experiment that was carried out in light of the conclusions of the first part. It contains both the formative and the control experiments. The formative program was carried out according to self-determination theory [43], [44] and had the following objectives: to identify whether mentors influence novice teachers' self-actualization, teaching competence, integrative and autonomous motivations, that constitute an integral part of their professional identity; to assess the importance of the mentoring process that emphasizes the support of the three basic needs according to selfdetermination theory [43], [44]; to enable mentors to provide maximum support in developing novice teachers' professional identity. The findings revealed the differences in integrative motivation and autonomous motivation on the part of novice teachers between the two groups. On the other hand, an increase in the feeling of competence was noted with all the teachers who had worked with mentors, a fact that underscores mentor's contribution and the importance of empowering him and planning his professional development.

**The General conclusions and recommendations** present the synthesis of our research results, as well as recommendations for activities in the systemic domain and for further research.

## 1. THEORETICAL APPROACHES ON THE DEVELOPMENT OF NOVICE TEACHERS' PROFESSIONAL IDENTITY

# 1.1.Psycho-pedagogic implications of novice teachers' difficulties in adapting to the educational system

The teacher is considered the most significant component of the teaching profession. The publication *A handbook for policymakers* issued by the European Commission identified teachers as being the most important element influencing the quality of education in schools. Policymakers and educationists have realized that the extent of learning, on the part of students, stems directly from the subjects and instructional methods of their teachers, these being a function of the knowledge, abilities and commitments that they bring with them to the profession [47], [55], [74], [96]. In light of the agreement that students must be trained in the skills required for the 21st century in general, and the age of knowledge in particular [133], the need for top quality teachers was never greater, and schools are making huge efforts to attract the most talented teaching personnel [22]. Teaching is gaining ground as an important profession, and it is vital that it becomes a more attractive vocation. At the same time, great importance is attached to the syllabus and the process of instructing potential teachers [184]. In parallel, teachers must have sufficient incentives during the course of their career to be able to refresh their learning needs and acquire new knowledge, skills and abilities [47].

The first year of work is significant for novice teachers. They come with a sense of euphoria, with great excitement, hopes and motivation – "I am very excited ... I feel quite ready ... and now I feel that this really is what I want to do" [222, p. 441]. The professional literature cites examples of beginning teachers arriving with a commensurate sense of competence – "Many new teachers enter their first year believing that they know how schools work, what their students need and how to teach them" [86, p. 13] – and with a feeling of motivation, a belief in education and that they have the ability to influence the students – "I believe that teachers can change the life trajectory of children"; "I want students to love English and find magic in the study of writing" [83, p. 234]. The novice teachers arrive with motivation and enthusiasm in education. They are infused with a sense of mission, they like to work with children, love the profession and they influence teachers wield, and believe in the importance of education. They enter classrooms with high expectations of themselves and their students, and feel that by influencing their students they can make a change in society [22], [83], [205].

I. Friedman [180] defined the expectations of teachers entering the system in terms of three aspects: (1) The social aspect – a principal who is supportive, considerate and encouraging on the one hand, and acceptance of the novice teacher as a leader by the students on the other; (2) The organizational aspect – clear and supportive organizational culture, clear-cut regulations,

collaboration, consistency, etc.; (3) The psychological aspect – an important factor allowing self-fulfilment, self-esteem and professional development.

C. Bartell [22] also presents the conclusions of the early research of S. Johnson et al. [82] that good pay and high status could attract those with the will to the teaching profession, but are evidently not enough to make them stay in it. The research points to the fact that the best teachers remain on because of inner motivation.

The induction stage is a part of the teacher development process [8]. The process of teachers' professional development is composed of three stages. The first stage (pre-service) consists of training and deals with a change in beliefs, logic and personal knowledge regarding teaching and schools, aimed at transforming them into a personal commitment. This stage also develops a firm basis in terms of knowledge. The second stage is induction and spans a period of several years. This is an intermediate stage, in which novice teachers develop their professional identity and practice in keeping with their professional vision regarding quality instruction. The third stage is the in-service stage, when the teachers have already been absorbed into the system and are acquiring flexibility and in-depth understanding that will enable them to hone their teaching skills and develop a professional direction [55].

M. Huberman defined three stages in the career of teachers, except that his theory begins with internship, passes through a mid-career stage, and ends in a late-career stage. The researcher divided each of the basic stages as follows: (1) entry career – the initial years of work, a stage in which the student becomes a teacher and one that is characterized by survival, learning and a search for ways to influence students; (2) the second stage is divided into three sub-stages: stabilization (4-6 years), characterized by building up confidence with respect to ability and feeling of ease with respect to fulfilling one's role as a teacher and carrying out the assignments that this role involves; experimentation (7 to 25 years) characterized by new experiences, a search for challenges and incorporation of creativity, with some teachers being more selfconfident and therefore open to criticism, and others experiencing crisis; and finally "taking stock", manifested in reflective contemplation of career and, at times, in a mid-life crisis, leading to further thinking about the career choice and decision-making regarding future; (3) the third stage is composed of two sub-stages – serenity and conservatism (45 to 55 years), the last stage in a teacher's career, when he has accumulated more than 30 years' experience), typified by calmness, a sense of exaltedness and self-acceptance; and disengagement (beginning at times in the previous stage), typified by tranquillity and a high sense of satisfaction in some teachers, and bitterness in others [80]. M. Huberman claimed that despite the above outline, it should not be considered linear as the individual's personality would have an effect on his development.

S. Feiman-Nemser [177], in contrast, focusing on teacher's professional development claimed that the three-stage continuum will allow professional development of top grade teachers based on two concepts: (1) the process of higher teacher efficiency takes place over time and under suitable conditions; (2) teachers in different stages of their career have different learning needs [177, p. 13]. This continuum is a particularly significant factor in light of the increasing need for such professionals, with the emphasis on teachers of calibre who could be expected to cope with a myriad of major tasks. As tasks increase in number, so do the expectations that the teachers will be concerned individuals, able to examine, reflect, at the same time continuing to nurture and develop personal knowledge and experience [22], [122]. What makes teaching special relative to other professions is the fact that the system expects novice teachers – who just a few months earlier, during their training period, committed mistakes accepted with understanding and received constructive feedback from their training colleagues and pedagogic staff – to conduct themselves like experienced teachers. Once on the job, they are required to integrate rapidly, demonstrate impressive results with their students, maintain good work relations and communication with their colleagues, face demanding and complaining parents, be under the principals and inspectors' watchful eye, and fulfil all responsibilities of a regular teacher – all this before they have acquired a full professional identity and skills commensurate with teacher behaviour [88], [178], [184], [198], [209].

The processes that novice teachers undergo are virtually universal. In researches conducted in European countries, USA, New Zealand and Israel [47], [66], [214, p.79], it is possible to find common areas, representing the difficulties that novice teachers cope with and the sense of "sink or swim" that is referred commonly in the professional literature [22], [67, p.20]. R. Rheingold [209] repeatedly emphasizes the fact that the novice teacher "must remain afloat with what was imparted to him in the initial training", and adds other metaphoric examples, such as "they come like flowers and wilt", "no red carpet is laid for them" and "at times the veteran teachers in the school give them the impression that the school is a battleground". N. Tzabar-Ben Yehoshua [222] compared coping on the part of teaching novice teachers to immigrants arriving in a foreign country with new and different language and customs: the common biography shared by the veteran teachers in the teachers' room, with the language, jokes, gossip and culture of leisure, underscore novice teachers' sense of estrangement - "the illusions, the hopes and the expectations, the despair, crises, sense of loss and the regret intermixed with compromise, resignation and adaptation. Even the intensity of emotion was the same" [222, p. 442].

In the period preceding entry into the classroom the novice teacher is filled with anxiety regarding his success: "In the week before the start of studies I couldn't sleep at nights. I was troubled by thoughts. How would I succeed? How would the students receive me? Have I in

general chosen a profession that is suited to me?" [198, p. 4]. The novice teacher entering the system encounters many and varied difficulties stemming from the complexity of the job and interaction with different entities (students, parents, colleagues, principal, inspector). In the professional literature researchers divide the difficulties into different types: difficulties in adapting to the educational system, pedagogic difficulties, difficulties in interacting with students, and difficulties in developing the professional identity [5], [102], [122], [171], [214, p.79].

Difficulties in Adapting to the Educational System focus on the relations of novice teachers with the teaching staff in the school, the school principal and other educational personnel. They must familiarize themselves with the procedures and expectations of the school, understand the meaning of proper relationships, and learn about the politics of the school and its organizational structure [22]. In a research presented by S. Fisherman et al. [178] on the absorption of the novice teacher in the school, interviews with novice teachers raised the social aspect as being particularly significant for novice teachers entering the school. It appears that the organizational expectations of the novice teachers focus mainly on the need to belong to the group of teachers that is already part of the school [180]. On the other hand, findings show that many novice teachers do not feel part of their surroundings and do not sense the recognition and appreciation which they think they deserve, impacting their ability to function at a high level of effectiveness [63]. Belonging is essentially perceived as being key to a sense of physical and emotional security and to being accepted, while also serving as a model for comparison and a basis for gauging success. The novice teacher arrives in the school as a newcomer who is not familiar with the organizational culture, "does not know how to form effective and supportive contacts with his colleagues, how to insist on his rights vis-à-vis the principal, what positions he is interested in, what work hours are preferable for him, he does not know how to present an assertive stand towards the principal and the staff," etc. [178, p. 3]. Understanding the organizational reality and the work environment can help novice teachers to gain a basic understanding of the organizational culture of the school and fashion a "tool kit" to cope with problems and difficulties, especially in light that each school is an entity unto itself, with its own uniqueness and complexity. Therefore the novice teacher must be helped to understand the tasks, values, norms, traditions, syllabuses, policies and credo of the school, with all that this implies [113], [205].

Novice teachers must familiarize themselves with work norms and patterns in the system, as there are significant differences between schools. Novice teachers are often sent to work in schools whose background is completely different from their own and this aspect in itself creates difficulties in view of cultural gaps [22]. At other times they are assigned to the most problematic classes in the school with minimum assistance, or the most difficult hours and/or study conditions [17], [209], [225, p.67]. Support for such "harmful" assignments can be seen in the research of M. Donaldson and Johnson [49], who found that novice teachers who are given assignments under challenging conditions (in terms of number of classes, number of subjects, subjects that are different from that in which the novice teachers have been trained) are at a higher risk for dropping out.

Novice teachers report on a certain lack of socialization, struggles with principals and parents and very little appreciation from the general public for the difficult work they are doing [47], [100]. Some novice teachers work alongside veteran teachers, who feel threatened by them from the professional point of view and create a difficult work environment; others work in schools where the principals are clueless regarding the provision of adequate feedback [96]. In a research conducted by A. J. Hobson et al. [77, p.26], 49 out of 73 interviewees, or 67%, emphasized the work load and the requirement for extensive paperwork and unnecessary administrative work alongside the legitimate demands that make up part and parcel of being a teacher. About onethird of the respondents reported poor relations with colleagues and officers in the school, who contributed very little to their adaptation in the system. Some even reported nasty receptions, a lack of sensitivity, hostility and even aggressiveness. Critical examples of this were given by novice teachers who had entered classrooms as subject teachers and were not updated regarding essential information on the students, such as children with special needs, students with problems, students receiving medicinal treatment, etc. A lack of knowledge about details concerning class students could affect the quality of lessons due to the lack of preparation and an inability on the part of the teacher to provide a solution to their unique needs [184].

In a research conducted in the USA following a 50% dropout rate of novice teachers during the first five years, subjects were asked what factors made their absorption in the educational system difficult. Among the factors stated were principals who pursued a policy of pressure, manipulations, lack of trust and lack of active support [102].

**Pedagogic Difficulties** focus on the lack of practical knowledge and skills in class management [88], [104], [209], [214, p.79]. Novice teachers struggle in planning syllabuses and claim that the theoretical background they received in teacher training did not prepare them sufficiently for the daily demands in the classroom and was not constructed on the basis of real-life experiences [112]. These teachers, like their veteran colleagues, bear responsibility for daily decision-making in terms of what and how to teach. Many novice teachers report on a waste of time in searching for learning material, understanding and adapting it to syllabuses, and in developing purpose-oriented lessons. Others, having completed their studies in teacher training institutions or in special programs in university, are equipped with knowledge of the educational

aims, learning theories and strategies, but discover the gap between theoretical studies and the ability to apply them on the ground. In other words the novice teachers are familiar with many theories but their ability to apply them in the numerous fields required of them is deficient [100], [205], [209]. The conventional wisdom among novice teachers with respect to the gap between the ideal (the knowledge required on the ground) and the existing (the knowledge they acquired during their training) creates emotional stress, which does not help them perform their job effectively and, at times, even prevents them from learning and advancing [63]. This stress is unnecessary, especially in view of its basis in the myth that a person completing his studies is qualified to teach. Although the training program lays the essential foundation in all matters relating to learning and teaching proficiency and skills, the novice teachers are in fact learning "how to teach" at this stage of their professional career [177]. An additional point deals with heterogeneous classes and the need to address an increasing diversity, such that novice teachers must frequently focus on individual instruction to meet the needs of all the students, so that they will be able to understand the lesson and gain a sense of equality, confidence and security [112]. There are also classes that include students with learning difficulties who constitute an integral part of the class and they have to be provided with solutions according to their needs. B. Chorzempa [34] tells of her realization regarding the lack of preparedness and knowledge in connection with students with learning difficulties in the first year in school. Novice teachers must plan syllabuses and teach in classrooms that contain students with cultural differences, socio-economic differences, differing abilities, etc., and their training does not always square with reality.

T. Mutton, H. Hagger and K. Burn [111] present the model of Calderhead (1996) on the thought given by experienced teachers to lesson planning, consisting of six stages enabling long-term, intermediate and short-term planning (planning for one week, one day and even for a single lesson). The model helps to understand the complexity of the process as well as the level of unique difficulties that novice teachers face, as demonstrated by the researchers:

- Planning takes place at several levels, the questions here being: Do novice teachers know to plan differentially by the end of their training courses? Additionally, does a novice teacher who has just completed his training have the capability to plan beyond a single lesson or a single unit?
- Mainly formal planning it was found that lesson planning by novice teachers is associated in many cases with formal procedures that are required by school management and it is carried out vis-à-vis this reference point.
- Planning must be creative novice teachers tend to use a specific format in planning their lessons in order to be sure that all the required parameters are taken into account during the

planning process [84]. It follows that instead of reflecting on the range of possible approaches and strategies for planning lessons, they adopt the existing patterns and lesson planning itself becomes a means instead of an end. "If planning is regarded as a psychological process of envisioning future, and of considering goals and ways of achieving them, it follows that beginning teachers (with their limited knowledge and experience) will have less of a scope to plan their lessons in as creative a way as their more experienced colleagues" [111, p. 401].

- Planning must be based on knowledge novice teachers will naturally not have the knowledge that veteran and experienced teachers have and therefore a general dependency is formed that could affect the novice teachers' self-confidence, with the latter focusing on lesson planning and not on the type of planning that would help them attain the goal they have set themselves.
- It is essential to allow flexibility working according to a fixed planning pattern, as
  presented above, does not allow much flexibility, especially in light of the fact, as
  mentioned, that novice teachers have less previous knowledge and experience in lesson
  planning and in planning and implementing strategies.
- Planning must take place in a practical and ideological context every teacher planning a lesson must take into account class-related contexts, namely, timetables, school credo, and other factors. It follows that novice teachers have an additional item that could constitute a difficulty, since they lack this knowledge and these aspects have not yet gelled in their awareness.

A review of the above breakdown shows that it is very reasonable to assume that most novice teachers do not have the abilities to plan a lesson with the same effectiveness as veteran, experienced teachers. This lack of ability naturally poses a difficulty that could cause frustration and a feeling of self-disappointment [50], [53].

L. Orland-Barak and D. Maskit [120] refer to the professional identity crisis faced by many novice teachers who enter the system with the belief in and the will to contribute and make a change. Research and in-depth examination of the narratives in novice teachers' stories (based on a national competition that has been held in Israel for the past 10 years) reveal three dimensions with those who have experienced realization and shattering of the dream of teaching: recognizing the limits to teaching ability; attempting to fulfil the vision, which does not square with reality; and coping with the many voices heard in the educational system. Realizing the limits to teaching, based on the recognition that the vision is not always at one with reality, can lead to much anguish and disappointment in oneself. At times, this is expressed by the novice

teachers as dissatisfaction over the trap in which they find themselves, being caught between pedagogic ideals and the real world of survival in the classroom [120].

**Moldovan Teachers' Professional development.** According to the Strategy for professional continuous training in the educational system of the Republic of Moldova (draft), continuous professional training in the educational system of the Republic of Moldova is focused on achieving the following desiderata: - develop capabilities to design, implement, evaluate/ self-evaluate educational activities; - accumulate, innovate and produce new knowledge for continuous professional training; - monitor the performances and the process of pupil's development; - pedagogical communication, communication with parents and community; - respect pupil's personal necessities and characteristics taking into consideration their age; - develop team work and efficient communication skills, as well as create and maintain an environment of understanding and respect; - develop professional practice, self-training, self-evaluation, monitoring and improvement capacities; - develop capacities for designing and implementing new informational and communicational technologies.

With a view to implementing a permanent monitoring system of teaching career of each teaching/managerial employee and improvements achieved in continuous training there have been elaborated and approved by the National Council for Curriculum as part of the Ministry of Education "Standards for Continuous Training of Teachers". The Standards for continuous training of teachers form a referential framework for the continuous development of professional skills in line with the educational necessities, existing tendencies and the requested didactic degree, as well as with the motivation of self-training and motivation to perform a qualitative didactic activity. The following Fields of Skills are included: 1. Specialty skill 2. Psycho pedagogical skill 3. Psychosocial skill 4. Technical and technological skill 5. Managerial and career management skill The professional skills aim at promoting an efficient policy concerning the teaching staff development, which would guarantee the professional development right of each teacher and at acknowledging teacher's role in cultivating and developing individual, social and European values [226, p. 9]. In Moldova, Teachers' professional development is under the direction of National system of in-service training. The national system of in-service training concerns the totality of bodies, organizations, institutions, economic entities whose activities focus on professional development. There are several types of in-service training: Qualification - building a totality of professional skills required for exerting a specific occupation or profession; Professional development - building new professional skills within the same qualification; Specialization – acquiring knowledge and skills in a specific area of an occupation; Getting a supplementary qualification – acquiring special knowledge and specific skills required to exert a new occupation or a profession related to the previous one;

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Requalification – acquiring new competencies required for exerting a new occupation or profession, different from the previous one. In-service training can be done by the means of: – training courses organized by the employers within their own organizations or in vocational training institutions; – professional development or requalification courses and programmes; – traineeship and specialization courses in different domestic and foreign organizations; – seminars, conferences, round-tables, workshops; – distance-learning courses; – other types of training courses complying with the legislation in force.

Among the institutions which provide in-service training courses for teachers are: Institute of Education Sciences, "Ion Creanga" State Pedagogical University, National Institute of Physical Training and Sports, "Alecu Russo" State University of Balti, Centre for New Information Technologies. The most active non-governmental organizations in this field are the Institute for Lifelong Learning, Pro Didactica Educational Centre, "Pas cu pas" ("Step by Step") Educational Programme, the Independent Society for Education and Human Rights (SIEDO), etc [55].

The trainee's evaluation is done both at the beginning (with a view to identify training needs) and at the end of the training course (to identify the changes). Evaluation sheets and self-evaluation tests furnish comprehensive information concerning further enhancement of training methods. Upon completion of the course, trainees pass tests in psycho-pedagogy, school curriculum and information technologies, consultancy and educational management.

Taking into account the information above, we notice that there are no programs designed especially for novice teachers' professional development, fact that must be considered by Moldovan policy makers and urge them into reviewing the regulation concerning novice teachers admission in the profession.

S. Feiman-Nemser [55] claims that it is important to plan and implement programs that encourage teachers, especially novice teachers, to cope with the difficulties involved in constructing a personal credo, as well as to promote further professional study that will lead to the development of a professional identity.

Whatever might the programs be, they must include the analysis of beliefs and creation of a new vision, side-by-side with development of knowledge in teaching-related topics, of understanding regarding students and learning, of a beginner's repertoire and of tools for teaching teachers. It is very possible that these tasks will be defined by other researchers in a somewhat different manner and/or sequence but the principle lies in a dialogue on the core of practice, continued professional development, and means for coping with the complexities involved in development of a professional identity.

# **1.2.** Analysis of induction programs as mediating factors in the development of novice teachers' professional identity

Novice teachers who come to the educational system with great enthusiasm and readiness to lead the students on to success discover that reality is not always the way they had imagined. The range of difficulties create a situation of "classroom shock", characterized by the sole struggle to survive and a loss of ideals [56], [88], [198], [205] and leading to a feeling of frustration, isolation, alienation and loss of self-confidence from the professional point of view [2], [47], [63], [222]. The teachers cope with daily dilemmas in connection with class management and decision-making and with challenges and disappointments, resulting in a feeling of anxiety – "Did I act properly? Could I have acted differently?" [22], [100].

The novice teachers' perceptions with respect to the work load or to what they consider to be a state of equilibrium in an unconventional work life explains why some of the graduates of teacher training colleges and universities, who have successfully completed their obligations and their year of internship, do not continue in the teaching profession [77]. The load borne by the novice teachers, coupled with many and varied difficulties, the emotional effect and the disappointment stemming from the inability to realize the expectations they had set themselves cause burnout at this early stage of their career [2], [205]. Principals who were interviewed claim that the trauma and disappointment on the part of the novice teachers stem precisely from the confidence with which they had entered the profession and from the intensity of the breakdown they experienced. The novice teacher does not enjoy a grace period and/or "soft landing", and this is the source of the real crisis [209]. The novice teachers refer to emotional fatigue syndrome where people in the profession feel that they are not able to give any more of themselves. Accordingly, they go from the state of caring and intense interest to exhaustion and frustration. And indeed, novice teachers find comfort in attributing their difficulties to the students' character or their parents, or in blaming management [56], [205].

*Environmental factors*, including the school principal and teaching staff, constitute a significant element in the fatigue and burnout experienced by novice teachers and their decision to drop out of the system already at the start of their professional careers. Novice teachers expect these individuals, who constitute significant figures in their professional environment, to care about their welfare and support them, whereas the reality that greets them comes as a nasty surprise, forcing them to confront not only their environment but also the internal conflicts [63].

The above factors together create an emotional load affecting teachers' decision as to whether to stay in the system or to leave, making them wonder what kind of teachers they will be [100]. These factors, alongside with the need to cope with deficits in teaching qualifications, improve students' achievements, encourage additional top grade individuals to join the teaching profession, and enhance the effectiveness of training programs [47] cry out for the development of a policy that will provide a solution to dropout of teachers in the initial years of their career [22], [56], [100], [200]. It is important to understand that apart from the loss of highly talented people who are so vital to the educational system; teachers' dropout affects mainly the students. When a teacher leaves the system, a new and inexperienced teacher takes his place, starting afresh the entire process of induction; the school development at the professional level is thus substantially arrested in terms of resource allocation [49].

R. Goddard and M. Goddard [66] state that the dropout rate of novice teachers in the developed countries of the world [118, p.68] is 30% and is associated principally with teachers' personality traits and their way of coping with difficulties at the outset of their teaching career. If so, the common challenge of educational systems worldwide is to dramatically upgrade optimal absorption of novice teachers and raise the professional level of those undergoing teacher training in order to find the golden mean that will help teachers in their initial years in the profession, reduce the dropout rate and advance their professional development as part of a proactive teaching policy [9], [67], [209]. "Based on this challenge three goals may be derived for the development period: (1) to assist the beginning teachers to make it through the induction stage successfully, amid development of professional work patterns; (2) to give the novice teachers the possibility of experiencing teaching under real conditions; (3) to give the system tools for good induction and evaluation of novice teachers. From these goals we derivate: (1) active and continuous teaching, class management and filling educational positions which he would not normally have the opportunity to do; (2) helping the novice teacher to create for himself additional professional patterns of activity to those he had already acquired during his studies and professional training; (3) improving the system of training for teaching and adapting it to the needs of beginning teachers based on feedback obtained from novice teachers; (4) improving the processes of absorption into the school system and novice teachers' evaluation" [224, p. 39]. The universal challenge, in terms of goals, has led to the planning and implementation of support systems in various countries. Below are examples of three programs for novice teachers induction into the teaching profession.

Educational systems in Europe are under the responsibility of the individual country, but countries belonging to the European Union have recognized the advantages that lie in collaboration, enabling them to plan superior absorption program after placing the quality of teaching together with the quality of teacher learning on their agenda. The Committee for Improvement of Teacher Education has declared that "In view of the increasing demands placed upon them and the growing complexity of their roles, teachers need access to effective personal and professional support throughout their career and, particularly, during the time they enter the

profession. "Efforts should be made to ensure that all newly qualified teachers receive sufficient and effective support and guidance during the first years of their career" [47, p.5]. As a natural course of events, all teachers who continue in the system will pass through three stages, although their professional level will depend on three dimensions of assistance: professional assistance (support in gaining adeptness in the use of essential teaching skills, including pedagogic knowledge and skills); social assistance (being a member of the school community, understanding and accepting the characteristics, norms, customs and organizational structure existing in the school in which they work); and personal assistance (development of a professional identity). *The policy of the induction program in the EU* [9], [47] bases on *interconnected systems:* (1) mentoring system; (2) expert inputs; (3) peer support; and (4) selfreflection.

(1) The mentoring system is manifested on the ground through an experienced teacher who receives a novice teacher under his wing and provides him with support at three dimensions (professional, social and personal). The choice of the mentor is vital: he must be at one with the school policy and vision, but at the same time must be available, capable of containment and willing to provide professional and emotional support. The mentor represents an educational model for the novice teacher and helps him to cope with the difficulties involved in personal and professional socialization during his induction into the profession. The mentor encourages the novice teacher with the help of feedback and emotional support, assists him in overcoming difficult experiences and raising his level of job satisfaction [55], [76], [224].

(2) A system of expert inputs must be initiated in order to ensure professional support to novice teachers. In the system of experts the focus will be on the creation of access to external experts, aimed at expanding the content and enhance the quality of teaching. This can focus on seminars, collaboration in courses between teaching experts, but also on the creation of access to material support: resources and guides.

(3) The peer support will provide opportunities for joint work on entering the school. The system will provide social support at three levels, creating an atmosphere of partnership, allowing novice teachers to see that their problems are identical to those of their colleagues. The peer group must be based on face-to-face encounters but can, to a partial extent also, be virtual. Such a peer system can exist as a "novice teacher workshop" in colleges and universities, as is practiced in Israel. The workshop allows reaching an in-depth understanding with respect to processes and events that have taken place during novice teachers' activity, and serves as a framework for joint thinking on difficulties and development of strategies for coping with them [113], [224]. "The process of event analysis in the workshop must also be a structural and

systematic process in order to constitute a model of self-reflection at two levels: the first level, in easing the burden vis-à-vis unresolved class dilemmas through an environment that focuses on professional support; and the second, in developing reflective thinking on questions that address teachers' professional awareness" [226, p. 46].

(4) Self-reflection must be an integral part of absorption programs for novice teachers, manifested in assistance in the mentoring process and during peer meetings presented above. "Man by his very nature is a reflective being" claim M. Zilberstein and M. Ben Peretz [228, p.5], and the principles of reflective thinking are rooted in the practical thinking proposed by Aristotle ("Phronesis"). This thinking calls for skill, an ability for personal openness, and a capacity for coping with a particular situation. Reflective practice is a task that deals principally with the study of personal experiences in the classroom and therein lies its effectiveness for novice teachers, who wish to examine objectively their experiences so as to enable them to improve. The process involves personal exposure but is based on dialogue, the aim being to "improve habits" and not "improve the person" [124]. Self-reflection ensures continued personal growth, advancement of professionalism and development of long-term learning. Furthermore, provision of an opportunity to encourage novice teachers to carry out self-reflection and to share their experiences with others creates a positive atmosphere, allowing the development of a culture of professionals in partnership.

In the USA, as in other countries, it was realized that the "sink or swim" approach claimed a huge toll from the novice teachers, their students and the school communities – a national problem that called not only for preserving teachers but also for preserving the quality of good teachers [115, p.30]. The understanding is that despite the quality or the source of their training, novice teachers encounter a learning system with serious challenges during their initial years and struggle single-handedly in charting a hazardous course that is characteristic of these years. Based on researches carried out, absorption and induction programs spanning several years are proposed in order to reduce burnout, promote professional growth on the part of novice teachers, provide positive returns on investment and improve student learning [67], [115, p.31]. A random controlled experiment, with federal funding, found that novice teachers who had received two years of comprehensive support produced students with better achievements in mathematics and reading vs. those with students of the same age who had received less support [67].

In light of the above facts, absorption programs began to be implemented in various countries. However, the differences between the programs in terms of goals and courses of action were fundamental (resources, work environment, organizational culture) and the same was true with respect to the job of mentoring, both from the point of view of definition and application on the ground, as well as the number of years of mentoring, which ranged from one

year to five. L. Bartlett and L.S. Johnson [23] critiqued the various support programs in the USA and reached the following conclusions: absorption programs are of great importance to novice teachers and it appears that the number of dropouts decreases as the number of programs increases. The researchers confirmed the conclusion that the mentor has a central role in supporting the novice teacher, in his professional development and in his willingness to remain and persevere in the teaching profession. In addition, the researchers re-examined the relationship found by S. M. Kardos et al. [88] between absorption of the novice teacher and the demographic environment, both from the point of view of resources and work with population. Finally, the researchers related to the relationship between the district and the state. They emphasized the importance of clear instructions and guidelines from the centre, in parallel with a "breathing space" to allow differential room for action. A central system will ensure dissemination of knowledge, expertise and resources in the districts [23].

The Novice Teacher Center (NTC) issued a policy document that reviewed the existing induction programs in each of the states in the USA. The Center declared that the common challenge is to dramatically improve the policy of providing a solution to novice teachers' needs. It prepared a recommendation at a national level, including ten criteria for a policy geared to maximum absorption of educationists in the educational system [67]:

(1) Teachers working in the educational system – all teachers will receive support for the induction stage, during the first two years of their work in the profession.

(2) New principals in the educational system – all school principals will receive support for induction during the first two years of their work in the profession. In addition, the state will provide a comprehensive program for first-rate induction and a model for a program which could serve as a pilot and an example for emulation.

(3) Standard program – learning must be done in the framework of a formal program for standards, including administrative planning and implementation of local induction programs (at the level of district/state). Standards in the program will define a vision for induction, expressing the elements composing a strong induction program, and will provide the desired criteria and answer questions like: Which programs would it be possible and desirable to develop and improve?

- (4) Selection of mentors will be done according to a strict process.
- (5) Training and professional development of mentors as an ongoing process.

(6) Allocation of mentors and reduction of load – the method for allocating between mentors and novice teachers must be defined, in addition to methods for managing them and encouraging programs for providing free time for them to sit together. Effective mentors are the

core of top-grade induction programs, and their selection and training are therefore critical. Mentors must, inter alia, observe novice teachers, converse with them and plan together with them.

(7) Implementation of the program – it's necessary to develop and maintain local induction programs that promote practical application with novice teachers and enhance their effectiveness in the classroom, while identifying critical points with a view to solving them. In order to implement this criterion, the realization of three fundamental elements must take place: Adequate amount of time for mentor-novice teacher meetings, formative assessment of novice teachers' practices and creation of opportunities for novice teachers to be observed in their classrooms and, in parallel, observation by novice teachers of experienced teachers who are willing to undergo scrutiny.

(8) Funding – the state must provide special funding for the support of local programs. Funding constitutes a strategic factor in enabling the state to implement absorption of novice teachers and mentoring as an educational priority. A country that participates in the financing of programs can also intervene in their implementation. In addition, such an investment pays off in the long run by holding on the best teachers and by raising students' achievements.

(9) Education for responsibility – participation and/or completion of the induction program must be required from all novice teachers in order to advance students in the training stage from the status of "teaching cadets" to qualified teachers with a professional teaching license.

(10) Reporting – the quality of the program must be evaluated or supervised throughout the induction stage, with research studies, visits, personal reports and relevant additional strategic tools. The Centre proposes four keys in evaluating the induction program: (a) countries can ensure compliance of the program requirements with national laws, regulations and policy; (b) countries can reduce the disconnection between policy and implementation by examining whether the districts are implementing the programs in line with the state's order of priorities; (c) countries can focus on improving the induction program using analysis of carrying the responsibility and giving opportunities for significant discussion and rich feedback; (d) countries can evaluate the effect of induction programs on student and teacher results in order to demonstrate a positive influence on the teacher's effectiveness, on student learning and on reduction in dropout costs.

Items 4, 5 and 6 refer to the role of mentoring and provide at one and the same time an answer both to the novice teacher population and the population of experienced veteran teachers

whom the system wishes to preserve (mentoring can constitute an additional professional track for advancement and for professional development) [115, p.32].

In 1997 Israel began operating a novice teacher program and a year later novice teachers internship became compulsory for all teachers who are completing their training in a college or university and who are interested in acquiring a license to teach. The novice teacher must work for at least one-third of a position and for at least six months during the academic year [189], [224]. The rationale for internship was presented to the entire educational system community by means of Director General's Circular [189]: "The process of induction into the teaching profession is complex and has a decisive influence on the future professional career of the teacher both from the point of view of his willingness to persevere in teaching and his crystallization of the perception regarding his role and professional identity. A structured track with pedagogic guidance and professional evaluation will allow proper integration into the system, formation of a professional identity, development of a commitment to the profession and prevention of dropouts among top grade teaching staff" [189]. The novice teacher must gain experience with teaching under real conditions.

In Israel, the Teacher Training and Professional Development Administration contains three departments that are organized according to the sequence presented by S. S. Feiman-Nemser [55]: the Teacher Training Department, the Internship and Induction Department, and the Professional Development of Teaching Personnel Department. The researcher [55] referred also to the situation in which there is no connection between the stages. In such a situation the training stage will deal with a collection of unrelated courses and with practical experience that has nothing to do with the program. In the induction stage, the syllabus will not be organized or uniform and mentoring will in fact be an individual process only. The professional development stage will deal with random events and the required continuum for actual professional development stages, just as the three departments are under the same administration. The internship year in colleges is in the fourth year of studies, when the novice teachers have completed 80% of their academic obligations, while the following two years, constituting an integral part of the induction process, are considered part of the teachers' professional development and advancement.

The Director-General's Circular [189] defines the roles of all entities involved in teachers' support at the start of their professional careers. The Internship and Induction Department is responsible for the support and assistance system throughout the three years and for novice teacher' evaluation, during and at the end of their first year of teaching. In order to implement the program, the Ministry of Education [188], [189] operates two departments, including support

systems: the teacher training system in colleges and universities, and the school as an employing agency.

In the college/university weekly internship workshops are held throughout the year, intended to empower the novice teachers through peer support – "in the workshops difficulties, dilemmas, feelings, deliberations, experiments and coping on the ground are raised. The workshop enables observation of events from the perspective of peer group identification and participation, allowing mutual learning from others' experiences. The workshop allows the novice teacher to make connection between theory and practice. Learning in the workshop is rooted in practice, but also sheds light on the perspective of research beyond immediate practice. This combination allows discussion and creation of general principles, theories and abstractions" [224, p. 10-11]. The workshops are accompanied by a qualified professional who bears overall responsibility for formulating content and courses of action both from the pedagogic and administrative aspects. Contact with the novice teachers is intended to assist them on the one hand, and improve and upgrade the processes of teacher training on the other [189], [224]. In addition, the workshop ensures professional continuity for the novice teacher and serves as a link between initial training and integration into the teaching profession [209].

The Internship and Induction Department instituted the position of mentor, who is a teacher with a teacher's license and experience of at least 4-5 years. His role is to support the novice teacher during the stage of his absorption into the educational system and to enable him to develop professionally through ongoing weekly meetings. The mentor must have experience in teaching at least one of the novice teacher's subjects and must be a graduate of a mentor's course [189]. The significant contribution of mentors to novice teachers is reflected in a survey conducted in Israel in May 2010 [221 p.23]. A total of 5000 questionnaires were distributed to novice teachers in the framework of their participation in internship workshops in colleges and universities; 3 000 questionnaires were returned and their results processed using SPSS software. Altogether 92.5% stated that the mentor gave them a sense of belonging and supported them in four areas: instruction, class leadership, integration into the teaching staff of the school, and personally-emotionally. Totally 85.7% of the novice teachers who answered the questionnaires stated that they would have chosen to be in contact with the mentor even if mentoring had not been compulsory, and 81.9% stated that the mentor contributed to their professional development - "The survey shows that the dialogue with the mentor is very significant and improves the balance between the novice teacher's beliefs and thoughts on teaching on the one hand, and his experience in practical teaching, with its failures and challenges in the first year, on the other. Personal weekly mentoring is adapted to novice teachers' needs and ranges from a proactive state to one of ambiguity and subsequent professional interdependency" [224, p.10].

As an extension of the support processes, tools were developed for evaluating novice teacher's performance and his work. These processes constitute a foundation for the formation of novice teachers' professional work patterns, and for decision-making regarding continued work in the educational system. The processes of evaluation include *two principal tools: the first tool is intended for formative assessment*, which takes place at the end of the first semester of the year. Formative assessment must be based on ongoing guidance by the mentor, at least two observations by the mentor, and at least one observation by the principal in the novice teacher's classroom. Formative assessment provides the novice teacher with detailed feedback on his educational and pedagogic work, constitutes a source of professional dialogue, and offers guidelines for further work according to detailed issues. *The second tool* provides an answer for the final evaluation, and involves: the mentor, the school principal. The final evaluation determines the novice teacher's eligibility for a permanent teaching license [189], [224, p. 10]. It is important to note that the novice teacher too performs self-evaluation as part of a reflective process that is intended to add an additional level to the development of professional identity.

Since 2009, as an extension of the rationale of continuous development, novice teachers participate in 40-hour workshops on professional development relevant to their current stage and other 20 hours of guidance are provided by the mentor [189]. From 2013, it was decided that teachers who had been recommended for "an additional probation year" in their evaluation ahead of tenure would receive an additional 20 hours of mentoring. In a research report that addressed this new procedure, it was found that these teachers too receive significant support in systemic, pedagogic and emotional issues [54], [176].

In the wake of various programs, researchers began to examine their effectiveness. J. McIntyre, A. Hobson and N. Mitchell [1063] defining the induction stage as the first three years of didactic activity, present the steps that will in effect be implemented, and claim that there is an overemphasis on evaluation and adherence to standards. In addition, they note that despite the policy that has been defined, there are still schools in which the program does not exist and in which no support is provided, resulting in a lack of professional development on the part of novice teachers and ultimately to their dropping out. *The researchers once again place the novice teacher and his needs at centre stage, while raising six fundamental points based on the research literature that can help the programs to succeed: (1) Ongoing learning and professional development between training and induction stages; (2) Nurturing reflection among novice teachers in order to assume responsibility for their professional development and for forming professional identity, as proposed in the model of the European Union; (3) Treatment of each novice teacher individually while meeting his personal needs; (4) Consideration of novice teachers in various networks, allowing* 

them to share their problems and discuss ways of dealing with them, based on a relationship of trust, support and choice. The networks can exist in different places and even be virtual, with emphasis on the aspect of belonging on the novice part of the teacher; (6) Creation of fertile ground for learning, motivation, perseverance and professional development by the novice teachers through an organizational culture of professional development, clear procedures, and a relationship of mutual trust in schools. In order to support their statements, the researchers [106, p.45] examined the induction program that was in operation at the university, where the emphasis was placed on the principal points that they had proposed. They found that the program provided accessibility to the support network, assisted and nurtured the process of selfreflection, and in parallel provided an answer to novice teachers' special needs. The program created a continuous process of professional development on the part of the student, from "teaching cadet" to forward-looking novice teacher, as recommended by S. S. Feiman-Nemser [55]. At the same time, the researchers emphasize the finding that the success of the program is directly related to the commitment and expertise of the program head and the involvement on the part of additional staff members.

Other researchers claim that beyond planning and implementation of induction programs, great importance is attached to the appropriate assignment of the novice teacher in terms of age group and study subjects in which he is qualified. In their claim, assignment of teachers affects their sense of capability and this, in turn, impacts their perseverance and willingness to continue to work in the school. It follows that unsuccessful assignment will exacerbate the dropout trend by creating a low sense of capability [49], [113].

There is no doubt that the reference point of novice teachers who come to a school that is suited to them is different from that of novice teachers who come to a school where the organization culture is not in keeping with their beliefs. J. Rippon and M. Martin [128] also decided to examine the question of "what is a good assignment" in the eyes of the novice teachers. The researchers obtained the following findings: It was important for the novice teachers to obtain information on school policy, on existing procedures and resources in the school, on mentors' support and receipt of feedback, as well as real help in improving the level of teaching and refresher [128]. These findings are in line with the conclusions of P.R. Hallam et al. [72] emphasizing that a supportive school work environment, based on a culture that upholds good relations between colleagues, will have a positive impact to the extent of 30% on perseverance, will enhance novice teachers' support by assigning them facilitating functions and selecting suitable mentors.

"The findings show that despite difficulties and deficiencies, induction programs play an important role in the initial steps of the beginning teacher. Most of the novice teachers assess

their experiences during the course of their internship as being positive and even essential for entering the profession and for making transition from teaching students to class teacher, with all that this involves" [113, p. 84]. Apart from this, support for novice teachers on entering the system can yield additional, indirect results. For example: strengthened expertise of the mentors as a result of training for mentorship and engagement in the mentoring process; gain of new ideas and diverse approaches, undergo a process of renewal, upgrade their strategies and styles, and improve their communication skills and ability for self-reflection. Mentors who have undergone training, report on greater self-confidence and on improved relations with both students and colleagues. They feel satisfaction and pride in the role of mentor, especially when the novice teachers they support succeed in advancing. Improvement of the internal communication system in schools increases in proportion to the mentoring process and teachers request to be involved, raising their commitment and desire to persevere in work in the schools in which they teach [76], [181]. The process eventually leads to the development of school population, both at interpersonal and professional levels, the ultimate beneficiaries being the students.

C. Bartell [22] and NCTAF [115] add a claim that the early years constitute opportunities for developing teaching in a way that will lead to the success of both teachers and students. They [22] refer to significant gains that can already be seen in the induction programs operated in the USA, which span (as mentioned) one to five years:

- High staying rate of novice teachers and a reduced dropout rate;
- Higher level of professionalism and satisfaction;
- Better performance by teachers;
- Early identification of weak teachers in need of support or drop out;
- Pursuance of teaching methods leading to a higher level of achievement by the students;
- Wider range of teaching methods and strategies;
- Improved ability on the part of novice teachers for reflective review of their work;
- Establishment of professional norms in a peer framework and continued professional development by teachers;
- Significant reduction in the costs incurred as a result of teacher dropout.

However, a research conducted in Scotland found that there were places where the support programs focused on the first year but problems appeared in subsequent years [58]. The years following internship constitute an important stage in the professional development of novice teachers and the rising awareness of this on the part of decision-makers can be seen through the development of multiannual programs [58]. An example confirming the findings of A. Fenwick [58] and relating to mentors' contribution in the year following internship, can be
found in a survey conducted in Israel in 2010 [221]. A total of 346 teachers who had successfully completed their year of internship and who had received their teachers' license participated in the survey at the end of their second year of work in the educational system, after taking part in a 40-hour workshop in college/university and received personal guidance for a period of 20 hours. Altogether 95% of respondents claimed that the mentor gave them a feeling of belonging and 87.4% stated that they would choose to be in contact with the mentor even if the program was not compulsory. A total of 85.5% of teachers stated that the mentoring process contributed very much to their professional development.

True success of the induction program would be characterized by the ability of novice teachers to cope with the difficulties manifested in quality teaching on their part and in perseverance in the school to which they have been assigned. Novice teachers who can be defined as examples of a successful absorption program demonstrate not only good teaching but also involvement in school activities, internal processes of change, acceptance of leadership roles, firm commitment to their students, and initiation of ways to deal with difficulties [37]. Optimal and significant induction would span the three stages in the teaching profession, such that one stage would stem from the other, enabling the novice teacher to develop along with the development of his professional identity. It is important that, in parallel with all support dimensions, the novice teachers were able to form their professional identity, so that they could give expression to their inner self, give of themselves to their students, later being able to fulfil themselves and their abilities and enjoy high achievements.

## 1.3. Conceptual highlights on novice teachers' professional identity

Identity is an integral part of personality psychology, the latter being defined as a complex system of psychological traits that influence behaviour patterns characteristic of the individual in different situations and over time [182, p. 677]. A general review of the literature sheds light on definitions and insights with respect to identity in general and professional identity in particular. Table 1.1 presents in brief a list of selected researchers over time and the theories they developed.

Researcher	Theory
S. Freud	An individual's personality integrates three components: (1) the id, including impulses
	and unconscious content; (2) the superego, a reserve of social values and norms that
	have been internalized, and human conscience; and (3) the ego, which mediates between
	the two [167, p. 143], [182, p. 694].
C. Jung	C. Jung regarded the libido as representing general life energy and the source of a
	variety of mental processes, including thought and emotion. Stemming from this energy
	are a person's wishes, proclivities and attitudes, and it serves to satisfy existential
	biological needs for the propagation of humankind, as well as cultural and spiritual

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Table 1.1. Personality theories

Researcher	Theory
	activities that a person can engage in once his biological needs have been met. C. Jung broadened the concept of the "unconscious" as coined by S. Freud, and claimed that it is not limited to one person's unique life experience but is replete with psychological truths that are common to the entire human race [182, p. 700]. According to Jung, personality, which is a system of internal forces that balance each other out, does not stop developing and strives to contain and balance out all the contradictions inherent in it – individualization [182, p. 700].
A. Adler	A. Adler established that humans experience feelings of inferiority and, being social animals, attempt throughout their lives to overcome these feelings and focus on advancing towards perfection, success and superiority [182, p. 699]. He emphasized five principles: (1) man is a holistic entity whose components must not be regarded separately; (2) the principal motivation in life is the desire to achieve perfection; (3) man is a creative creature with free choice; (4) man is dependent on the social environment in which he lives and this dependency allows him to feel empathy and identify with the feelings of others, while also having a strong need to belong; (5) man's behaviour is an expression of his subjective perception of reality. According to Adler, humans set themselves goals based on subjective ideals, realization of which amounts to control over the course of their lives and advancement in the direction of self-fulfilment [168, p. 149], [182, p. 699].
J. White	J. White was the first to outline the concept of "competence" as a central motive in man's desire to feel effective in coping with environment and influencing it. He referred to motivation as underlying competence and emphasized that the need for competence does not stem from deprivation or from an attempt to alleviate feelings of anxiety or fear, but rather from a pull towards positive feelings and a sense of growth that are created by effective action [168, p.165]. J. White used psychoanalytical and behaviourist theory to claim that people are motivated internally and that competence is therefore a motivational concept that is integral to mental welfare and human functioning.
E. Deci and R.Ryan	Self-determination theory (SDT). This theory concerns with human motivation, personality and optimal functioning. It is a peer-reviewed, well-accepted theory in the world of psychology contending that once a person's physical needs for food, clothing, and shelter are met (addressed through adequate pay in the workplace), money ceases to be a strong motivator and higher-order needs become the driving motivators for employees. SDT has revealed that when these higher order needs are met in the workplace, people achieve more and live richer lives. The three higher-order motivators described by SDT for employees include competence (feeling valued as skilled), relatedness (feeling connected or related to those around them), and autonomy (a degree of self-determination and fulfillment).
E. Erikson	E. Erikson focused on crystallization of a person's identity and claimed that it develops from outcomes and crises that a person experiences during his lifetime. As such, it is a developing concept that changes with age. The researcher claimed that it is a person's most important goal, comprising four components: (1) uniqueness: a person's awareness of his existence as a separate and discrete human unit; (2) wholeness and synthesis: the sense of man being a single totality; (3) uniformity and continuity: unconscious movement between past personality and predicted future personality; (4) social relatedness: sense of belonging and connection with ideals and values, according a feeling of security. E. Erikson claimed that the self is the basis for human behavior, and a lack of consolidation of the self creates a problematic and painful vagueness and confusion with regard to self. He agreed with J. White that an environment that supports a sense of identity and control in a person encourages optimal development. Erikson

Researcher	Theory
	describes 8 stages in a person's life: (1) infancy: this stage depends on the trust that an infant develops in the quality of maternal treatment; (2) early childhood: the child learns to control his bodily functions and acquires a sense of power, independence and confidence and lesser reliance on his parents; (3) play age: appearance of initiative and
	curiosity, manifested in exploration of the surroundings; (4) school age: understanding of the importance of creative work and its results, achievement and acquisition of self-worth; (5) adolescence: bodily changes and consolidation of a personal and social identity; (6) early adulthood up to middle age – a person who has established his status is required to make important decisions in his life, such as choice of life partner, choice
	of career, etc.; (7) adulthood – conflicts of self-renewal and energy vs. stagnation and creativity vs. productivity; (8) old age – the person sums up his life in hindsight. In all the stages the person faces a conflict between his personal needs and the demands of society, challenging him to seek the ideal solution and adding a level to the process of crystallizing his identity [168, p.168], [182, p. 523].
P. Lecky	P. Lecky defines a person as a continuum of unique concepts arranged in hierarchical fashion around a group of concepts relating to self-consistency. He proposed an individual-related structure that maintains and alters the structure of concepts. The person shows opposition to environmental, interpersonal or psychological events perceived as inconsistent with the concepts of self-consistency. Assimilation involves reconciliation of perceptional contradictions with new or existing concepts, leading to rearrangement of concepts. The conditions allowing assimilation are preferable to opposing conditions since this allows resolution of inconsistency and development of percentional (138).
G. Alport	G. Alport claimed that traits are the basis of personality and the source of an individual's uniqueness. Traits connect between and unify the individual's responses and the various stimuli and shape his behavior, thus serving as mediating variables [168, p. 19]. Alport identified three types of traits: (1) cardinal traits, around which a person organizes his life; (2) central traits, the general characteristics of the person; (3) secondary traits, specific characteristics that help to predict the person's behavior [182, p. 681].

There is no consensus among researchers regarding personality, and five important differences may be pointed out between the different theories that have developed over time: (1) heredity vs. environment – inborn vs. learned; (2) learning processes vs. inborn behavioural laws – changes in personality as a result of learning vs. internal timetable governing personality development; (3) emphasis on the past, on the present or on the future – that exerts the greatest influence on personality – past events, traits or present events and future goals?; (4) conscious vs. unconscious – conscious processes vs. unconscious processes; (5) Internal proclivities or external conditions – situational factors vs. inner tendencies or a combination of the two [182, p. 721].

S. Coulter and J. Lester [39] and E. Hoffman and D. Niederland [187] state that in trying to integrate the understandings he has gained from learned theories with practice on the ground, including interpretations and insights he has acquired, the novice teacher can develop in different directions, through awareness that changes are part of self-development, of coping with

the image of teaching and perseverance in the discipline. Such complexity in the role of the teacher creates an inseparable bond between perceptions of self-identity and professional identity. Thus the definition of professional identity does not include only the formal ones but also those that contain emotional involvement [187]. During the past 10-15 years numerous researches have been conducted on teachers, their beliefs, attitudes, the processes they undergo, and the development of their professional identity. In light of many research studies [143], [187], [196], [223] there have been formulated, based on teacher's questionings, definitions regarding their professional identity: "Who am I as a professional person?" – referring to a sense of belonging to and identification with the profession on the part of the teacher, and to a long-term view by the novice teacher himself in his current role as a novice teacher and in his future role as a teacher [93].

The questionnaire regarding teachers' professional identity comprises two interconnected elements: "Identity refers to the way a person understands and views himself, and is often viewed by others" [79, p. 62]. The first generally deals with the way in which a teacher perceives himself as a teacher, while the second refers to the way in which the teacher is perceived by others: students, peers, parents, and society in general. Two angles of vision may be considered: one dealing with the psychological aspect and referring to the teacher's identification with his work and the way he perceives his traits, skills, professional values and interaction with students, colleagues, principals and others he encounters in his work; and the other relating to the professional aspect, focusing on social esteem for him as a professional person and his professional image [179].

C. Rodgers and K. H. Scott [129] proposed four basic assumptions relating fundamentally to the definition of professional identity:

- 1. Professional identity is contextual, i.e. it is built up based on social, cultural, historical and political contexts.
- Professional identity is constructed through interpersonal relations and assumes forms within contexts.
- 3. Professional identity is dynamic, i.e. it is built up, develops and changes according to different contexts, situations and relationships.
- 4. Despite the fact that professional identity is dynamic and fluid, there is a tendency to create in it a coherence based on a continuum of day-to-day events and life narrative.

L. Tickle [143] claims that professional identity refers to the sense of belonging on the part of the teacher to the teaching profession and notes four interdependent components: "(1) the manner in which the profession and its essence are perceived in the eyes of society and those engaged in the profession; (2) the manner in which the professional perceives the profession; (3) the manner in which the professional is perceived as such in his own view: what he sees as important in his work and professional life based on his experiences and according to his personal background; (4) the manner in which the professional is perceived by others: clients, peers, others in his position, and the public in general" [p. 3]. C. Rodgers and K. H. Scott [129] who also advocate theories that refer to identity as a developmental process, claim that the dayto-day experiences, undergone by the novice teacher, are influenced by the way in which he views them and the feelings that develop as a result. The personal and professional identity that develops in a person and his self-esteem constitute part of his self-image, and therefore changes could affect the further development of identity and self-esteem. An outcome of this would be the process by which he copes with and relates to these changes [197]. The understanding that emotions can affect professional identity is something that also appears in the theories elaborated by S. Fisherman and I. Weiss [179], who studied the concept and developed tools for its measurement. They defined professional identity as "teachers' thoughts and feelings in relation to their professional choices, their professional efficacy, their sense of mission and their feelings on the status of teaching" [p. 48]. Four indicators contribute to the definition of professional identity according to S. Fisherman and I. Weiss [179]: (1) confidence in the choice of profession; (2) the sense of competence and self-efficacy; (3) the sense of having a calling; and (4) the status attached to education and teaching.

#### (1) Confidence in the Choice of Profession

Choice of profession is a particularly important decision that a person makes in his lifetime, being one that affects him later from the psychological, social and economic points of view. A person who chooses the teaching profession is required to cope with a wide range of issues, inter alia: *the complexity and demands of position, widely varying interaction with students and parents, societal expectations, and fields of knowledge*. Accordingly, it is important for a person who chooses a profession in general, and teaching in particular, to be content with his choice, especially in view of the difficulty in recruiting teachers for the educational system and in preventing their dropout [118, p.67], [193].

Based on different conceptions, various researchers have defined the internal and external factors that influence the choice of teaching as a profession for life. I. Katzir, R. Saguy and Y. Gilat [193] claim that teacher trainees chose the profession for five principal reasons: economic and social security, self-fulfilment from the professional point of view, contact with children, previous knowledge and experience and impact on the next generation. Understanding the factors that motivate teachers to choose their profession is very important. *Teachers of teachers must take into account their trainees' motives in order to maintain their interest*. In addition, novice teachers who are integrated into schools where they can realize their vision and

motivation will have a sense of satisfaction and it may be reasonably assumed that they will suffer less burnout, the dropout rate falling significantly [152]. Based on the perception of "appropriateness" (behaviour that is appropriate to adopt, irrespective of internal or external gain, and for ethical reasons alone), A. Katzin and A. Shkedi [192] defined the factors that serve as motivation for choosing the teaching profession: influence of exemplary figures and previous experience with education, teaching as a worthy vocation, external rewards and recognition of teaching as a profession that enables self-fulfilment. On the other hand, I. Rots, G. Kelchtermans and A. Aeltermank [130] defined the factors responsible for choosing teaching as a profession for life in the wake of a research whose participants were teacher trainees who had completed their practical work. Two principal factors, encapsulating a number of meanings, were pinpointed for choosing teaching as a life profession:

### - The process of professional development includes three parameters:

**a**. Feeling of competence – professional ability and/or ability to influence the students.

**b**. Social recognition – considerable importance is attached to identification with significant "others" who are exemplary figures, who have been etched in the memory and who have kindled a wish to engage in teaching [163]. In a research conducted by S. P. Nahal [112],

95% of respondents stated that they had been inspired by a teacher in their childhood, who served as a model for emulation and who instilled in them the desire to learn and to transform their lessons into an experience of relevance for their students. Another possibility is the lack of identification with significant "others" who remain in the memory as harmful personalities. Thoughts about positive and/or negative characters from the past can help in identification of their impacts on the teacher trainee and the novice teacher [93], [163]. At present, most of the significant figures appear in the form of mentors, who are perceived as pedagogic and professional and who serve as models for emulation [130].

**c.** Threats to the sense of professional prowess – fear of and coping with failure, which could cause a lack of recognition of the skills of novice teachers by others [130].

- Social-professional relations in the school constitute a basic condition for novice teacher's success, enhance his self-confidence and improve his attitude to the profession.

The day-to-day contact between the novice teacher and the mentor and the rest of the school staff can reinforce his certainty with respect to his choice of the teaching profession, but can also create ambiguity, a feeling of oppression and a decision to drop out. A caring and facilitating mentor can act as a bridge to the rest of the school population by representing the school culture [130]. E. Deci and R. Ryan [43], [44] too refer to the important contribution of experience and

social relations in developing the sense of belonging, which plays a part in the development of professional identity (part of integrative motivation).

Based on the above definitions and a research conducted recently by R. Arnon, P. Frenkel and Y. Rubin [163], it may be stated that *the principal motivations for choosing teaching are internal and belong to the realm of personality and values, being manifested mainly in interpersonal relations, caring, social involvement, ideology and a sense of mission, as well as the cognitive-organizational realm of teaching a subject and developing thinking* [163]. A teacher who is content with his choice of teaching as a profession for life, who has chosen teaching out of internal motivation and a desire and willingness to contribute to society will be satisfied with his work in all its ramifications and will invest a greater effort to succeed by realizing his aspirations and vision. In contrast, a teacher who has chosen the profession out of a lack of any other choice will very soon experience burnout, resulting in less commitment and effort and very possibly subsequent dropout [59], [179].

# (2) Sense of Self-Efficacy and Sense of Competence – Development and Definition of the Concept and its Relationship with Professional Identity

The self-efficacy of a teacher reflects his belief in his ability to cause a positive change in his students and his subjective perception of his ability to perform tasks relating to teaching and education [112], [194]. According to A. Bandura [19], self-efficacy influences a person's self-perception, expectations, motivation and performance, and is consolidated principally on the basis of his successes or failures.

The concept of self-efficacy refers to teacher's integration in the organization and his success in coping with diverse situations, both at the level of class (the students) and school (management and peers). High self-efficacy raises the chances that the person performing the action will achieve the desired result. *Behaviour patterns characteristics of a teacher's selfefficacy are the ability to instil interest and motivation in students, impart values, improvise during unexpected situations in the classroom, handle disciplinary problems without too much effort, win over colleagues, and be assertive vis-à-vis school management* [19], [194].

A. Bandura [20] views learning processes as crystallizing personality while emphasizing social dimension, and claims that the feeling of self-efficacy develops over time as part of the learning process, influenced by the knowledge that a person has accumulated from different sources regarding his ability to function in different fields and situations. Thus, the novice teacher's experiences are highly important in that they mould and leave their mark on the development of the feeling of self-efficacy. The same researcher [20] grouped *the ways that influence development of self-efficacy into four categories:* 

- a. Successful personal experiences, which create high expectations with respect to selfefficacy.
- b. Role models learning through observation, based on a belief in the ability to emulate others who cope successfully with difficulties.
- c. Conviction and social influences the supportive environment/society as a shaper of selfefficacy. Positive feedback from the environment has a Pygmalion effect (in the sense of a self-fulfilling prophecy) – "I can".
- d. Psychological and physiological level of arousal in order to ascribe effectiveness to categories, arousal must take place the physiological feelings that a person receives from himself must be positive and associated with success.

Just as self-efficacy is influenced by defining events and enhances positive feelings in novice teachers, it is also influenced by events that create in the novice teacher feelings of negative self-perception. Once a negative self-perception takes root in the novice teacher and he begins to experience doubts about his capabilities, he will invest less effort and will readily give up in the face of difficulties. Such a condition will be difficult to alter, even when he experiences positive events [19], [21], [93]. This is apparently the reason that some novice teachers try not to take risks based on their knowledge of themselves and their personality, and their awareness of the difficulties that they will have to cope with. High self-efficacy allows the novice teacher to approach an event with a positive attitude, facilitating new experiences, in contrast to low selfefficacy, which reinforces negative emotions and low self-confidence regarding anything new [127]. Negative experiences are part of the overall experiences gained by teachers in general, and novice teachers in particular. Accordingly, instead of attempting to eliminate negative experiences, concern should be directed towards raising the frequency of positive experiences, thereby fostering determination on the part of the novice teachers and enhancing their feeling of self-efficacy [91]. A person's belief in his self-efficacy affects not only the person himself but also other vital agents. Through self-determination and motivation, people set challenging goals, assess results, and steer their actions accordingly. A future perspective provides direction, coherence and meaning to life. People plan ahead, decide which challenges to face, how much effort to invest in trying to meet them, and to what extent they should persevere in the face of difficulties, building their lives accordingly [21].

E. Deci and R. Ryan [43] follow in the footsteps of J. M.White [168, p.165] in developing the concept of competence, which embodies the concept of self-efficacy coined by A. Bandura, but they also include the need for autonomy. At the same time they emphasize the fact that a sense of competence is a prerequisite for sound mental development, for intrinsic motivation, for high-level performance of complex tasks, and for mental well-being. A low sense of competence

could involve defensive self-processes. According to E. Deci and R. Ryan [43] self-efficacy can be developed in novice teachers by internalizing the belief in their competence at both the personal and professional levels. *Competence in teachers is thus composed of two dimensions:* (1) competence in teaching – beliefs on the part of the teacher regarding the connection between teaching and learning, and the extent to which he is able to influence his students at the level of learning, behaviour and achievements; (2) personal competence – the teacher's beliefs in himself and his ability to succeed and behave in a way that will lead to the desired results. These two dimensions can act interdependently but also independently. It is also possible to define them as internal control vs. external control styles. Internal control is optimistic and positive (the teacher feels that he is able to influence the learning and success of his students; he is the focal point of control), in contrast to external control, according to which the teacher attributes his success or failure to factors that are external to the class and beyond his control [167, p. 177].

The teacher's belief in himself, his knowledge and capabilities have a significant effect on his motivation and level of performance since there is an interrelationship between feelings of self-efficacy and processes of professional identity building [43], [44], [197]. A teacher who does not believe in himself sufficiently suffers lowered vigour and initiative, affecting his performance and greatly increasing his chances of burnout [179], [194]. The feeling of self-efficacy on the part of the novice teacher stems from his achievements both at the professional level and the level of interaction with his students, boosting the feeling of success and satisfaction with himself. A positive feeling also stems from the opinion of significant others in the eyes of the novice teacher, particularly the mentor, who represents a professional-pedagogic figure whose approval can reinforce feelings of self-efficacy but whose harsh criticism can have the opposite effect [63], [130]. Moreover, a feeling of high self-efficacy spurs the novice teacher to pursue professional growth and development and bolsters his ability and desire to cope even with educational changes [153, p.27], [197].

#### (3) Sense of Mission

The sense of mission refers to a subjective feeling on the part of teachers [93], [179]. S. Coulter and J. Lester [39], who researched activities relating to perseverance in teaching, found that one of the rewarding features in the eyes of teachers is the privilege of impacting students' future and that of witnessing their growth, based on the understanding that a sense of reward can be achieved only through perseverance and patience. Moreover, altruistic motives accompanied by strong inner motivation for working as a teacher constitute factors influencing continued perseverance in the profession and a willingness to overcome, adapt and succeed despite difficulties [25], [118, p.69]. In a research conducted by S. Nahal [112], 100% of participants reported on the love for their work, their desire to provide inspiration for their students and their

need to make a dent in their lives as the reason for choosing the teaching profession. The same is true with respect to their feeling that teaching is a rewarding career, being a force motivating students to become citizens who will benefit society.

S. Fisherman and I. Weiss [179] claim that the sense of mission stems from the teacher's attitude vis-a-vis the outside world - he is an envoy of society/ideology, whence comes his feeling of empowerment and responsibility, leading to a feeling of self-efficacy. The difference is that the feeling of self-efficacy, like confidence in choice of profession, relates to the person himself, whereas the sense of mission relates to external factors. The sense of mission is in fact the highest level at which a person can ask himself personal questions, such as: "To what end am I doing this work?" "How do I view my mission in the universal context?" "What drives me?" These questions are not simple ones, for they deal with existential issues relating to the novice teacher as a person. A high sense of mission as part of his professional identity will help the novice teacher to cope with difficulties he will face and subsequently impel him to further his professional development [93]. A report written by UCLA's Center for Mental Health in Schools [31, p. 27] states that despite all the controversies and difficulties, the realm of education has always attracted top professionals. Thus, despite career options open to some teaching candidates, they choose education out of a deep sense of mission and are prepared to face it and make an effort to integrate successfully, spearheading processes that will advance children and contribute to society. These are undoubtedly deep layers existing in the professional identity that can continue to develop so long as all those involved in their integration and success know how to care for novice teachers in the educational system [22], [31 p.29].

#### (4) Status of Education and Teaching

In modern societies, in different parts of the world, a clear consensus exists regarding teachers' importance and impact [47], [55], [74], [193]. There is therefore the expectation that education and teaching will help towards solving society's problems [179]. As regards the status attached to education and teaching, this should be seen in the context of the combination, as presented by L. Kozminsky [196] and L. Tickle [143], between the teacher's view of himself and society's view of the teacher as part of his professional identity crystallization. In reality, society has established the image of the ideal teacher as one who "must be a person with education and wide horizons, with a command of a number of branches of knowledge, with the necessary pedagogical knowledge for the purposes of his work, with an ability for research and analysis, with learning ability and intellectual curiosity, with a social awareness, sensitive to both children and adults, with dialogue skills and the ability to work as part of a team, and management capability" [187, p. 44]. The question is if there are really teachers who have all these traits and skills or if the view of the position and the status associated to it is the root of deterioration in the

profession status and the poor image of the teacher in society? What is the image of the teacher as perceived by policymakers? Is it his expertise in the subject or his pedagogic-educational abilities and his leanings towards values and proper conduct? [187]. On the other hand, if the image of the teacher is to be cultivated and the high status of the profession preserved, one would have to beware of branding the teachers' innate-human traits and cheapening his disciplinary skills and expertise [93].

The novice teacher comes to the profession with high expectations that people will respect him because of the profession he has chosen. He expects society to recognize the personal traits and skills necessary for his work, and the considerable number of hours he must spend in preparation and constant learning that go hand-in-hand with teaching [180]. High status of the teaching profession is one of the factors enhancing the feeling of self-efficacy in the teacher, constituting a parameter in definition of professional identity. This would apparently lead to viewing the four parameters composing the definition as connected vessels that are interdependent and mutually influence each other. *Teachers can strengthen their professional status as teachers, their self-image and the teaching profession by taking responsibility for constructing their own professional development, both at the disciplinary level and by virtue of his role as teacher in the educational system*. This development, with its varied horizons and strata, will result in consolidation of his professional identity [179], [223].

**Self-Appreciation and Self-Evaluation.** The two principal issues underlying professional identity are the manner in which the teacher perceives himself as a teacher, and the manner in which the teacher is perceived by others. These issues call for the performance of evaluation processes by competent and influential authorities, as well as for self-evaluation. A return to the basic assumptions of C. Rodgers and K. Scott [148] and theoreticians such as A. Adler, E. Erikson [168, p. 168], and Bandura [20] regarding a person's dependence on the environment and the influence wielded by significant individuals puts the pieces of the puzzle together and helps to develop professional identity in novice teachers. The novice teacher thus develops a very high dependence on the feedback and assessment he receives from those around him, affecting his feeling of competence and his ability to evaluate himself from a position "without noise" once the need for belonging is fulfilled [43], [44].

A person's self-evaluation constitutes an overall evaluation of self [182, p. 715]. It follows that the self-awareness a novice teacher develops is based on the knowledge of himself and his capabilities [182, p. 715], and on his ability to perform reflection and assess his professional and interpersonal skills; this requiring deliberate thinking on his deeds and conduct, involving attitudes, motivations and mental states [130], [210]. Thus development of the skill of "learning how to learn" – constituting a significant condition for the novice teacher's success, both during

the internship year and throughout his professional life as a teacher – is important, manifesting itself in the way he conducts himself, inter alia, with respect to teaching procedures, choice of methods and strategies [36],[142, p. 127]. Teachers in general, and novice teachers in particular, can learn how to amass and organize knowledge relating to their skills and experience in teaching, so that they can improve their teaching methods and exhibit accountability based on the understanding of their strong and weak points. Ideally, self-evaluation allows the teacher to develop and grow continuously, in terms of his personal and professional identity as well as in other ways [142, p.127], [149], [210].

Prospective reflection, performed during a certain activity and on its completion, allows consolidation and intensification of the novice teacher's self-evaluation, allowing him to arrive at insights that express themselves in his future actions [210]. G. Kelchterman [90] too refers to prospective reflection, using the term "self-understanding" to mean the understanding that a person has of himself through inquiry and experimentation, and their effect on himself and his surroundings. A. Urzúa and C. Vásque [149] emphasize the fact that activities such as outlining of plans, expectation of possibilities, and expectation of similar results and experiences in the future represent opportunities for teachers and novice teachers to build up a self-understanding with respect to their teaching environment. Personal evaluation and development of prospects regarding practice consolidate expectations that are rooted in reality, a fact that is an important aspect in meta-cognition by novice teachers. These expectations are based on knowledge, experiential judgments, levels of commitment and ability to assess one's actions and those of others [149].

I. Rots, G. Kelchtermans and A. Aelterman [130] claim that it is possible to see as early as in the training period how unique events or people influence students, leading them to alter or reorganize their personal interpretative frameworks; this occurring in parallel with the clash between professional/ self-understanding on the one hand, and educational theory on the other. The above claim reinforces the wisdom that the use of reflection that leads to self-evaluation must begin at the training stage and develop throughout the professional career; this is because reflective teachers are engaged all the time in testing their educational modus operandi, a fact that helps them to constantly reform their credo, identity, practice, and interpersonal relations with different people [210].

Thus self-evaluation and reflective processes in teachers and novice teachers constitute tools that provide an answer to the psychological, social and pedagogic needs that are important for the development of a *professional teacher* – *a person who tests himself, identifies his needs, analyzes goals, chooses his teaching methods, and plans his work and the relationships he develops and consolidates* [210]. Self-evaluation then represents an additional level in the

development of the novice teacher's professional identity and it is important that mentors work with novice teachers on processes that advance this end, and on the criteria inherent in it (e.g. the novice teacher evaluation tools presented in Appendix 9, as part of the reflective dialogue conducted between the two).

#### **Stages in the Development of Professional Identity**

T. Goddard and R. Foster [65] claim that teachers' professional identity begins to develop already at the induction stage, a fact that is in line with the perception that the process is a dynamic and structured one, developing through negotiations with the various entities that constitute an integral part of environment, as claim C. Rodgers and K. Scott [129] and N. Boreham and P. Gray [27]. S. Coulter and J. Lester [39] also support the perception that professional identity is a dynamic process and add that it is unique to each teacher since it derives from his personal life experiences, including his absorption into the job, his encounters and his career development. Professional identity develops slowly according to the concrete situations with which the novice teacher copes and the school context [129], making it a matter of cross-linking between external demands and the subjective self-perception associated with the position [27]. Based on their perception, T. Goddard and R. Foster [65] concluded that the dynamism and structuring involved with respect to professional identity consist of six stages: (1) determination of a "prototype"; (2) arrival at the school gates; (3) understanding of the situation; (4) disappearance of the glitter; (5) shedding of the illusion; and (6) alternative ways pointing to a process of learning and professional development.

## **Professional Identity During the Training Stage**

The trainees come with certain concepts regarding teaching, learning, and the persona of the teacher that they would like to assume at the end of their studies. Accordingly, importance is attached to their decision-making processes and an understanding of the implications involved at this stage [93]. The trainees come to the profession with the image of the ideal teacher etched in their minds. As part of a research respondents stated two super-categories to describe the image of the ideal teacher: the teacher's personality (89% of respondents) and his knowledge of the subject (76%). The respondents were asked to state additional important traits, and 91% of them stated "empathic and attentive" as being the most important. Most of the trainees who participated in the research stated that an improvement had taken place in their basic traits as teachers during training, with 90% referring to personality traits and about 60% to improvement in professional knowledge [207].

This perspective is in line with the approach of A. Katzin and A. Shkedi [192] and I.Rots, G. Kelchtermans and A. Aeltermank [130] with respect to the impact of exemplary figures on the decision of teacher trainees to choose the teaching profession from the moral and cultural points

of view. N. Reichel and S. Arnon [207] claim that this perception represents a change in postmodern Western society, which is disappointed in the world of technological, cognitive, structured and organized knowledge and advocates a return to the progressive movement according to J. Dewey, which focuses on the individual and assigns pride of place to his needs and feelings through caring and empathy. Also L. Tickle [142] claims that when policymakers gauge professional knowledge purely according to standards and processes of evaluation, they do not acknowledge the social aspect, namely, interaction as part of teaching and development of emotional aspects such as empathy, compassion, flexibility and tolerance. The view that hails the personality traits of the ideal teacher does not negate the element of knowledge but presents teaching as a unique profession in which importance is given to the intertwined components of personality and knowledge. In other words, while the professional knowledge of the teacher is significant, teacher trainees attribute high importance to code of conduct, manifested in the personality, behaviour and empathic attitude of the teacher to his students [207]. The combination of personality and professional knowledge is enhanced in an interviewee presented by I. Horn et al. [79]: "able to facilitate, just the whole classroom management issue, [...] able to sense sort of how the class is going, knowing when to spend enough time—spend more time on something or spend less time on something, learning how to assess students' understanding [...]. Running group work effectively, providing clear directions whether it be oral, written, a combination of both, having the right level of specificity if that's the right word, the right concept" [p. 65].

The above interviewee referred to productive and pedagogic aspects of work in the classroom, paying attention to other aspects relating to his connection with the students: "able to sense sort of how the class is going" and to social values "running group work effectively". It is therefore important for teacher training institutions to give serious thought to the combination of human and knowledge components. At the same time consideration should be given to the fact that teaching is a complex practice involving knowledge and skill on the part of the teacher regarding how to teach and on what to focus – a complex art that moulds the identity of the teacher; hence the importance of the training period [87]. Moreover, the training stage is characterized by learning that changes what we are and what we are able to do [154, p.83] – because learning is not just a matter of collecting facts and information but involves formation of a certain personality in light of the significance attributed to experience, to learning through action, to belonging to a community and to shaping identity. Based on the research of N. Reichel and S. Arnon [207] awareness grows on the part of teacher trainees of the change that takes place in their perspective regarding "Who is a good teacher?", of understanding themselves as

teachers, conceptualization of professional identity and openness to new learning, such that new learning goals are formed to mould the students as learners and teachers [79].

Development of Professional Identity on the Novice teacher's Admission to School Determination of the prototype possibly takes shape during the training period. However, the following stages, namely, arrival of the novice teacher in the school, coping, and shedding of illusion, lead to a process of survival, in line with the approach of N. Tzabar Ben-Yehoshua [222]. The same researcher [222] described the excitement of the novice teacher prior to his induction, including his expectations, hopes and fears, the shock of entry and the disappointment, and finally the integration. Frustration and dissatisfaction appear in novice teachers at this stage also because of the fact that their personal expectations which, albeit subjective, are not met but are rather a source of helplessness and depreciation in self-esteem. This affects the way the novice teacher copes with the difficulties he faces and with constructing his professional identity through an attempt at self-fulfilment versus the existing reality [195]. L. Thomas and C. Beauchamp [141] emphasized the gap between the end-of-studies stage and the induction stage on the one hand, and the end of the first work year, using metaphors to this end. On termination of studies, the metaphors focused on support, care, security, and help for the students (e.g. ship's captain, defence line in a football team, and coat hanger). The metaphors at the end of the internship deal mainly with the novice teachers themselves and their survival in the classroom (Titanic survivor, a gerbil running on a wheel in a cage and going nowhere), conveying a lack of self-confidence and a feeling of debility in their professional lives.

J. Nias [114, p. 204] claims that many people define themselves through the roles they fill and therefore the disappointment and the feeling of wretchedness with beginning teachers on entering the system stems from their inability to bridge the gap between their basic beliefs with respect to themselves as teachers and teaching itself. According to her, the greater this gap becomes, the greater is the sense of frustration, until a stage is reached where there is an inability to cope and at times dropout. On the other hand, coping with the gaps between vision and reality helps in constructing the professional identity of the beginning teacher. Coping with the imaginary world that the novice teacher has built for himself prior to entering the educational system vis-a-vis reality and with emotions vis-à-vis rationality develops an inner reflective dialogue with respect to the kind of teacher he wants to be. In addition, these subjective processes pit the novice teacher against the theories he has learned, making him cope with new theories and with perspectives that build his awareness and encourage him to seek a range of solutions deriving from a critical approach and deeper view of events, enabling him to cope with tensions and conflicts and construct his professional identity [171].

This approach connects with the view that professional identity is a developing and dynamic concept, as claimed by C. Rodgers and K. Scott [129] and Coulter and Lester [39] and as presented through metaphors for professional identity by L. Thomas and C. Beauchamp [141]. In their research they found that metaphors relating to "constant change" take second place (after "support for the child") in the definition of professional identity by novice teachers. Novice teachers crystallize a professional identity for themselves, but in parallel also develop a personal identity, which deals with the self-perception of a person in a particular context and at a given moment. It too, like professional identity, is dynamic and developing [24]. G. Kelchtermans [90] too agrees with the significance of the context of a specific moment within the historical continuum of a person's life: "The person of the teacher is always somebody at some particular moment in his/her life, with a particular past and future" [90, p. 263]. A look at coping on the part of a novice teacher necessitates to understand that there is an inseparable connection between his professional and personal identity, and the construction of one identity influences the other [114, p. 203]. A teacher who enters the classroom does not leave his personal identity outside its walls, as defined by a novice teacher by the name of Norah in the research of B. Johnson et al. [85]: "I definitely feel you know, that it's important to have a little bit of me in the classroom" [p. 5].

Construction of teachers' professional identity is based on the interrelationship between their internal forces (deriving from personal stories and emotions, from a perception of the role and an inner voice) and external forces (political, historical and social, involved in educational changes and reforms) [117], [196], [197]. The novice teachers leave teacher training institutions and move on to teaching itself and there they encounter students, peers, parents and other entities that also influence construction of their professional identity. The induction stage is a dramatic one, as the novice teacher, who is faced with the shock of reality, sobers up and gradually develops an understanding regarding the institution to which he is trying to belong. At this stage the novice teacher must learn the organizational culture of the institution in which he is working, interpret it and create social and professional interaction with the people around him. In addition, he must conduct negotiations with himself and his professional identity out of the desire to adjust to the work environment and cope with difficulties that constitute an integral part of his absorption process [156].

In addition, as suggested by C. Rodger and K. Scott [129] in their second basic assumption, the interpersonal relations formed by the novice teacher with other entities around him have an impact on the construction and development of his professional identity in the school in which he has begun to work. A novice teacher who has pedagogical abilities and contributes to the school and his students success is esteemed by his peers who, in their turn, will share things with

him and create in him a feeling of belonging. In contrast, it is precisely at this stage that many novice teachers report on a feeling of isolation and lack of belonging, which stands in opposition to the need for collaboration, connection and belonging with co-workers [122], [156]. S. S. Feiman-Nemser [177] and L. A. Cherubini [33] emphasize the understanding that team work allows collaborative learning, insights into things that the students need, and ways to support them and their learning processes. Team work will intensify the feeling of belonging, constituted of emotional and pedagogical support, and will create trust and openness that develop the sense of self-esteem, helping to construct and develop professional identity [69], [112], [197].

A. Shaz-Openheimer [212] claims that the personality of the novice teacher is reflected in the act of teaching, with the novice teacher bringing his world view, opinions, perceptions, experiences and values, and comparing them to the "other", while examining belonging in the personality, social, professional and cultural sense. The researcher presents examples in support of her statements which describe not only the professional identity that has developed but also the conflicts. "Comparison and examination of belonging cause conflicts, tensions, confrontations, decisions and preferences between different ideologies: between contradictory commitments that the teacher has in teaching different content; between their different desires in fulfilment of their path; between the reality he experiences with his students and the fantasies he carries with him; between his own self-perception, culture and professional practices" [212, p. 32].

Theories of motivation deal with internal processes in a person, allowing him to mobilize resources from within himself and the environment, translate them into efforts, and with their help realize goals that he has set himself. The theories of needs of A. Maslow [105, p. 80] and C. Alderfer [16] refer to the need for belonging [105, p. 89], recognition and esteem [105, p. 90], alongside the need for growth and self-fulfilment [105, p. 91]. Joining these researchers, E. Deci and R. Ryan [43], [44] claim that satisfaction of these basic psychological needs creates integrative motivation. Providing an answer to these needs, creates a synergy with the principal elements for choosing teaching as a life profession, as proposed by I. Rots, G. Kelchtermans and A. Aeltermank [130].

Thus fulfilment of novice teachers' needs in the social and personal (psychological) realms, as presented by Friedman [180] in Section 1.1, creates motivation, allowing further professional development. This professional development will reinforce the professional identity of the novice teacher in becoming a rank-and-file teacher, will allow him to develop a credo that will accompany him throughout his professional career, and will grant him the ability to cope with difficulties while striving for self-fulfilment and realization of his dream of becoming an "ideal teacher" [50, p.51].

## **1.4.**Conclusions on chapter 1

The clash between novice teachers' belief, hope and willingness on the one hand, and the reality on the ground on the other, deals novice teachers a harsh blow, forcing them to fight for survival. In light of the recognition given to the importance of quality teachers and the grim reality, novice teacher absorption programs have been designed with the intention of helping novice teachers and providing them with solutions to the difficulties they have to cope with. Although the structure of various programs differs in design [47], [67], [189], their impact has been considerable [22], [76], [113], [181].

The term "professional identity" has different definitions but in the final analysis they all relate to the questions regarding the way the teacher perceives himself as a teacher, and the way the others perceive him. The answers to these questions are significant as they involve reference to the components of professional identity and coping with difficulties on the part of novice teachers. This can be explained by means of a correlation between induction programs and the basic assumptions proposed by C. Rodgers and K. Scott [129], while conducting more in-depth observation of the components of professional identity as defined by S. Fisherman and I. Weiss [179]. The first two assumptions pertain to contextual aspects and to interpersonal relations that develop in the school system and allow the creation of a sense of belonging. The latter provides an answer to systemic-social difficulties by allowing identification with figures that are models for emulation, and promotes self-confidence on the part of the novice teacher, so that he could be at peace with his choice of profession, his competence be strengthened and he could feel able to fulfil aspirations that stem from a deep-rooted sense of mission [143], [179]. Moreover, the sense of belonging affects the teacher's motivation to invest efforts, cope with difficulties and continue to develop professionally [43], [44], [179]. The two additional basic assumptions also receive an answer in the designed programs: the third basic assumption refers to the dynamic nature of the processes of professional identity development, while the fourth deals with the tendency to create coherence based on day-to-day events.

The various programs deal with processes based on the understanding that holistic support will affect the novice teachers in terms of their professional development, their ability to cope with the difficulties they face and with the gaps they experience in the induction process. The support systems that were developed are based on daily practice and create a sense of relevance, concreteness and coherence, allowing the novice teachers to cope with the gaps between the vision and reality, thus adding a new level to their professional development [171].

# 2. THE IMPACT OF MENTORING ON THE ABSORPTION OF NOVICE TEACHERS IN THE EDUCATIONAL SYSTEM

#### 2.1.Mentoring process characteristics and mentor's psycho pedagogic profile

Internship programs in teaching were born of the need, on the one hand, to support novice teachers entering the educational system and prevent them from dropping out and, on the other, to nurture top quality teaching staff. Internship programs constitute a bridge between the pre-service and in-service period and allow continuity between theoretical training and professional practice, as referred to by S. S. Feiman-Nemser [56]. This bridge is intended to help novice teachers cope with challenges and difficulties in four spheres (mentioned in chapter 1.1.2): adjustment to the system, pedagogical issues, interaction with students, and development of professional identity [9], [29], [76], [150, p.75], [213]. The EC Staff Working Document, published in 2010 for the benefit of policymakers by the General Committee for Education and Culture of the EC on Development of Coherent and Holistic Absorption Programs for Beginning Teachers, refers to mentoring in one of the more significant messages in the document, providing an answer to the needs of novice teachers from three angles: personal, social and professional [47]. The mentor's roles (duties and demands) were emphasized by the publication of a document by the Romanian Ministry of Education [14].

Research conducted in the USA also found that mentoring plays a significant role in supporting novice teachers and in preventing their dropout in the early years [67], [103]. In 1996 a document was produced by the NCTAF [115], which referred to the future of education in the USA. The document emphasized the importance of entitling every child to learning with a top quality teacher having the required skills, and among its recommendations was one for establishing and financing mentoring programs, including evaluations based on standards as described below [30].

In Moldova there is a reference to mentoring in Article 3 of the Education code: "Mentoring – process of guidance, support learning, education and/or professional development held between a mentor and another person, based on the premises of interactive involvement of both parts, assuming obligations according to the status they hold" [7]. Another mention appears in Article 55, where mentoring processes are referred to as part of teacher's duties. These definitions emphasize the fact that in Moldova great importance is attached to the role of the mentor and mentoring during the induction period. Moreover, Article 58 details the activities required from the mentor, including professional advancement of the novice teacher with the help of a professional teacher [7].

In Israel, in an official paper on the subject of mentoring published by the Ministry of Education, mentoring occupies a central place in the absorption of novice teachers: "Mentoring

is the key link in the system of internship in teaching. The mentor is the principal human element assisting the novice teacher in developing his identity from the personal and professional points of view, during the stage of absorption into the educational system" [214, p.5]. A. Shaz-Openheimer, B. Mandel and S. Zilbershtrom [214] propose three principles on which the process of mentoring should be based: (1) the personal aspect, consisting principally of emotional support and assistance to the novice teacher in coping with conflicts between personal and professional needs; (2) the professional aspect, dealing with assistance to the novice teacher in his transition from student to teacher (practical knowledge of strategies, skills, resources, syllabuses, etc.); and (3) constructive criticism, allowing the novice teacher to raise questions, inter alia, on education, teaching and social values, as well as on existing gaps and ways to apply the principles of the world he brings with him. C. Clark also adds: "One of the best ways to come to an understanding of what one believes is to talk it through with others who understand the challenges of being a good teacher in an uncertain time" [31, p. 173-174].

T. Smith and R. Ingersoll [137] and P. Youngs [159] state that it is preferable that the mentor and novice teacher teach the same subject and work with the same age group. They claim that this would allow them to focus on common specific pedagogic content, contributing to their collaborative efforts, to the benefit of the mentor and the novice teacher alike.

P. Hallam et al. [72] found that the role of mentors in influencing perseverance on the part of novice teachers is highly significant and it is therefore important that the school principal pay particular attention to their judicious selection. Important too is the existence of compatibility between the novice teacher and the mentor, based on considerations of mentor's knowledge and experience, similarity with respect to age groups taught, approachability, and potential for the creation of trust between the two. An additional source that emphasized mentor's contribution and the understanding of this contribution by the school principal can be seen in a research that addressed the process of internship from the perspective of school principals, with the principals emphasizing the mentor's contribution, as exemplified by the following statements: "Strengthens and guides the novice teacher to success, monitors his professional development"; "importance is attached to the guidance of novice teachers in order to enhance their work and the results depend to a great extent on the mentor"; "if the mentor is professional, willing to give of his time, and humane, the results will be significant and will assist the novice teacher first and foremost, but also the mentor" [210, p. 61].

The mentor first appears in Homer's Ulysses, as Odysseus' good and steadfast friend, who educated and trained his son while his father set out on a long quest [71], [213]. For generations, mentoring served as a means for transfer of knowledge and culture, and support for artistic talents and for leadership of the future. The mentor saw to the transfer of knowledge to

the trainee and to imparting to him the secrets of culture while serving as a protector, spiritual guide and supporter. This was a traditional system of paternalism and dependency, power, hierarchy and safeguarding of the status quo [42]. In the professional literature, mentoring is described as a role model - the mentor must be able to adapt, must be trustworthy and understanding, devoted and articulate. In order to provide guidance and counselling he must be available, supportive, have good interpersonal skills, have high professional abilities and be experienced [213]. The content of dialogue between mentor and novice teacher must remain confidential, the mentor being attentive, supportive and instrumental in developing the thought processes of the novice teacher [99]. The mentor must adapt the process in which he and the novice teacher participate in the dynamic life of the school, the school credo, and the procedures, work methods and communications observed in the school. The mentor must in essence translate the organizational culture to the novice teacher and pave the way for socialization processes and involvement in the school community to occur, enabling him to become an active and esteemed member of this community [95], [214].

G. Olsher and I. Kantor [119] state that the mentor's role is complex, while presenting him with an internal challenge: "On the one hand, I wanted my novice teacher to adopt my methods and teach like me ... On the other hand, I desired to see Danny develop professionally on his own and arrive at his own pedagogical truths". It follows that apart from support to the novice teacher, mentoring is intended to develop, nurture and strengthen the novice teacher, factors that lead to self-confidence, self-esteem, and development of interpersonal communication skills with students, peers, parents, managerial staff and other relevant individuals. Mentoring is intended to allow the novice teacher to achieve full personal and professional capabilities through motivation and fulfilment [138].

Apart from adaptation to the organization, the work of the mentor must be based on the assumption that novice teachers differ from one another, as do their needs, and therefore different strategies must be applied in meeting the novice teacher's needs, while paying due attention to professionalism and the ability to evaluate teaching as well as identify needs and difficulties directly in the context of teaching [7], [30].

The mentor's role is not easy. The mentor is required to meet with the novice teacher on a weekly basis, observe him, demonstrate techniques, assist him in pedagogic procedures, construct subjects and evaluate him, providing constructive feedback to help him develop his professional prowess. All this clearly takes place in parallel with the processes of socialization and emotional support, while preserving the idealism with which the novice teacher has arrived and helping him in developing his professional identity [9], [89]. From the research literature, a number of recommended key characteristics may be noted to achieve the full effect of the mentoring process [5]. These characteristics are particularly significant in the face of the dualism that exists in the role of the mentor and the will to assist the novice teacher in coping with the above-mentioned problems, while seeing to the development and growth of both the novice teacher and the mentor.

Professional Knowledge and Experience in Teaching in General and the Subject in Particular.Mentoring shapes the way in which novice teachers understand themselves and their work, and has an important role to play in moulding professional standards and the profession itself over the long range. Accordingly, the mentor must have professional knowledge and experience that have been acquired throughout the period of his work, and must also have confidence in his abilities. These characteristics will trigger in the mentor the willingness to share the knowledge and experience he has accumulated with the novice teacher and assist him in enhancing his understanding of the subject in particular, and teaching in general [5], [48], [128], [214]. Mentor teachers attach importance to their own professional abilities. In a research by Goldenberg et al. [181], 77% of the mentors who participated in the sample stated that they had taken upon themselves the role in order to advance beginning teachers who were top professionals. In addition, 52% of respondents noted that a lack of knowledge, training and confidence in filling the position constitutes a hindrance to the novice teacher's success. The lack of professionalism in the field of teaching on the part of the novice teacher stems from the feeling of inexperience and absence of skills due to the fact that during the period of training he learned mainly principles and did not have sole personal responsibility for a class and for students [15].

Pedagogic-professional support for a novice teacher relates to both the subject taught and to pedagogy. On the one hand, the novice teacher must learn how to construct a syllabus, plan a lesson and set learning goals that relate to the basic principles of the subject he is teaching. On the other hand, the novice teacher needs guidance and assistance in class management, handling disciplinary problems, coping with conflicts, professional ethics, and developing his professional identity [199].

A sense of fellowship between the mentor and the novice teacher is extremely important in order for the novice teacher not to experience a sense of dependence on the mentor's professionalism and knowledge, preventing him from exercising his own judgment. A novice teacher who develops through a relationship based on joint work and exchange of opinions devoid of power struggles will be able to develop a professional and personal identity and gradually assume roles and responsibilities in the school [128].

A good mentor must give of himself and his knowledge, but must at the same time be tolerant, encouraging the novice teacher to use his own professional discretion, cultivate his own professional identity and self-image, take initiatives, and carry out collaborative discourse and planning. At times the novice teacher may come with new ideas that can benefit the mentor as well. A good mentor will assist the novice teacher in developing ways to apply his ideas, his very acceptance of them being instrumental in allowing the novice teacher to develop his self-image and professional identity. A relationship based on partnership will empower the novice teacher and develop openness to receiving criticism and to exposing his deliberations [109, p.48].

**Guidance Skills.** During his first year the novice teacher changes status from that of a student with no responsibility for others to that of a teacher responsible for students at both the personal and pedagogic level. He goes from learning theoretical knowledge to imparting it, with responsibility for evaluating his own practice.

The mentor must be able to offer support through empathy and willingness to assist the novice teacher in coping. At the same time it is important that he knew how to be critical and steer the course so that the novice teacher could be able to cultivate and develop his professional skills and his ability to cope with difficulties. The combination of empathy and emotional support on the one hand, and professional-pedagogic support on the other, is significant and the mentor must try to integrate the two. At times, however, an empathic attitude is not quite the ideal one the novice teacher needs in times of uncertainty and confusion. In such a case he needs and expects pertinent, actionable suggestions that will enable him to cope with the reality at hand – and this is where the role of the mentor is important in providing an appropriate response [5], [103]. The ability of the mentor to know when to provide empathic support and when to be critical is crucial, especially in view of the fact that at the end of the internship year the novice teacher undergoes a process of evaluation, enabling him in some countries to receive a teacher's license [213].

Guidance is, by its very nature, a self-restraining practice. The mentor is expected to supervise and guide, but he must refrain from direct interference in the novice teacher's work. On the other hand, the mentor must be sufficiently skilled to develop meaningful dialogue as part of the guidance process, while understanding the importance that the novice teacher attaches to this dialogue. Thus, the mentor must consider his steps well in order to be able to help in the professional development and growth of the novice teacher [191]. K"Z [191] defined the guidance process as "a paradoxical practice based on love – love for the profession and for the experience of developing in its framework. It involves discovery of the logic in the profession together with others, it evolves and forms through encounters that combine giving and dedication. When this practice is at its best it causes people to 'grow' and develop as professionals who know how to be autonomous but also how to cooperate with peers" [p. 57].

K"Z I.[191] describes four roles of guidance: (1) creation of a connection between theoretical knowledge and practice; (2) consolidation of quality norms; (3) establishment of norms relating to research, wonderment, invention and renewal together with knowledge that already exists; and (4) support in professional work being carried out in real time.

Awareness of the Social Needs of the Novice teacher in the School Framework. As soon as the novice teacher enters the system, he constitutes a part of it and is exposed to its various pedagogic facets, as well as its cultural-organizational aspects. The novice teacher must conduct interpersonal relations with a wide range of peers (the principal, fellow teachers, subject and grade coordinators, paramedical staff, parents and students). These vary, depending on the work relations, and he must adapt himself to the place, time and population. The mentor is expected to assist him in the process of socialization in the teachers' room - in undergoing absorption, guiding him and lending an attentive ear to his problems. All this takes place while he himself is an integral part of the system and is committed to it. The mentor is expected to bring the novice teacher in contact with the school culture, including its professional, pedagogic and social aspects, and in familiarizing him with the procedures. This is not always easy because of the mentor's dual role – on the one hand his commitment to the novice teacher and his needs, and on the other to the needs of the school system [128], [213]. Thus good mentoring obliges the mentor to be involved both at the personal and professional level, and create a professional dialogue with the novice teacher with the involvement of the teaching staff, who will share pedagogic-educational insights and attempt together to apply the values that are being developed in the school [138]. A mentor who will succeed in finding a suitable balance will be able to convey the work methods and procedures in the school to the novice teacher, thus helping him in crystallizing his relations with the rest of the teaching staff, a fact that will influence his professional identity as well as his professional development [85], [128].

Ability to Provide Emotional Support. The mentor's work must be predicated on desire and willingness to fill the mentoring position. He must be geared to the novice teacher's needs and difficulties he has to cope with. He must have a good capacity for interpersonal communication and be able to listen, encourage and provide emotional support during a crisis [128], [214]. In a research conducted by R. Lazovsky, R. Reichenberg and T. Zeiger [199], 62.9% of mentor teachers defined the desired personal traits of a mentor: able to listen, empathic, flexible, open, creative, assertive, serious and tolerant. M. Zuljan and C. Bizjak [162] too found that mentors attach great importance to ability for communication and empathy. The following statement appeared in their research: "Good communication skills and an aptness for interpersonal relations, empathy and support" [p. 316].

The traits noted by the mentors may be regarded as an outcome of the reasons that prompted them to take on this role in the first place. It was found that 80.57% of mentor teachers accepted the position out of the desire to assist in the integration of beginning teachers into the system, and 79.43% noted that this was a way for them to contribute to the teaching profession [162]. In a research conducted by G. Goldenberg et al. [181] too, the two principal reasons for the mentors deciding to accept their role were the willingness to give and their inherent traits -84% referred to the desire to share their knowledge and experience with beginning teachers and 79% wished to support novice teachers and boost their confidence. The above two reasons constitute inner motivation and provide the logical connection between acceptance of the position and willingness to assist - comprising the characteristics mentioned above [199]. Lindgren [99] too points to listening as a basic factor in development of finer mentoring processes, constituting a building block in a system based on trust (assurance that the content of dialogue remains confidential) and allowing support for the novice teacher on the one hand, and development of reflective thought by the novice teacher on the other. The novice teacher, who finds himself in a fragile, complex period of his life, is in need of an attentive ear and a person whom he can trust in the plainest sense of the term. It is found that support based on a relationship of trust allows difficulties and failures on the part of the novice teacher to be dealt with and steered in a positive direction. Undoubtedly, a novice teacher who feels that the content of his dialogue with the mentor remains confidential, that it does not constitute part of the process of evaluation, and that he is able to ask any question without fearing a judgmental response, will develop his skills and self-confidence to a greater extent [103].

Approachability, Consistency and Quality Sessions between Mentor and Novice teacher. A permanent framework of sessions between the mentor and novice teacher is important for their joint work and is considered to be a key element in the eyes of the novice teacher, representing a commitment on the part of the mentor himself and the system in general [96], [99], [128]. Altogether 52% of mentors believe that the lack of time shared with the novice teacher is a significant factor in hindering the mentoring process [181].

In addition, it is important that the mentor be versatile, with the ability to listen and conduct a meaningful and constructive dialogue with the novice teacher – "...have time to spend with you discussing problems and how to deal with them" [128, p. 18]. The number and duration of the sessions may have to be adjusted to the novice teacher's needs, especially during the internship year, when the novice teacher develops professionally and personally and feels more confident of himself. However, J. Rippon and M. Martin [128] also present the negative feelings that could be formed on the part of novice teachers who are in need of more novice teacher-

mentor time: "If I had meetings and other probationers in the school didn't, I'd know it was because I was failing" [128, p. 15].

In contrast, A. Shaz-Openheimer [213] claims that it is important to define the boundaries of the sessions such that it will infuse the novice teacher with confidence in a permanent framework on the one hand, but impart to the role of the mentor a tone of professionalism and efficiency on the other. Article 58 recommends that mentoring be held in the workplace [7]. Undoubtedly the very creation of the mentor and the novice teacher are also called for by virtue of their presence in the teachers' room. Such ad hoc sessions allow interpersonal interaction between mentor and novice teacher in answer to the novice teacher's immediate needs and as part of the school system of work relations and on-going interaction between members of the teaching staff [15], [213]. However, it is important that they did not constitute a replacement for permanent sessions [128].

The various mentoring programs recommend that the subject taught by the mentor be identical to that taught by the novice teacher, and to the same age group. The correspondence between these two parameters allows many important discussions to be held, and not necessarily planned ones. Many novice teachers feel that a mentor with a similar background, teaching the same subject and age group will be of greater help to them, in view of the mentor's ability to observe their lessons more effectively and as a fellow thinker who can work collaboratively with them by holding up a mirror to reality [103], [147]. The findings show that mentors who began to work with novice teachers at the beginning of the year were particular about permanent sessions, showed greater determination in filling their role, experienced conflicts and tended to claim greater satisfaction from their mentoring.

Following the examination of the literature of specialty, *Moldovan novice teachers* always received the support of veteran teachers, but that wasn't a process stipulated by legislation. Until now, it doesn't suppose any final assessment that could influence the subsequent enrollment in the system. At the moment, in Moldova, novice teachers are not required to participate in induction programs or mentoring. Yet, the new Education Code envisages the provision of mentoring assistance in the first three years of activity.

In 2012, the *Republic of Moldova* has received a grant from the Global Partnership for Education Fund toward the cost of the implementation of the Consolidated Action Plan on Education, and it intends to apply part of the proceeds for consulting services. The consulting services ("the Services") include training of mentors on fundamental aspects related to mentoring. Subsequently, trained mentors will provide continuous training and mentoring services to teachers in local mentoring centers. The focus will be the classroom: how to make

visible changes at the classroom by improving the quality of teaching-learning process in all kindergartens and for all children.

About 300 specialists from the field participated in training mentors in Chisinau, within Pro Didactica Educational Centre. Participants represented the created centers for mentoring, in order to support the professional development of teachers in kindergartens. The purpose of the "Global Partnership for Education" is to improve access, quality and inclusion in early childhood education in Moldova, including the professional development of teachers able to implement a child-centered curriculum and new educational standards. Mentor training program will take place in the interactive methods, with emphasis on professional skills training equitable approach children, creating a friendly environment for learning/development focused on the needs of each child. The overall objective of the training is to help strengthen the skills to mentor teachers in early childhood education by learning the skills necessary for a mentor, mentors developing attitudes and awareness of the need to observe. The first involved the training of trainers workshop was held on June 24, 2015 and included in the program development design for the 5 days of training, team building trainers, sharing responsibilities for future activities and other logistical issues.

Yet, mentoring is still insufficiently explored in the Moldovan System of Education and it continues to remain an issue awaiting the appropriate consideration and valuation at official level.

#### 2.2. The role of novice teachers' emotional culture in shaping their professional identity

Emotional culture is a system of emotional competencies directed towards the harmonization with oneself and the others during communication. Teachers' emotional culture integrates into a charismatic style of didactic communication, generating professional comfort and emotional values. The prior function of teachers' emotional culture is to harmonize with oneself and with the others. The other complementary functions relate to: communication, motivation, professional culture increase, students' emotional development, integration and amplification of social culture. Misbalance at the emotional level generates a lot of problems alike: emotional stress, psychic extenuation, emotional exhaustion, deficit of emotional energy, groundless alternation of mood, lack of expressivity and emotional originality, emotional misbalance, interpersonal conflicts, insufficient emotional management, intolerance and lack of cooperation, low resistance to didactic communication, difficulties in assuming responsibilities etc.

Judging by the difficulties the novice teachers face at the beginning of their didactic career, emotional culture is that which suffer most of all. In this context, measures should be taken in order to reduce the number of difficulties and create an environment favouring

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emotional balance. The researcher, M. Cojocaru - Borozan points out some arguments for teachers' emotional culture development: responsibility of emotional self-development in order to favour pupils' emotional development and to improve educational services for a resonant career; the existence and perpetuation of emotional problems that undermine education efficacy; the necessity of knowing the methodology of pupils' emotional development in order to harmonize their IQ and EQ [232].

One of the most fundamental difficulties faced by novice teachers is interaction with students, stemming from the harsh disappointment they feel of not meeting expectations, and of not being accepted as uncontested leaders of the class. C. Maxwell [106, p. 12] characterizes five types of leaders, belonging to five different stages of leadership (from the most basic to the most desirable): (1) Position Rights - People follow because they have to [106, p. 6]; (2) Permission Relationships - People follow because they want to [106, p. 7]; (3) Production Results - People follow because of what you have done for the organization [106, p. 8]; (4) People development Reproduction - People follow because of what you have done for them [106, p. 10]; (5) Respect - People follow because of who you are and what you represent [106, p. 11]".

Novice teachers expect their leadership as teachers to be readily accepted by their students out of respect, in exactly the same way that the principal stands for school leadership [106, p.12], [180]. To their surprise, not only is their leadership not a foregone conclusion, they also encounter difficulties in interaction with the students, focusing principally on class management, namely, on coping with disciplinary problems and behaviour, leading to a sense of alienation on the part of the students, in imparting learning habits, around questions of developing motivation for learning and the class as a social group [224]. The research of A. Hobson et al. [77] found that 56% of the interviewees reported on inappropriate behaviour on the part of their students, with the emphasis on specific incidents that left them with a nasty feeling of helplessness and even trauma. I. Harari, E. Eldar and C. Schechter [184] too found that the element of discipline occupies a central place in the daily work of novice teachers - 53% of the novice teachers in their research stated that the main factor with which they needed to cope was discipline, manifested in students leaving the lesson without permission, noise, sassiness, lack of quiet in the classroom, disturbing other students and refusing to listen. However, in the second trimester of the year this decreased, with 42% of the novice teachers reporting on disciplinary problems. In the third trimester only 39% of the novice teachers reported having to cope with disciplinary problems. Despite this, there are still a high percentage of novice teachers who report coping with these problems and a clear uneasiness is felt. The importance that novice teachers attach to the question of interaction with the students can also be

gathered from the reports on success, which appear mostly only in the second and third trimesters [184].

S. Feiman-Nemser [56] presents some of the questions novice teachers ask themselves when standing in front of the class, revealing their true concerns: "Who the students are; what their families are like; and what interests, resources, and background students bring to the classroom. For the novice teacher, the questions are unending: What am I supposed to teach? How will my students be tested? What will their test scores say about me as a teacher? What does the principal expect? Am I supposed to keep my students quiet, or do my colleagues understand that engaged learning sometimes means messy classrooms and active students? And after the first weeks of school, how can I find out what my students really know, deal with their diverse learning needs, and ensure that everyone is learning?" [56, p. 26]. The novice teachers' entry into the role of teacher comes as an outcome of their acceptance by the school principal; thus in the initial stage the students "accept" them because they have to [106, p. 12]. If so, how can novice teachers progress from the initial stage of understanding the ins and outs of the profession and accepting responsibility (starting from the first stage of leadership) to a position in which they constitute a model for emulation by their students, their greatest pleasure being the development of the students and their own contribution in this respect (according to the fifth stage). The process of development of novice teachers up to the fifth stage is not something that can be taken for granted, and they are in need of assistance in order to run the course [106, p. 14-16]. The professional literature presents a number of difficulties that touch upon the sphere of interaction on the part of the novice teacher with his students - disciplinary problems in the classroom, raising the students' motivation, coping with gaps between the students, evaluation of the students and coping with their personal problems [200].

This difficulties are related to the emotional intensity and pressures exerted on novice teachers, the work load, including the content of the material that must be taught and the need to cover it in time, the dilemmas involved in the evaluation process, the extensive paperwork, meetings with various entities, and the host of difficulties enumerated in chapter 1 [100]. Most novice teachers are young and starting to set up a family and they must strike a balance between the family needs and the work load precisely when they are consolidating their perception with respect to their responsibility and commitment as teachers [104]. It is important to take into account the fact that the novice teacher comes to the class with his own personal perceptions regarding the meaning of good teaching, proper learning and effective educational approaches. All this he crystallizes as a student in school and in higher learning institutions; when he begins work he realizes that not all his beliefs can be implemented in the reality of the educational system, so that he must make the relevant adjustments himself, professionally and qualitatively

[214]. These difficulties lead to "The ambiguity that novice teachers feel with respect to their professional identity, which has not yet crystallized, causing them a sense of malaise, frustration, helplessness and isolation" [213, p. 162]. As a result of this ambiguity, they experience an identity crisis: on the one hand they like being teachers (because of their commitment and the influence they have on the children), but on the other hand the myriad difficulties they face (the struggles, tension, stress, etc.) create in them a revulsion for the profession [33].

The basic assumptions presented by C. Rodgers and K. Scott [129] influence construction of professional identity, with emotions constituting an integral part of the process. It must be borne in mind that interaction in various contexts affects the novice teacher's emotions and the significance that he attributes to it. Thus reforms, interaction with colleagues, children, principals, parents and others, and changes within the set of contexts, impact the emotions, which affect the components making up the professional identity [127], [146], [223]. Additional support for the importance and the place of the teachers' emotions in the process of constructing professional identity is obtained from the research of K. O'Connor [117]. K. O'Connor [117] examined the interconnection between emotions and professional identity among teachers and concluded that teachers use their emotions to guide, shape and justify their professional decisions, as part of building up their professional identity. The researcher claims that despite the fact that emotions and the ensuing behaviours cannot be measured, they should not be ignored since they impart meaning to the work of the teacher and justify his perseverance in the profession. Accordingly, the emotions of novice teachers in their first year of work are extremely important due to their effect on the construction of their professional identity [117], [127], [146], [223].

S. Intrator [83] is of the opinion that more meaningful consideration should be given to the emotional aspect and to training "teaching cades" in the field of emotional intelligence, in the same way they are trained in pedagogic skills in their respective fields of study. The novice teacher copes with many and varied difficulties that affect him at the emotional level, up to the point of frustration, which can then lead him to dropping out. Training that includes coping with the classroom as an emotional arena and that imparts tools and insights for development of emotional intelligence can allow novice teachers a different view of the situations occurring both in the classroom and the school. Training should include skills geared to treating the students in a changing reality. Teaching cadets should learn to use varied tools such as interviews and questionnaires. They must learn how to extract information from corridor conversations with their students, from face-to-face encounters and from the use of technological means in order to be able to answer the questions that will lead their students to effective, challenging learning out of a desire and willingness to do so: How can they get to know their students? What interests

them? What aspects of the subjects in the syllabus could challenge their thinking? What frustrates, scares, concerns them and/or causes them uneasiness? What thrills and draws them to study? etc. It is important that teaching cadets be exposed to situations involving emotional swings in the classroom and learn how to deal with them. In the induction stage the novice teacher will be able cope with a complexity of feelings and be free emotionally to provide his students with responses that are both pedagogically and emotionally sound. It is important to develop the novice teacher's capability to be attentive to the students' needs, thoughts and emotions through development of his own ability to cope with the class dynamics in its various forms [83].

S. Intrator [83] places on the agenda the emotional difficulty with which novice teachers have to cope and suggests beginning to address the issue already during the training period. It is possible to relate to the experience that novice teachers undergo in programs that include internship workshops, but one should not ignore the time that passes between one workshop and the next and the novice teacher's need to obtain concrete support and solutions (at times even in the "here and now"). And this is where the mentor comes in, who by virtue of his traits can act according to the guidelines set by S. Intrator [83], [85], [128], [162], [199], [214].

Reinforcing an understanding of the significance of the processes that the novice teachers are undergoing, as well as the significance of teaching will lead to positive implementation and to the existence of a connection between their sense of mission and desire to teach, which constitute some of the parameters of professional identity as defined by S. Fisherman and I. Weiss [179] on the one hand, and their potential as teachers and human beings on the other [157, p.63]. It follows that mentoring processes that take place during the internship year constitute one of the most important factors in self-perception that novice teachers form for themselves and they are critical for the moulding and development of future teachers [155]. In general, during the internship period novice teachers experience numerous teaching incidents, formation of personal bonds and confrontations. Some are defining events that enhance the feeling of competence and allow construction and strengthening of professional identity, while others are challenging, complex events that create frustration and could lead to a sense of low competence. As stated earlier, the feeling of competence is not a simple thing to alter and the role of the mentor in these cases is therefore significant. For example, when a novice teacher approaches a mentor with a difficulty, the mentor must question himself as to the exact nature of the difficulty, the things that are bothering the novice teacher and the factors that are motivating him. The mentor must help the novice teacher to be aware of the way the event developed and gain insights that go beyond its mere detection, while making room for statements and opinions on the part of the novice teacher and creating in him a feeling of potential and faith in himself.

By managing such a process the mentor can become an agent of change and cause an improvement to take place in the novice teacher's feeling of competence [93].

In addition, sometimes the novice teacher works with students of high potential and does not encounter any disciplinary problems. On occasion, however, the novice teacher is forced to cope with students who have no motivation whatsoever to learn and/or problematic students. Coping with such students is not easy and the novice teacher is forced to experience things that leave him with negative feelings that are not necessarily within his control [31]. The novice teacher must understand the language of his students, with all its implications; motivate them through positive emotions such that they will feel involved and important. This takes place through an understanding that motivating them will result in the realization of pedagogic and education goals [117], [146]. Accordingly, apart from emotional support, the mentor must ask the novice teacher questions that will enhance his actions and attempts to reach these students such that his feeling of self-efficacy will not be affected [31]. A change in the feeling of selfefficacy will be followed by a change in the perception of the teacher's professional identity. A novice teacher who learns empowerment first-hand in a way that is non-threatening and directed towards advancement of self-awareness will be more aware of his students' good basic traits and will be better able to reinforce them and guide them into using these trains both as part of their learning process and later on in life [92]. An in-depth understanding of students' traits is important for novice teachers, enabling them to influence the students' learning process out of an awareness of the difficulties they face and based on establishment of a relationship of trust with them [166]. M. Barak and N. Barnea [166] describe how mentors identified the impact of a specific event in novice teachers' stories on the novice teachers' professional identity. The researchers suggest that mentors incorporate in their work with novice teachers "stories of novice teachers" and discuss with them difficulties arising from the stories and coping options, with a view to enhancing their self-confidence and consolidating their sense of togetherness and their role as educators in addition to being imparters of knowledge.

An additional point that deals with interpersonal relations relates to teachers who on occasion form a very close personal attachment with their students by involving them in their private lives. The blurring of the boundaries between the personal and professional realms can constitute a problematic element for teachers in general, and novice teachers in particular, since personal contact can engender erroneous connotations and attract unnecessary finger-pointing [148]. Here the role of the mentor is essential in helping novice teachers understand the need for boundaries and for finding the golden mean despite their desire for personal contact with their students as part of their belief in the role of the teacher [90], [117]. Along with the processes of empowerment and development of self-efficacy, it is important that mentors help novice

teachers in developing the ability to evaluate themselves, allowing them to identify spots where harder work is necessary both from the pedagogic and class management angles. This concept is based on the assumption that self-evaluation has an important contribution to make to the novice teacher's self-study and professional development [208], enabling them to subsequently manage their professional development by themselves. A novice teacher who completes his year of internship is considered to be a teacher to all intents and purposes – one who regards himself as a professional and keeps abreast of new information relevant to his activity. It may therefore be reasonably assumed that he will take pains over his professional development as part of his professional identity [122], [127], [223].

Novice teachers have a vision as well as a consuming desire and willingness to apply the knowledge that they have acquired and to continue to acquire knowledge, based on the recognition that the teaching profession involves constant learning. They wish to teach and lead their students to success, predicated on the premise that this will be their own success, while also wanting to gain experiences relating to professional and personal growth. They are perhaps concerned about the unknown, and about issues such as class management and teaching strategies, but are willing to meet the challenge and fulfil their desire to be teachers.

# 2.3.The Pedagogic model for developing novice teachers' professional identity through mentoring

The literature review conducted and the reinforcement received in the research design helped in elaborating a model presenting a new paradigm of developing novice teachers' professional identity, based on factors, descriptors and conditions. The model exposes the interconnections between all parts of the puzzle comprising the act of teaching and the mentoring processes during the induction stage. The professional literature describes three significant criteria with respect to optimal mentoring: special mentor characteristics, mentoring strategies, and provision of support at the level of the three aspects representing the difficulties the novice teachers have to cope with. The Model served as a basis for organizing the pedagogical experiment. It has at its basis the most significant theories associated to the development of novice teachers' professional identity, the stages of developing novice teachers' professional identity: initial training, induction, absorption in the educational system, as well as the factors determining novice teachers' professional identity developmen. Profesional literature describes the mentoring process as one of the key elements with a positive impact on



Figure 2.1. The Pedagogic model for developing novice teachers' professional identity through mentoring

the development of novice teachers' professional identity, especially during induction stage. Mentor's characteristics, mentoring strategies and categories of assistance provided to novice teachers, considering internal and external factors determining each novice teacher professional identity development can contribute to the development of professional identity components.

According to self determination theory, elaborated by E.Deci and R. Ryan, individuals have an inherent need to develop into coherent autonomous individuals. The first assumption of self-determination theory is that people are activity directed toward growth. Gaining mastery over challenges and taking in new experiences are essential for developing a cohesive sense of sel.f The theory identifies three key psychological needs that are believed to be both innate and universal: *the needs for competence-* people need to gain mastery of tasks and learn different skills, relatedness- people need to feel in control of their own behaviors and goals. Social environments can, according to this perspective, either facilitate and enable the growth and integration propensities with which the human psyche is endowed, or they can disrupt, forestall, and fragment these processes resulting in behaviors and inner experiences that represent the darker side of humanity."(Deci and Ryan, 2002). Thus, human development/growth must be self determined: reflective, intentional and conscious.



Figure 2.2. Relationships between human's needs according to Self-determination theory

Taking into account the above mentioned theory, the peculiarities of teaching and those of professional identity, we found necessary to valuate in our investigation the next aspects: *Autonomous motivation; Integrative motivation; Competence, Self-actualization, as components of professional identity* that, being adequately explored, could generate multiple effects at both the individual and social levels: reducing dropouts; improving teaching methods and strategies; improving reflection; emphasizing professional status an life-long professional development.

*Autonomous motivation* is one of the basic components of professional identity, since it is determined by internal factors: personal experience, emotion, perception of the role assumed. Hence the importance attributed to psychological support provided by the mentor to the beginning school teacher.

*Integrative motivation* results from satisfying the need of belonging, recognition and respect and need for development.

*Self-actualization*. In Maslow's pyramid of needs, self-actualization is reflected as one of the needs that culminates in the formation of successful personalities as it refers to creativity, self-fulfilment and talent pursuit.

For a successful professor, creativity is the key to professional *competence*, determined, at the same time by competent teaching including genoseologic, praxiological, communicational, managerial, investigational and metacognitive skills.

The literature dealing with mentoring, its importance and implementation has become more extensive in the past two decades, although the implementation process itself, differs from one mentor to the other [199]. Undoubtedly, proper compatibility between novice teacher and mentor will contribute to the novice teacher's optimal absorption, empowering him and helping him to develop his own professional identity. At the same time it is important to take into account the differences in personality between mentors and the fact that in the final analysis it is the mentor who moulds and defines his role [29], [199]. Furthermore, the role of the mentor is often something that develops during the course of the mentoring period. S. Feiman-Nemser [55] described the work of a mentor teacher with beginning teachers, defining it as "wisdom of practice"[p. 19]. Such a mentor relates to the needs of the novice teacher here and now, but also looks ahead to long-term goals, allowing the professional development of the novice teacher hand-in-hand with his inclusion and development in the professional community of which the mentor is part. A mentor who looks to the long range must constantly question himself about the quality of the mentoring he is imparting to the novice teacher and whether it allows the novice teacher to grow, develop a vision and crystallize a professional identity – "Is what we are doing in our practice making a difference to student learning? If it is not, why are we doing it? How do we change the action in our practice so that it is? If this is making a difference, how do we
reshape it to continue to improve it?" [69, p. 147]. In order to do his job properly and advance the mentoring process vis-à-vis the novice teacher, the mentor has recourse to a variety of strategies. We expose below five active strategies used with novice teachers in the mentoring process:

Observation of Lessons and Pedagogical Dialogue. "The best way to identify behaviours is by observing them ... only observation can yield the essential information that can transform a loser into a winner" [182]. Observation constitutes a tool for research and study underlying modern social science and serves for systematic recording of events and behaviours in the research environment [219]. Direct observation allows purposeful and focused contemplation. The mentor who observes the novice teacher does not have to question him about his conduct in specific situations, but observes these directly in a natural environment [202, p.75]. Observation help in identifying processes, difficulties and strategies, in coping with them, and in developing constructive and in-depth pedagogic discourse. However, the mentor who cannot be in all places at the same time and see everything must be focused in his observation and beware of devoting greater attention to subsidiary issues. The mentor must remind himself of the aim of the observation and the way he must focus it in order to realize this aim [219]. During the course of the observation, the mentor's job is to document the processes, behaviours and issues he has chosen to focus on in the lesson, but it is important that he in parallel make a note of ideas, responses, clues and assumptions as a result of his observation, constituting material for reflection. An advantage for the mentor is his understanding of the context of the observation in terms of location, timing, population and other relevant phenomena taking place at the same time [219].

F. Patrick et al. [122] found that novice teachers welcome observation by mentors and the subsequent feedback they provide. This is particularly true of supportive mentors, who enable learning and development and the feeling that they create as a result of this process. E. Taylor and J.Tyler [140] found that evaluations based on the TES model, which focuses on observations and feedback in teacher evaluation, contribute to further professional development of the teacher and enable a long-term perspective of the change that is supposed to take place in him. The researchers also found that the grades of students whose teachers had undergone a process of evaluation according to this model showed a 10% improvement. During observation, the novice teacher puts into practice what he has learned in the framework of training, his sessions with the mentor and on-going work. The lesson constitutes application of the material learned, with the personal interpretation of the novice teacher [134]. True learning grows from personal experience and therefore, pedagogic dialogue following observation serves as a springboard for brainstorming and development of focused thought and investigation with respect to the lesson [69]. Optimal observation and the ensuing pedagogic dialogue facilitate advancement of teaching as a result of intensive analysis of the teaching and learning processes, followed by development of the object of observation. The mentor observing the novice teacher can direct him on the didactic level, the level of content and ways to convey it, as well as on the educational level, in terms of class management. A mentor can also go to greater lengths and add more intensive observation relating to the connection between the aim of the lesson and its delivery, while dealing with deep insights and the impact of the activity in the lesson on further learning [214]. It is important that the pedagogic dialogue stem from the successes and prowess of the novice teacher in order to instil in him a sense of competence. Intensification of the feeling of competence also transfers responsibility to the novice teacher, leading to self-direction in construction of future goals, development of reflective thinking, and coping with and changing erroneous decisions independently. Focusing on weaknesses and difficulties that were detected in the lesson creates a lack of confidence in terms of competence, fears and dependence on the observer, who becomes the responsible party [162], [182]. On the other hand, where a mentor observes an unsuccessful lesson by a novice teacher, the mentor must conduct a dialogue that will concentrate on points of strength, enabling the novice teacher to grow [15]. In any event, the dialogue should not end with a host of suggestions and tasks for the novice teacher to perform, but should rather focus on a small number of implementable assignments and goals [134].

C. Guterman [182] suggests 10 principles for conducting observation and pedagogical dialogue, such that it will result in growth and empowerment: (1) equality between the mentor and the novice teacher during the observation and dialogue in order to prevent the novice teacher from feeling that he is being dictated to from a position of superiority. A person who feels that he is being treated equally tends more to cooperate and accept responsibility; (2) reflective process contributing to growth; (3) dialogue to enable the partners to express their opinions while maintaining mutual respect for each other and their ideas; (4) use of questions to raise the level of thinking; (5) listening with empathy and curiosity and reinforcement of the sense of partnership; (6) selection of "what to and what not to adopt". Selection creates a change through understanding and willingness, and neutralizes both overt and covert objections; (7) openness based on mutual respect and a willingness to listen without fear but rather through a desire to develop and grow; (8) active thinking, geared to applying what has been learned; (9) adaptation of suggestions and ideas raised to the personal style of the novice teacher in order to foster acceptance and prevent alienation; and (10) reciprocity – regarding the entire process as an opportunity to learn, both for the novice teacher and the mentor, irrespective of their roles,

education and experience, and through an awareness that new ideas, interesting strategies and possibilities that had hitherto not been considered can be raised.

In order for the mentor's observation of the novice teacher to be meaningful, it is important that it be carried out several times during the course of the year (no less than twice in each semester).

**Modelling.** Observation of the mentor by the novice teacher can serve as a learning opportunity. When the mentor uses this strategy he reveals his notion of teaching, the considerations that guide him in his work and the processes by which he makes decisions. Involving the novice teacher in these processes can challenge him as a colleague to pose questions, make suggestions and encourage collaborative learning. This strategy, moreover, which leads to peer learning, can create a bond of partnership and boost the personal and professional self-image and self-confidence of the novice teacher [214]. The dialogue following observation of the mentor by the novice teacher stimulates thinking regarding what can be done in the framework of the lesson, what can be learned from it, what can be done differently and how things can be improved – raising the effective relationship between the novice teacher and the mentor and the formal professional development of the novice teacher, as well as that of the mentor, to a different level [80].

In developing a professional culture, the mentor must strengthen beliefs and values that constitute the basis for interdependence. Observation of the applied practice by the mentor and/or presentation of a dilemma by him constitute a statement of trust, partnership, dedication and creation of a true dialogue on the situations occurring in the classroom, in terms of the specific subject as well as the more general pedagogical aspects [15], [69]. P. Hudson [80] presents a somewhat different meaning to the term "modelling". The focus is not only on the possibility of the novice teacher's observing the mentor's lesson but the mentor's demonstrating to the novice teacher how one can conduct oneself according to different tracks within the educational system, e.g. class management, coping with disciplinary problems, meetings with parents, handling of interpersonal relations in the school, time management, and others. This returns us to the role of the mentor as a "role model"– the novice teacher observes the mentor in his day-to-day conduct in the school and the interpretation he gives to this conduct serves to all practical purposes as a manifestation of the organizational culture.

An additional point derives from the claim of Dewey [116], who claims that teachers must be able to see what is going on in the heads of their students. Thus when a novice teacher observes a mentor deliver a lesson, he can focus on the mentor and learn additional teaching strategies, but he can also choose to focus on the students, their behaviour, their understanding, the ways in which the lesson impacts them, and their reactions to it. This perspective allows the novice teacher additional learning and honing of his thought process with respect to what he has observed and what influence it has. Application of such a model underscores the importance of creating a relaxed atmosphere and favourable interaction between the novice teacher and the mentor [116].

Reflective Dialogue. The concept of reflection originates in the Latin work "reflectere", which means to reflect, to think about, to decide. M. Zuljan and C. Bizjak [162] defined reflection as a mental activity that allows a person to distance himself from a situation and view it objectively. The process of reflection involves experiential learning based on an in-depth analysis by the person of himself and recognition with regard to what motivates his thoughts and actions. The roots of this process are found in meta cognitive processes. A person's ability reflect on his work sheds different light on his professionalism, much beyond technical rationality [162].Informal learning is insufficient in making the novice teacher aware of the changes he must make. The novice teacher is required to develop an awareness of the cognitive and emotional processes that he is undergoing, including feelings, beliefs, values and needs, all in contexts relevant to the behaviours he exhibits [78]. It follows that one of the building blocks of mentoring is reflective dialogue between the mentor and the novice teacher. Dialogue allows indepth contemplation by the novice teacher of himself and his work, helps both the mentor and the novice teacher better understand their behaviour patterns and work situations, allows them to describe their thoughts and ideas, and contributes to a deep understanding that facilitates the novice teacher's development. The mentor is not expected to hand out prescriptions on how to cope, but must rather ask the novice teacher questions that will support the reflective process and allow him original thought while moulding his professional identity. All this takes place through support, emotional security and building of trust in the novice teacher [95], [98], [99], [119], [162].

The mentor must begin the reflective process of the novice teacher from a situation/conflict that stimulates the development of discourse through subtle, supportive questions that allow objective thinking on the part of the novice teacher on the processes, as well as pointed critical questions to develop and crystallize his professional identity [69]. D. Schön [135] developed a model that emphasized two principal reflective processes – one reflection "in action" and the other reflection "on action" [135, p. 276-278]. Reflection in action [135, p. 49-69] refers to reflection that takes place during an activity, aimed at directing further activity, whereas reflection on action takes place in retrospect, on completion of an activity. There is, however, a consensus regarding the fact that with proper training novice teachers can be expected to carry out reflection on action [149]. A. Urzúa and C. Vásquez [149] claim that mentoring sessions constitute an opportunity to advance reflection and self-awareness on the part of novice teachers. Accordingly, mentors must be aware of the challenges inherent in these

sessions and make a conscious effort to assist novice teachers in creating contexts and in gaining a deeper understanding of their actions, their implications and further planning through awareness. In these sessions novice teachers are given the opportunity to carry out reflection on actions that have already taken place, but in parallel plan ahead by predicting the possible results and their place as teachers. The researchers believe that these sessions provide the novice teachers with a unique opportunity to engage in decision-making, definition and investigation of problems, and evaluation. This occurs through an attempt on the part of the novice teachers to imagine the future course of events and themselves in this future state - prospective reflection, which addresses future planning and prediction of results. The idea is that teachers consider the probability of the results that could be obtained by acting out their decisions and in light of factors such as the size of the class, student motivation and student skills in parallel with goals and targets [149]. What is involved is not the kind of small talk that takes place in the teacher's room or a pep talk by a counsellor but a structured process that provides a safe and supportive environment in which the novice teacher can explore his emotions and accept unsuccessful performance as part of his learning process [78]. It is a deep process in which the mentor listens and helps the novice teacher form his own decisions [98].

F. Korthagen [94] described an ideal process of learning through experience and reflection and presented a structured model that demonstrated ALACT (Action, Looking back, Awareness of, Creating alternatives, Trial): A – the action itself (teaching, coping with one or another event, etc.); L – contemplation of the action retrospectively; A – awareness of the essential elements in the action; C – creation of alternative strategies; T – a new action that allows a new cycle in the process.

The processes of reflection in the school are mostly focused and swift, and try to provide answers to problems of the moment, a fact that is due to the dynamic nature of life in school. This model is a product of real problems experienced and concerns felt by novice teachers; it advances systematic reflection and reaction between the novice teacher and the mentor while combining theory and practice. The model allows personal work between the mentor and the novice teacher in which they get down to the crux of the matter, the aim being to advance the novice teacher from the professional point of view and foster processes of self-directed learning [92], [94]. The mentor who is able to intensify his work with the novice teacher can extend reflection to two levels that deal with identification of the ideal situation that the novice teacher would wish to have occurred and the factors that thwart it. Treatment of such an event empathically will help in strengthening the novice teacher's awareness of feelings and fears, gaps and difficulties, as well as the possibilities available to him for continuing to cope with an event, thus bolstering his personal capabilities and self-direction [92]. G. Olsher and I. Kantor [119] conducted a research in which the mentoring process was based on reflective processes involving deep thought-provoking questions by the novice teacher on the lesson/process (reflection on action). To this end they formulated a series of questions which would oblige the novice teacher to move from the stage in which he sums up a lesson with "the lesson was good", or "most of the students understood the subject", to a stage devoted to thinking about the factors that caused the feeling of success/failure, such as "how do you know the lesson was a success?" As the process continued in the course of their research, dialogue with Danny, a participating novice teacher, became deeper and more meaningful – "Danny started asking deeper questions, ones that were related not only to content but to pedagogy and professional identity as well" [p. 165].

Novice teachers who are engaged in professional improvement and advancement through trials, emulation, persevering study, adoption of work habits and counselling, among other things, must learn how to conduct reflective feedback for themselves such that they will be able to reach a high level of inner self-esteem and develop their professional identity in parallel with professional development. In order to convert the knowledge they are gaining into personal knowledge, they must undergo a procedure by which they process and assimilate it. This involves reflection based on the personal world view of the novice teacher and on the context in which he exists [228, p. 5-6]. Thus the knowledge the novice teachers have crystallized constitutes a filter through which they process the lesson (ahead of, during and at the end of the lesson) and through which they also respond to it. It is impossible to teach everything during the training period and novice teachers who encounter gaps between the knowledge they have acquired and the needs on the ground have to contend with tension and fears, and many a time must function in situations of ambiguity and with spontaneity and intuition based on tacit knowledge. The main characteristic of this knowledge is its development as a result of reflective thinking about an action during and after its occurrence – understanding of motives and attitudes driving students, identification of their difficulties and factors causing them, and identification of their thinking styles, pace of learning and ways to respond to them [182, p. 420].

The practice of reflective dialogue is by its very nature one that investigates the experience of the novice teacher in his class. A mentor who cultivates reflective processes in the novice teacher must be oriented to improving the novice teacher's habits rather than improving the novice teacher; this is to avoid rudely stamping out the novice teacher's rights, since the indepth analysis of issues could be very personal indeed. Moreover, the novice teacher should not be made to feel like an object whose worth must be improved. Development of the process in the form of a dialogue is an ethical one that enables a change in habits, with the mentor being the external agent assisting in the process [124].

**Simulations.** Simulation is a pre-planned virtual experience aimed at improving the novice teacher's day-to-day skills by adapting them to the context of a particular situation based on the awareness of his attitudes and emotions and their impact on his work. Simulation takes place in a protected environment and it is therefore possible to incorporate in it conflicts and complex problems which the novice teacher encounters in the school. The conditions are such that the novice teacher is able to make mistakes and learn from them without sensing any element of judgment and without fearing that he will make a mistake that could be potentially harmful. The experience is a dynamic one and takes place in familiar, non-threatening surroundings, allowing the novice teacher to learn new and varied strategies that will advance his professional development [174].

A research carried out with the collaboration of a number of participants from the academic world and a hospital found that learning based on simulation is more effective for novice teachers and consequently produces better results with students [173]. "The novice teachers acquired experiences of success, a personal toolkit for effective conduct, and keys to development of a professional identity" [173, p. 9]. Also S. Nahal [112] states that experimenting with virtual scenarios in order to gain ideas and learn practices develops intuitive skills in day-to-day coping in the school. The Institute for education simulations at Bar-Ilan University was developed in recognition of the importance of mentors for novice teachers a special workshop has been set up there for mentor training. The workshop focuses on key principles in creating a secure learning environment and provision of feedback and experiential learning through simulation with actors who have been trained to portray novice teachers. During the course of the workshop the mentors experience simulations associated with their roles, they are filmed on video, and the activity is followed by an analysis [174].

**Formative assessment Throughout the Working Year.** During the past decade attention has begun to be paid to the question of teacher evaluation, the basic assumption being that collection of information on teachers and their performance will enable teaching to be improved. The concept of "teacher evaluation" includes three elements:

(1) teacher competence – the teacher's skills and talents;

(2) teacher performance – the work of the teacher in practice;

(3) teacher effectiveness – the impact of the teacher's performance on the students [170]. Over time various tools have been developed that enabled two types of evaluation to be conducted: summative evaluation and formative assessment. "Summative evaluation allows advancement of a culture of accountability and quality assurance for policymakers and parents, granting recognition and remuneration to teachers as well as pointing out ineffective teachers and examining ways to promote or dismiss them" [186, p. 2]. Summative evaluation is carried

out with the help of tools that are based on uniform, comparative criteria whereas formative assessment leads to professional development through identifying strong and weak points in teachers, providing constructive feedback on their practical work, and directing them to professional development tracks to improve their capabilities" [186, p. 3].

Feedback is perceived as a central component in assisting learning, and formative assessment is perceived as a feedback loop, for the information itself obtained from the feedback is pointless unless use is made of it for improvement and for reducing the gap between the ideal and the real [75, p.36]. Thus, great importance is attached to feedback and to the feelings of the novice teacher: when the novice teacher feels that he can trust the mentor and the feedback is fair he will accept it and try to meet its recommendations [144]. Formative assessment improves the learning process by developing learning strategies based on self-regulation among learners [36]. This involves development of the skill of "learning how to learn", being an important condition for the success of the novice teacher both during his internship year and throughout his professional life [36]. Sadler [132] states that this process depends on three factors:

(1) understanding of the aim by the novice teacher;

(2) comparison between the performance of the novice teacher and the ideal/standard;

(3) involvement in activity required to reduce the gap between the ideal and the given. The mentor must therefore assist the novice teacher in understanding the aims, in developing a judgmental capacity regarding his performance, and in creating a repository of strategies [75, p.38]. This is undoubtedly a learning process in which the learner (novice teacher) is involved and tries to understand the new knowledge and put it into practice (incorporate it in his work procedures). According to L. Vygotsky, the learning processes distinguish between two levels of knowledge: the first level is the one on which the learner (novice teacher) is able to solve problems independently, whereas the second level refers to the learner's potential, known as the approximate development zone, or the level at which learning takes place, with the veteran, experienced teacher (mentor) assisting the novice teacher [151, p. 19-20].

Formative assessment connects with the theory of L. Vygotsky [151, 92] by allowing mentor and novice teacher to work together on the subject of study by monitoring its development, planning and advancement. In addition, it allows consolidation of interpersonal relations between mentor and novice teacher through mutual activity towards common goals and through creation of work norms relating to partnership, openness, mutual support, trust and respect [8], [75, p.39]. Collaborative work by the novice teacher and mentor thus allows the incorporation of additional tools.

R. Reichenberg, R. Saguy and A. Levi-Feldman [208] suggest incorporating the concept of the work portfolio throughout the year due to the fact that it "allows expression to be given to originality, dynamism, reflection and variety ..." [p. 57]. Construction of the tool by the novice teacher and the mentor together will strengthen the bond and trust between them while also allowing the perspective of the novice teacher to be presented based on his professional considerations [208]. The mentor whose premise is assistance and support and who is geared to advancement of learning on the part of the novice teacher must know how to evaluate the novice teacher in a way that will not destroy the relationship he has built up with him, which is based on trust, reciprocity and openness. The mentor must also direct the evaluation process such as to have the novice teacher cooperate, accept what is said and grow professionally. In order to put theory into practice it is important that the mentor construct valuable feedback and reflection processes and that the evaluation itself focus on processes (on the feedback itself) rather than the end result (assigning a grade to the lesson) [8], [145]. At times the teacher who is being evaluated feels that the evaluation is sealing his fate, which could possibly lead to mental stress, exacerbating the emotional difficulties he experiences and causing his dropout [52]. This is undoubtedly not a simple matter, raising questions with respect to the duality inherent in the role of the mentor – his ability to support the novice teacher on the one hand, and evaluate him on the other as also his ability to maintain objectivity – and the novice teachers' feelings [160].

J. Rippon and M. Martin [128] found that the opinions of the novice teachers who were asked if they were interested in their mentor's being involved in their evaluation were divided – 53% believed that there was an advantage to knowing the mentor performing the evaluation – " I feel this would be useful as this person could work closely with you and get to know you and your style" [128, p. 90]. On the other hand, 16% presented the problem that arises when the mentor is a guide and supporter, but also an evaluator – "On the one hand it is good for someone to know about my whole progress and to be able to offer advice based on this. On the other hand it may make the supporter less approachable" [128, p. 90].

The problem stems from the mentor's concern for the novice teachers, who will hesitate to request the mentor's help or consult with him on difficulties out of a fear that this will lower them in his esteem and affect them adversely in the evaluation process. On the other hand, the mentor knows the novice teacher better than the principal – he works with him in close cooperation and shares knowledge and experiences with him, and it may be reasonably assumed that he will ensure that evaluation of the novice teacher will be fair, proper and based on true information [29], [61], [128], [160]. The adequacy of the formative assessment aims and the clarity of the criteria for the novice teacher included therein are fundamental for its success [8], [144].

M. Heritage [75, p.39] states five guidelines for effective use of formative assessment: (1) progress in learning;

- (2) clarification of the aims of learning and output/success indices;
- (3) verbal-descriptive feedback;
- (4) self-evaluation in parallel with peer evaluation;
- (5) collaboration.

A novice teacher who not only does not feel threatened but also understands the nature of the process and its advantages will make an effort to cooperate in applying the recommendations made, enabling him to advance professionally and crystallize his professional identity. By virtue of the continuous contact between mentor and novice teacher, formative assessment does not have to take place at any particular point in time but can develop over the course of the internship year [52], [145]. Both the mentor and the novice teacher can gather evidence for the evaluation over a period of time as part of the process of documentation of the novice teacher's work and the reflective processes he undergoes, the extent of learning gained from the evaluation in the final analysis depending on the nature of the feedback and the way in which it is conveyed [8], [145].

A novice teacher who comes with a storehouse of learning and empowerment will invest efforts in collaborating and applying the recommendations made, such that on the one hand he will be responsive to his students, and on the other will develop professionally and strengthen his professional identity [52]. The mentor must be a person with self-confidence and a sense of accountability. Thus it is important for the mentor to be able to evaluate the novice teacher based on an educational vision and responsibility for meeting existing standards. Where necessary, the mentor must point out a novice teacher who is unsuited to the teaching profession [30], [160].

In this frame, the *Pedagogic model for developing novice teachers' professional identity through mentoring* is directed towards developing novice teachers' professional identity from the perspective of approaching professional identity components.

#### 2.4. Conclusions on chapter 2

In Chapter 2 we approached the phenomenon of mentoring from the point of view of its formative dimension [67], [7172], [102], [210], [214]. It makes no difference how much novice teachers have been primed for their career in teacher training institutions – teaching by its very nature is unpredictable and many times they will have to cope with difficulties for which they have not been prepared, a fact that could exacerbate their vulnerability. Researchers recommend selecting worthy mentors who can provide adequate responses to the difficulties described in Chapters 1 and 2. To this end, they list a number of mentor characteristics: (1) They should have professional knowledge, enabling them to help the novice teachers in coping with pedagogical difficulties [15], [48], [128], [214]; (2) They should be skilled in training, including the ability to assist in conveying both generic pedagogic and disciplinary messages [40], [103], [116], [191]; (3) They should have an awareness of the novice teacher's needs (need to belong), a factor that repeatedly appears in professional identity theories [43], [44], [85], [128], [129], [143], [179]; (4) They should be able to provide emotional support and advice [98], [128], [162], [199], [214]; (5) They should be approachable and consistent [103], [128], [214] .

Successful absorption and mentoring programs are measured by their ability to instil in novice teachers professional confidence, a sense of competence to initiate processes, and self-determination, so that personal learning takes place at a professional level, impacting pupils' achievements as well [32]. This statement reinforces the recommendation of A. Fox and E. Wilson [60] to listen to the novice teachers' voices with respect to the things they find or miss in the induction stage. Mentors are expected to serve as mediators between novice teachers and school, enabling the novice teachers to have a sense of belonging and overcome the contradictions created: (1) as a result of the gap between the vision they cultivated for themselves and reality; (2) the gap in pedagogic knowledge and (3) the gap between feelings of hope and euphoria on the one hand, and frustration and disappointment on the other.

It is important that the mentors understand that novice teachers differ from each other with respect to the experiences they bring with them and their processes of development [177]. It is therefore important to choose the correct strategy or find the right combination of different strategies, enabling novice teachers to receive maximum support. This is based on a recognition of the components of professional identity and the understanding of their influential power, as well as on fundamental assumptions relating to professional identity being context-related and dynamic, formed through interpersonal relations and directed towards creating coherence, as suggested by C. Rodgers and K. Scott [129]. These processes will allow the novice teachers to fulfil themselves and realize their vision, while encouraging perseverance in the profession and preventing dropout.

# 3.METHODOLOGY OF DEVELOPING NOVICE TEACHERS' PROFESSIONAL IDENTITY THROUGH MENTORING

### 3.1. Ascertaining the level of novice teachers' professional identity

The central aim of the pedagogic experiment is to identify the level of novice teachers' professional development and check the efficiency of the pedagogical model for developing novice teachers' professional identity through mentoring. The insights gained in the wake of the literature review led to determination of the following objectives:

- to identify the difficulties faced by novice teachers in Israel and the solutions provided to them currently;
- to upgrade procedures relating to the induction stage in Israel through the mentoring process, in order to help novice teachers in developing their professional identity;
- to identify and evaluate the manner in which mentors help novice teachers in consolidating their professional identity.

The research methodology: Following formulation of the research questions and objectives, the process of data collection began, comprising two research methods: (1) The statistical methods included: averages, standard deviations and significance, a Pearson correlation, t test for independent groups, multiple regression, frequencies, Cronbach's alpha; (2) Empirical methods systematically that engaged in collecting data that enable synthesis, generalization, reaching conclusions, comparing, categorizing and triangulation. In order to carry out the processes and examinations, I used the following research tools: for the quantitative research I used questionnaires; for the qualitative research I used semi-structured interviews, content analysis, description, presentation of findings.

# **Descriptive statistical methods:**

- Average the average is the sum of the values of the variable with all the subjects divided by the number of subjects. It represents the middle position of the number group in the statistical distribution and describes the phenomenon on a general level [202, p. 161].
- Standard deviations the aim of these numbers is to allow a comparison between the relative position of a particular individual within the sample and to determine in which of the samples he is ranked relatively higher [201, p. 38-41].
- Frequencies in statistics the frequency is the number of occurrences of a particular event in a given trial, research or population. Frequency can be presented quantitatively in numbers, in percentages or by means of various graphs [202, p. 62-64].

#### **Deductive statistical methods:**

- Significance the significance tests serve to examine the hypotheses with respect to specific parameters in different populations [201, p. 120].
- Cronbach's alpha measure for internal reliability to assess the reliability of the questionnaires [168, p. 192].
- Pearson correlation this is an index that examines the relationship between two variables. In statistical data processing the reference is generally to a symmetrical relationship between two variables. The values of the index vary between -1 and +1 and are indicated with the letter R or ρ: in a correlation of +1 a full positive correlation exists between the two variables; in a correlation of -1 a full negative correlation exists between the two variables; a correlation of 0 indicates that no linear correlation exists between the two variables. The Pearson correlation factor provides information on two levels: (1) the degree of correlation between the variables: the closer the value is to +1 or -1, the stronger is the correlation; (2) the direction of the correlation between the variables: a positive value shows a positive correlation and a negative value shows a negative (inverse) correlation [201, p. 58].
- t -test for independent groups the t test is a test of the differences, which examines the probability that a quantitative characteristic being examined in a particular small sample taken from a particular population shows a normal distribution. This test serves for comparison between averages where the standard deviations of the population are not known but are equal to each other [201, p. 126].
- Multiple linear regression- estimation of a single variable by means of a number of known variables. The addition of variables enhances the estimation capability, practically without exception.
- Fisher test designed to test the existence of dependence between variables years [201, p. 172].

The research method - Over time two dominant research approaches have developed – quantitative research and qualitative research – each emphasizing a different world perception. The aim in quantitative research is to provide data relating to reality and its interest lies in phenomena so long as they represent a general law. It is therefore possible to generalize its findings in other contexts as well. The reference point in quantitative research is theoretical knowledge, allowing questions to be asked and specific hypotheses to be proposed that reflect reality in an objective manner [206]. Qualitative research constitutes a scientific way to understand human phenomena taking place in reality from the point of view of the participants. It is based on the belief that an important relationship exists between events and the way they are interpreted by people, and on the assumption that an analysis of the internal experience and

behaviour of the research subjects, both by the researchers and the subjects themselves, will allow an in-depth understanding of human behaviour.

The third approach is the mixed methods approach, based on the assumption that phenomena exist in education that are explainable, prediction of whose influences has a considerable impact in extensive and varied contexts. On the other hand, the educational system is composed of a variety of complex individuals who are influenced by different cultures, norms and traditions, a fact that prevents identification of a method that will solve all problems holistically. The mixed methods approach claims that the integration of quantitative and qualitative research can constitute an optimal solution and the combination of the two approaches is considered to be a valid means and is defined as advantageous, providing a balance between the breadth and depth of the research [68, p.132], [140], [161]. In addition, the advantages of one method are offset by the disadvantages of the other, resulting in a more complete picture being obtained [46, p.30], [68, p. 135].

The present research has been conducted according to the mixed methods approach. About 7,000 novice teachers are part of the educational system in Israel and it was therefore important to focus at the first stage on a "cross-sectional study" which would produce a general insight of the factors influencing development of a professional identity on the part of novice teachers during the mentoring process. The use of the qualitative approach has in fact validated and complemented the quantitative process in as much as it has tried to understand the contexts of the different variables and their effect on the processes that novice teachers undergo and the manner in which they interpret them. The present research was conducted in accordance with the phenomenological approach, which seeks to investigate the "phenomenon" as experienced by the research subjects (i.e. the novice teachers) [216, p. 62], the significance they attribute to the incidents and the place, meaning and impact of the experiences in terms of the daily lives of the subjects and the shaping of their perception [41, p. 58], [216, p. 64].

The main research tools were questionnaire and interview as listed below.

**The Questionnaire** - The questionnaire is a tool for gathering data on a specific phenomenon. The closed questionnaire is uniform and composed of questions that the subjects are requested to rate according to a predetermined scale (the answers were coded according to a numerical or ethical scale). The data collected for the present research related to academic year 2012-2013, with the questionnaires being distributed towards the end of the year in order to allow the novice teachers to express their opinion on processes at the closure of a full year rather than on those that had barely begun. The questionnaire (Appendix 1) opened with a preface that explained the aim of the research. The novice teachers were told that the findings from the questionnaire would be used for the purposes of the research and for deriving conclusions that

would help in upgrading the processes and incorporating them optimally in the system. In order to increase the response rate and prevent skew, it was made clear to the respondents that the findings would be confidential and anonymous. The questionnaire used at the first stage of the experiment concentrated upon the determination of Professional identity level. In reliability test conducted for the entire first part in the present research a value of  $\alpha = 94$  was obtained, indicating high internal consistency and homogeneity of the items).

**The Interview** - "The interview is a research method in which the researcher gathers information with the help of direct interrogation of informers, generally as part of a face-to-face talk" [168, p. 32]. The interview enables an understanding of the interviewees and the significance they attach to this experience. The voices of the subjects are revealed through an open in-depth interview, allowing the personal perspectives of the interviewee to be probed [38, p. 349] [123, p.341], [216, p. 69], [217, p. 22]. The semi-structured interview, which allows the researcher to use a framework of uniform questions, but also allows him flexibility and room for questions arising from the interview [108, p.74]. In the present research I chose to use the semistructured format (Appendix 4 - key questions to novice teachers, Appendix 5 - key questions to Stakeholders), such that an initial uniformity was established between the respondents. Subsequently, I allowed the interviews to develop, giving the interviewees the feeling that there was room for them, their emotions and their opinions, and I allowed them to express themselves freely in their own words in order to obtain a story with depth [26, p. 57], [216, p. 70]. On completion of the interviews I transcribed them verbatim, including non-verbal signs such as coughing, laughter, intonation, noises, etc., as suggested by A. Shkedi [216, p. 78]. The commonly accepted rules of ethics with respect to qualitative interviews were observed. It was important for me to give the interviewees the feeling that I was interested in their stories for their own true value and for their contribution to the research [26, p. 213], [216, p. 79]. In order to ensure perfect anonymity, in presenting the findings of the interviews I used fictitious names for the novice teachers and officers next to their positions.

**Content Analysis.** Content analysis constitutes one of the most important tools for research and it is used extensively both in quantitative and qualitative research. The aims of content analysis are to examine, analyze, understand meanings and derive conclusions regarding the studied phenomena. Quantitative content analysis is used extensively in mass media as a means to count overt textual elements [153, p. 10], and it can be especially effective when the research contains a large number of cases and data. It should be noted that at times short quantitative descriptions can be focused and convey clearer and more meaningful messages than long narrative descriptions [153, p. 12], [216, p. 212]. In contrast, qualitative content analysis is intended to investigate meanings and messages in the database. It is mainly inductive and

consolidates the examination of the subjects and the conclusions arising from them [161]. Quantitative content analysis requires random or probabilistic sampling in order to ensure the validity of the research, whereas qualitative content analysis is mostly composed of texts that could answer the research questions in a directed manner. In addition, according to the quantitative approach, results are represented in numbers based on statistical methods whereas in the qualitative approach descriptions are obtained that reflect the researcher's view of the social world being investigated [26, p. 3, 9-10]. The answers for the two open questions were processed on both the statistical and qualitative level. In contrast, content analysis of the interviews is solely qualitative and was done following completion of the questionnaire on standpoints, such that a clear notion is obtained regarding the directions that are suitable for the interviews [216, p. 108]. Details of the content analysis process may be seen in Appendix 6.

N. Denzin [45, p. 295] was one of the first qualitative researchers to believe in and advocate the use of triangulation in qualitative research as a means of validating it, proposing the following four types: triangulation of data, triangulation of researchers, triangulation of theories, and triangulation of research methods.

The present research is based on three types of triangulation: (1) Triangulation of data – initially a wide sample of the research population was chosen, having a range of variables. In addition, use was made of a range of information sources (closed questionnaire according to the quantitative approach, to which were added two open questions which were subjected to content analysis according to the quantitative approach and content analysis according to the qualitative approach; and interviews with novice teachers and officers in the induction system, which were transcribed). All collected and analysed material was saved and documented; (2) Theoretical triangulation – manifested by application of a theoretical framework that helped to expand the scope of interpretation; (3) Triangulation of research methods – quantitative and qualitative findings, were subjected to a "rich description", which included all relevant information on the context and containing quotes from the subjects and an in-depth discussion of them [38, p. 141-142], [45, p. 301], [97, p.18], [216, p. 234].

**The basic research period:** The research had been carried out from 2012 to 2015 and included 4 periods:

- The first period- orientation (2011-2012): Literature study related to all the subjects related to entering the teaching profession (difficulties, special programs in the world, mentoring, and professional identity).
- The second period (2012) design: projecting the management methodology model for the improvement of novice teacher's absorption into the educational system.

- 3. The third period (2013-2014) experimental: verify the differences between novice teachers whose mentors have undergone training and those whose mentors have not in terms of the motivations expressing the novice teachers' professional identity and checking the impact of mentors manifested with respect to teachers who have been recommended during the evaluation process for an additional probation period.
- 4. The fourth period (2014-2015) summarizing: working out the research findings, i.e. analysis, generalization, systematization, summarizing, and description of the experimental research results; studying connections between the theoretical and empirical conclusions, elaborating perspective directions for further scientific researches in this domain.

## There are several potential limitations of the research:

- Consideration should be given to the fact that Israel is a multicultural society, based on which I recommend examining the various issues that are raised specifically in the different sectors. Although the questionnaire was answered by novice teachers from all sectors, the interviews were attended by only novice teachers from the state and religious state sectors. It is possible that different processes would be given prominence in the Arab and/or ultraorthodox sectors, impacting crystallization of the professional identity of the novice teachers in a different way. It is possible that these findings will lead to proposals that are unique to these sectors and their needs.
- Although based on the findings it appears that nearly all the novice teachers are pleased with the mentoring processes they are undergoing, it is important to learn also about cases involving problems and ascertain that it is a question of incompatibility with the model (a fact that reinforces the model since it refers to the ideal situation). However, due to the restrictions of the Chief Scientist in Israel, I could interview only novice teachers who had established contact with me and these were pleased with the process that they had undergone and with the relationship they had formed with their mentors.
- In the framework of my position I am well connected with all internship and induction coordinators. Although the letter was sent to the coordinators by email and access by means of the link was anonymous, it is possible that a need to please was felt because of the work relations between us.

The research field is the physical or human site that the researcher wishes to study and understand [218, p. 73]. The novice teachers studied in the induction units in the academic institutes that expressed the idea of continuity as presented by S. Feiman-Nemser [55].



Figure 2.2. The unit of "entering the teaching profession"

The units activities include: contact with graduates who have entered the teaching profession, organization of weekly workshops for novice teachers, active contact with mentors, analysis of formative assessments and their implications regarding the graduates and their training, organization of seminars and conferences, organization of courses for mentors, "Guidance on guidance" sessions for tutors, development of channels of communication with principals and inspectors, contact with new teaching staff in the first two years of work following internship, organization of courses for new teaching staff.

**Research Population** that answered the questionnaire included 112 novice teachers who had participated in internship workshops in 27 colleges and universities.

# The Background variables:

- Gender: 13.6% men, 86.4% women;
- Work with Age Group Corresponding to Training: 10.5% no, 89.5% yes;
- Work with Subject Matter Corresponding to Training: 12.2% no, 87.8% yes;
- Teaching position: 24% class teacher, 53.2% subject teacher, 6.4% special education teacher, 5% kindergarten principal, 7.3% substitute kindergarten principal, 1.2% special education kindergarten teacher. 2.9% other;
- Work sector: 52.6% Jewish, 10.3% Arab, 3.7% Bedouin, 28.1% religious Jewish, 4% Ultraorthodox, 1.3% other;
- Training framework: 75.8% regular studies, 16.9% academic retraining program, 4.8% outstanding students for teaching program, 0.5% top rated academics for teaching program, 2% other.
- Participated in a internship workshop: 14.2% in the universities, and 85.8% in the colleges. In addition, 81% of them had continued without a break with their regular studies for a degree and teacher's licence, 16.5% had participated in an academic retraining program and 2.5% had participated in other special programs.

J. Creswell [41, p. 61] recommends that not less than five participants be interviewed in phenomenological research. In light of this recommendation, a total of eight novice teachers

were sampled as well as four stakeholders in the induction stage: an Inspector from the Internship Department, the Head of the Induction Unit in one of the colleges, a Internship Coordinator in a college and a Internship Workshop Moderator. In addition, a District Counsellor and Coordinator (DCC), motivated by a sense of mission and deep-seated interests, was interviewed [175, p.34].

**Dependent variables in the quantitative research:** autonomous motivation, integrative motivation, self-actualization, competence.

**Indicators of professional identity:** certainty in choice of profession; self-efficacy; sense of mission; prestige attached to teaching; mentors teaching the same subject as the novice teachers

In reliability test conducted for the entire first part in the present research a value of  $\alpha$ =94 was obtained, indicating high internal consistency and homogeneity of the items.



Figure 2.3. Research Population Setup

**Independent variables in the quantitative research:** didactic support; emotional support; system support; general mentor support; constructive evaluation.

Ascertaining experiment. The pedagogical experiment was carried at Kaye College which operates according to self-determination theory, developed by E. Deci and R. Ryan [43], [44], and deals with the individual's internal processes, emphasizing the universal tendency for psychological growth and development [43], [44], [150, p. 245]. This theory refers to three psychological needs (sense of belonging, competence and autonomy), whose support contributes to integrative motivation, leading to optimization, social and emotional adaptation, and development of **professional identity**:

(1) The need for a sense of belonging, manifested in the desire to be part of a social fabric and imparting a feeling of physical and psychological protection [43], [44], [150, p. 245]. Behaviours supporting a sense of belonging and protection include, for example, demonstration of interest in and concern for others, investment of resources, time and willingness to help others, and a non-competitive framework with respect to learning and discipline.

(2) The need for a sense of competence, expressed in the individual's belief in his ability to realize his plans, aspirations and aims through a feeling of effectiveness and confidence [43], [44], [150, p. 245]. Behaviours supporting competence include, for example, provision of specific, immediate and non-comparative feedback, posing of optimal challenges, and assistance in coping with failure.

(3) The need for autonomy, referring to the need for self-determination and self-regulation, amid fulfilment of one's abilities and proclivities, and crystallization of aims, attitudes, values and plans constituting the professional identity [43], [44], [150, p. 245], [164]. Support for autonomy includes behaviours such as absence of coercion, cooperation in selection of study aims and subjects, clarification of the value, benefit or relevance of the study material, and permission to freely express negative opinions and feelings [43], [126], [165].

An in-depth look at the significance of the above three needs shows that frustration on the part of teachers at the start of their career is the cause of difficulties they have to cope with, underscoring the connection between this theory and the present research. E. Deci and R. Ryan [43], [44] claim that when basic psychological needs are met, people will invest special efforts in realizing an activity that interests them and will perform it in the best possible way [185]. In this frame, the participants in the pedagogic experiment had to complete a questionnaire measuring the level of professional identity components, called in the experiment dependent variables: autonomous motivation, integrative motivation, self actualization and competence, each of them involving some independent parameters: confidence in the choice of profession, image of teaching profession, sense of mission, self-efficacy etc.

Variables	Indicators	Samples	Levels				Standard
v arrables	indicators		Optimal	Average	Minimal	Mean	deviation
	Confidence in the choice of	EG	17%	25%	58%	4.27	.35
Autonomous motivation	profession, Emotional balance Performances while achieving difficult tasks	CG	18%	22%	60%	4.22	.47
	Image of teaching profession	EG	19%	15%	56%	4.37	.41
Integrative motivation	Need to belong Recognition and respect Need to develop	CG	25%	17%	58%	4.25	.54
Self	Sense of mission Creativity	EG	12%	20%	62%	4.14	.53
actualization	Self-fulfilment Talent	CG	14%	21%	62%	4.10	.56
	Self-efficacy	EG	25%	25%	50%	4.35	.40
Didactic competencies	Gnoseologic Praxiological Comunicational Managerial Investigational Metacognitive	CG	28%	26%	46%	4.26	.47

Table 2.1. Statistic differences regarding the level of professional identity components

An environment that supports psychological needs – including, in the case of the present study, the encounter between the mentor and the novice teacher and the attitude of the mentor – leads to satisfaction of these needs: a sense of belonging, a feeling of competence, and a sense of autonomy, **in line with the pedagogic aspect and systemic aspect appearing in the model.** According to self-determination theory, consistent support of these needs over a period of time promotes processes of internalization, culminating in integrative and autonomous motivations, which are manifested in positive sensations, emotional and social adaptation, and deep internalization of behaviours and values, **these being in line also with the emotional aspect** [43], [165], [190]. In other words, the novice teacher who feels that his basic psychological needs are being met performs his duties out of a genuine willingness and sense of choice, as a consequence of which he crystallizes purposeful and meaningful values and goals that lead to the development of his **professional identity** [165], [180], [190].

# **3.2.** Formative values of the Pedagogic model for developing novice teachers' professional identity through mentoring

The implementation of the model was carried out throughout a formative program developed on the basis of self-determination theory. It took place in the Kaye Academic College of Education with a group of 56 teachers who had completed their internship year, who were participating in courses for novice teachers in the year following internship, and who, in addition, had received twenty hours of mentoring during the course of the year.

The College Induction Unit is an experimental unit that conducts research based on selfdetermination theory [43], [44]. The unit advocates advancement of autonomous motivation and development of professional identity in the novice teacher based on a belief in his growth potential [190]. According to the theory of self-determination, different types of motivation exist that can be classified along a continuum representing a process of internalization. External motivation is characterized by a low level of self-determination, with behaviour being controlled by external factors. Autonomous motivation and integrative motivation, on the other hand, are classified as being at the highest level of self-determination, consolidating professional identity [131] and containing a sense of competence, certainty in choice of professional and sense of mission. It represents the highest level of man's focus, in questioning the very nature of his existence as part of his professional identity [92]. This type of motivation reflects deep internalization of values, ideals, demands, etc. The level of internalization is deep, expressing the identity of the individual [131].

The above three needs also appear as the needs of the novice teacher in developing his professional identity. The research literature presents the need for bonding and belonging as one that dealt a shock during the teacher's period of induction into the system, being manifested in his relations with the staff members in the school and with the organizational setup [122], [156]. The sense of competence in the framework of the teaching profession expresses the individual's belief in his ability to make a positive impact on his students and perform the tasks called for in teaching and education [19], [112], [194], motivating the novice teacher to continue growing and developing professionally and to acquire the ability and desire to cope with educational changes taking place in the system [197]. S. Feiman-Nemser [177] emphasizes the team work that takes place between the mentor and the novice teacher as reinforcing the feeling of belonging. Moreover, good team work fosters discourse and learning, transcending processes of socialization. The need for autonomy is manifested in the feeling on the part of the teacher that he is acting out of a genuine desire, choice and appreciation of the value of the act [165]. Positive processes that take place in the framework of a safe place enable the novice teacher to express his stances, present his abilities and develop his self-esteem, all these being instrumental in **building and developing his professional identity** [70], [112], [165], [197].

Table 2.1 describes the activities focused on "novice teachers" support organized with the experimental group. Beside the first two activities, the order of activities in the table is facultative, since every mentor created a different dynamics with the novice teacher that required different order of activities. In addition, some of the activities were performed repeatedly several times within the year, for example: design of teaching units, handling discipline problem, observation process, and formative evaluation.

Table 2.1. Mentor and Novice Teacher Meetings
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	Activities in the meetings
	• Introduction and coordination of expectations – novice teachers' interests (school, hobbies,
	general knowledge, educational vision, ideas and self-realization etc.)
	Clarification of the prime necessities
	Preparation of annual work plan
	• Meetings with other teachers in the team to create a sense of belonging
1	The activity provides an initial response to the difficulties and needs described throughout the
1	thesis. The first stage allows recognition and treatment of the novice teacher as a whole
	individual, with feelings, skills and professional values [179]. This is aimed at creating in him a
	sense of belonging – feelings that is intensified on meeting the rest of the school staff.
	Investigations into needs allow further familiarization with overt needs as well as with latent
	needs (reading between the lines). Preparation of a work plan provides an answer to the
	pedagogic difficulties.
	Introducing the "tool" for novice teachers' formative assessment:
	First stage: Dialogue on a personal-emotional level, aimed at alleviating anxieties: the
	personal experience of the novice teacher during the evaluation process (dealing with positive
2	and negative emotions, looking at the process from the place of contribution and growth rather
2	than judgment and criticism).
	Examples of questions: tell me about an experience in which you were assessed. What
	associations come to mind when you think about the assessment? What were your
	feelings/expectations before/during the assessment process? Tell me about an assessment that

	Activities in the meetings
	<ul> <li>was a defining experience for you; tell me about an assessment that left you with a bad feeling. In the events you described, what were in your opinion the factors that left an impression? How in your opinion would it have been possible to carry out the assessment you described differently, such as to leave you with a feeling that you derived some benefit from it? <ul> <li>Second stage:</li> <li>(1) Familiarization with the "tool" and the four principal indexes (Appendix 9).</li> <li>(2) Examples of questions on the assessment tool for novice teachers and the formative assessment process: What is the meaning behind each index? What is the connection between the different statements? How can the overall picture be seen and what in fact does the job of teacher include? What is the meaning of formative assessment?</li> <li>(3) Provision of examples by the mentor of optimal implications that the indexes have in the routine work of the teacher.</li> </ul> </li> </ul>
	<ul> <li>(4) Provision of examples by the novice teacher of optimal implications that the indexes have in his work.</li> <li>(5) Dialogue: how to use the assessment tool to improve the novice teacher development?</li> <li>Throughout the meetings devoted to observations and assessments it is important to bear in mind that observation of lessons and subsequent feedback discussions are perceived by some teachers as a negative experience, whereas others have positive memories involving support and growth. Oftentimes the personal assessment is retained in the memory as a judgmental and critical encounter, for a number of reasons: little formative assessment is given, a feeling is created of being under scrutiny, the teacher mostly acts independently and from his own personal perspective; when an additional person is present observing him and providing him with feedback, he feels that the other person does not get the full picture – the fine nuances he feels, the past, the class history, i.e. the specific context in which he works – and therefore he is not in a position to judge him fairly. This causes a difficulty in growth based on assessment. He role of the observer is dual: on the one hand he is expected to provide support and growth, and on the other he must act as judge. It is thus important that all "emotional noise" be erased at these meetings, allowing the teacher to enjoy the full benefit of the assessment.</li> </ul>
3	<ul> <li>above factors and develop autonomous motivation.</li> <li>Designing teaching units together: Relate to the principal and system requirements, to the profession requirements, heterogeneity between students, "novice teacher" requirements, and integration of 21<sup>st</sup> century skills as defined by the Ministry of Education.</li> <li>The connection to components that appear in the assessment "tool" (Appendix 9):</li> <li>Instructional planning and organization: lesson aims and their adaptation to conditions; lesson management: structure, time use and flexibility</li> <li>Teaching, learning and evaluation methods: differential approach based on commitment to reaching all the students; diversity of teaching, learning and evaluation methods; use of information and communication technologies (ICT) in teaching and learning; cultivation of high order thinking skills; activities to involve students in social and ethical issues; student participation and class interaction; provision of learning-oriented feedback; feedback for improvement of instruction.</li> <li>Novice teacher training on how to give feedback to students and how to help each of them according to their specific requirements. Reference to specific cases raised by the novice</li> </ul>

	Activities in the meetings
	teacher and the possibility to make a case simulation (Role Playing Game).
	• Following the meeting the "novice teacher" will report regarding the implementation of the
	unit in class – difficulties and confrontations, feelings about the different components in the
	assessment "tool".
	The parameters making up the teaching units allow the novice teacher to reach the practical
	stage knowledgeable and empowered, with concepts that are clear to him both in theory and in
	practice. The work meetings allow him to familiarize himself with the relevant tools, including
	the aims and importance of the parameters, enabling him to answer the needs of all his students
	while meeting the demands of the system on the one hand, and understanding their significance
	on the other. A proper process will allow him a good grasp of the various contexts and
	development of flexibility in lesson management from a position of awareness and strength.
	It is also an opportunity to sit together with a more broad-based professional team, supported by
	the mentor, allowing him to gain a sense of belonging. In addition, he has the opportunity to
	suggest to the professional staff innovative ideas that he has picked up during his studies (e.g. in
	the field of technology), thereby earning their appreciation.
	Proper execution of joint planning allows the novice teacher to overcome difficulties in lesson
	planning, as raised by T. Mutton, H. Hagger and K. Burn [111], while developing a commitment
	to the organization and the system, as required in the assessment tool.
	Motivate students (according to self-direction theory):
	• Dialogue – the essence of the motivation that comes from an interest in the activity or
	awareness of its importance, so that it can create autonomous motivation. Link between
	helpful behaviour and attitude to students (including demonstrations): taking an interest in the
	students' welfare, making eye contact, exhibiting concern and interest, developing an
	awareness of the personal needs that arise during the course of the lesson, encouraging and
	assisting in meeting demands, attentiveness, etc.
	• Demonstration: a teacher that encounters unwillingness to learn and/or opposition should try
	to understand the cause. Provide an example and demonstrate how to conduct a dialogue with
	a child in an attempt to understand emotions that we perceive as negative.
	• Dialogue – What happens when a teacher understands that a student is bored? Joint thinking
	on solutions; what happens when it seems that a student has difficulties? Or it is too easy?
	• What about children who are afraid of failure or of ridicule on the part of other children?
	Develop a joint activity that will allow them to experience success and develop work
4	procedures with the rest of the class, thereby imparting a sense of belonging to all and
4	highlighting the strong points in each and every child.
	• Creation of a class climate: (1) guidelines on how to relate to the students and their needs; (2)
	social activities during and after class hours.
	• Drafting a possible solution to a problem presented by the novice teacher. Report at the
	following meeting and plan the continuing process.
	• Help the novice teacher in treating arising social student's problems: Clarifying the
	importance of the sense of belonging of students, how warm and understanding the student
	environment can contribute to formulating solutions and responses to the unique needs of
	students?
	In order for the novice teacher to act out of a sense of autonomous motivation he must feel that
	he is learning and developing from a position of interest and desire rather than out of coercion,
	while appreciating and internalizing the importance of the issue at hand. He must feel protected,
	free to learn and affiliated with the group, while at the same time feeling competent to carry out
	his duties and fulfil himself [165].
	The same processes must be experienced by the students in order for them too to learn through

	Activities in the meetings
	autonomous motivation, underscoring the importance of the mentor's work with the novice
	teacher on this issue.
5	<ul> <li>Treatment of discipline problems – linking to processes of motivation and students' needs:</li> <li>Training novice teachers to improve students' "internal compass"– try to understand negative emotions, clarify the "value", teacher-student collaboration in building a new process from collaboration and connectivity side and not from compulsivity.</li> <li>Guidance – perform a feedback conversation with the student following a disciplinary event (optional demonstration through role-playing game).</li> <li>Drafting and implement of a possible solution: the "novice teacher" will report regarding the implementation of the solution.</li> </ul>
	Observation and Dialogue:
6	<ul> <li>Conversation before the observation (Appendix 10) and pinpointing the aims of the observations.</li> <li>Observation of the "novice teacher" lesson</li> <li>Feedback talk with "novice teacher": What does the "novice teacher" feel after the lesson?; what does he think about the lesson?; What were the "good" things of the lesson?; Where are the difficulties?; Would he change anything of the lesson?; if so, what?; What are the next steps?</li> <li>Joint work with the "tools" in Appendix 10 and Appendix 11 – the initial reference will be to defined goals but where other behaviours assume prominence that deserve mention, it will be important to refer to them (e.g. should it be decided that the goals focus principally on a particular subject and on group work, but during the course of the lesson a social situation develops and the novice teacher knows how to incorporate the required flexibility and provide the necessary solution, it is important that this be mentioned).</li> <li>Training and help on the points to improve (Appendix 12)</li> <li>Additional observation and reference to the changes between the two. Design the following processes.</li> </ul>
	The minute the novice teacher knows what is expected of him and what to aim for, the level of anxiety drops and he is freer to engage in the processes of learning and application. This provides an answer to both emotional difficulties and pedagogical problems. The feedback (Appendix 12) talk takes off from a position that advances cultivation of the teacher's reflective ability, enhancement of the feeling of equity, and granting of autonomy for exercising discretion in implementation. The mentor helps without intervening. In the event that the lesson observed by the mentor was not optimal, it is important to open the discussion by noting the strong points, allowing the novice teacher to feel satisfaction with actions where he felt he was at his best. Only then should the mentor refer to aspects that need improvement, building on the feeling of confidence instilled in the teacher and the absence of an ambience of criticism, thus freeing him to learn.
7	Joint design of school activities: Examples: a school ceremony, excursion, or other school activity (using mentor's knowledge and professionalism, but allowing place to new ideas and initiatives of the "novice teacher", to create a sense of competence and belonging).
8	<ul> <li>Emotional support according to the novice teacher needs (built up on social, cultural, historical and political contexts and coherence that is based on a continuum of day-to-day events): <ul> <li>Reference to the sources of difficulty, to the self-representation of the novice teacher and to its source of strength</li> <li>What is "success" in the eyes of the "novice teacher" and the way of its implementation</li> </ul></li></ul>

The feedback forms from the novice teachers shed light on the activities and strategies used by the mentors and the areas to which they made a contribution. A connection could be seen between the mentors' work/support and the three types of difficulties with which the novice teachers had to cope at the start of their career: (1) pedagogical difficulties at the generic level (class management, handling of disciplinary problems, incorporation of teleprocessing and technology, teaching strategies) and the subject level (writing of work plans and curricula, teaching units, evaluation, observation and feedback); (2) integration into the school staff (staff meetings, peer work, collaborative work, events, social initiatives) relate to environmental difficulties and represent an answer to the need for contact and belonging as presented by selfdetermination theory [43], [44]; (3) emotional difficulties, which appear at times directly and at other times as an integral part of other issues (assistance in integration with the staff, interaction with the parents, providing an answer to students with special needs, and teacher-student relations [51]. To follow the progress of novice teachers' professional development, there were carried out several measurements. The Independent variables explored in the quantitative research were: didactic support; emotional support; system support; general mentor support; constructive evaluation. Since the initial Objectives were to get a general picture of the factors influencing the emergence of novice teachers' professional identity, through mentoring, there were defined several hypotheses:

Hypothesis No. 1: A significant positive correlation exists between support to novice teachers in the didactic domain and development of professional identity in novice teachers.

Hypothesis No. 2: A significant positive correlation exists between mentor support in the system domain and development of professional identity in novice teachers.

Hypothesis No. 3: A significant positive correlation exists between mentor support in the emotional domain and development of professional identity of novice teachers.

Hypothesis No. 4: A significant positive correlation exists between overall mentor support and the professional identity of novice teachers.

Hypothesis No. 5: A difference in professional identity exists between novice teachers receiving one formative evaluation and novice teachers receiving a number of formative evaluations during the course of the year.

Hypothesis No. 6: Significant differences exist between the professional identity of novice teachers whose mentor taught the same subject as they did and the professional identity of novice teachers whose mentor did not teach the same subject.

Hypothesis No. 7: Overall professional identity is influenced by the gender of the novice teacher, work with the age group for which the novice teacher has been trained, work with a

mentor teaching the same subject as the novice teacher, work with a mentor teaching the same age group as the novice teacher, and overall support as a single component.

The following alpha Cronbach test results were obtained:

- Didactic support by mentors (items 32, 33, 38, 39, 42, 43, 44, 45, 57, 59; question 60 failed the reliability test)  $\alpha = 0.917$ .
- Systemic support by mentors (items 34, 35, 37, 40, 41, 51, 55)  $-\alpha = 0.889$ .
- Emotional support by mentors (including items 36, 46, 47, 48, 49, 50, 52, 53, 54, 56, 58) α = 0.94.
- In the reliability test of general mentor support  $\alpha = 0.965$ .

**Findings**: The research findings as related to the first four research hypotheses (in order to examine the relationships between support aspects and professional identity components according to Fisherman and Weiss, 2011) are presented in table 2.2 [179]. Table 2.3. Relationships between support aspects and professional identity components

Hypo- thesis no.	Number of table	Name of table	Statistical analysis tools	Findings		
1	Table A7. 1	Correlation between Mentor Support in the Didactic Domain and Professional Identity of Novice teachers	A Pearson correlation analysis	A significant positive correlation exists between support by the mentor in the didactic domain and all professional identity indices, the strongest correlation being in self-efficacy and certainty in choice of profession.		
2	Table A7. 2	Correlation between Mentor Support in the System Domain and Professional Identity of Novice teachers	A Pearson correlation analysis	A significant positive correlation exists between mentor support in the system domain and professional identity in novice teachers for all professional identity indices, the strongest relationship being in self-efficacy.		
3	Table A7. 3	Correlation between Mentor Support in the Emotional Domain and Professional Identity of Novice teachers	A Pearson correlation analysis	A significant positive correlation exists between mentor support in the emotional domain and professional identity in novice teachers for all professional identity indices, the strongest correlation being in certainty in choice of profession.		
4	Table A7. 4	Correlation between overall mentor support and professional identity of novice teachers.	A Pearson correlation analysis	A significant positive correlation exists between overall mentor support and professional identity in novice teachers for all professional identity indices, the strongest correlation being in self- efficacy and certainty in choice of profession.		

(Tables presenting the statistical calculations are presented in Appendix 7)

In examining the differences between the degree of correlation according to Fisher's Z transformation, it was found that a significant difference exists between the correlation between overall support and certainty in the choice of profession and feeling of self-efficacy on the one hand, and the correlation between overall support and sense of mission and image of the teaching profession on the other. The significantly strongest correlation is found in the certainty in the choice of profession and feeling of self-efficacy as against sense of mission and image of the teaching profession. In other words, certainty in choice of profession and feeling of self-efficacy are influenced to a more significant degree by overall support than are sense of mission and image of the teaching profession.

In addition, a comparison of Table A7. 1, Table A7. 2 and Table A7. 3 shows that the strongest correlation exists in the emotional domain, but when reference is made to overall support as a single component in its own right, the strongest correlation is found between overall support and professional identity of novice teachers, as seen in Table A7. 4.

In order to test hypotheses 5 and 6, t-tests were conducted on independent groups, as presented in Table 2.4.

Number of	Number	The table name	Statistical	Findings
hypothesis	table		analysis	
			tools	
5	Table A8.	Correlation between	A 'T' test	Differences in Professional Identity
	1	number of Formative		of Novice teachers Whose Mentors
		Evaluations Given by		Teach the Same Subject
		mentors to Novice		
		teachers and Professional		
		Identity of the Novice		
		teachers		
6	Table A8.	Differences in	A 'T' test	A significant difference exists in
	2	Professional Identity of		certainty in choice of profession and
		Novice teachers Whose		self-efficacy when the mentor
		Mentors Teach the Same		teaches the same subject as the
		Subject		novice teacher. It was found that
				both certainty in choice of
				profession and feeling of self-
				efficacy were significantly higher
				when the mentors taught the same
				subject. In contrast, significant
				differences were not found when the
				mentor and novice teacher taught
				different age groups.

Table 2.4. Correlation in hypotheses 5 and 6

(Tables presenting the statistical calculations are presented in Appendix 8)

In order to test hypothesis 7 and ascertain that overall support is indeed the principal factor of influence, multiple regression was performed, with the age group and subject for which

the novice teacher was trained being introduced in the first stage, the subject and age group taught by the mentor being introduced in the second stage, and overall support being introduced in the third stage (Table 2.5).

Influential		dardized ïcients	Standardized coefficients	Т	Sig
factors – three stages	В	Std. Error	Beta		
• Gender • Age group • Subject	3.681 -0.069 0.220 0.165 3.580	0.156 0.069 0.081 0.075 0.165	-0.040 0.117 0.095	23.595 -0.986 2.717 2,187 21.688	0.000 0.324 0.007 0.029 0.000
<ul> <li>Gender</li> <li>Age group</li> <li>Subject</li> <li>Subject – mentor</li> <li>Age group – mentor</li> </ul>	-0.058 0.191 0.141 0.120 0.043	0.069 0.082 0.076 0.060 0.057	-0.034 0.102 0.081 0.084 0.031	0.839 2.334 1.855 1.992 0.0750	0.402 0.020 0.064 0.047 0.453
<ul> <li>Gender</li> <li>Age group</li> <li>Subject</li> <li>Subject – mentor</li> <li>Age group – mentor</li> <li>Overall support</li> </ul>	2.784 -0.074 0.135 0.136 0.036 0.021 0.266	$\begin{array}{c} 0.170\\ 0.063\\ 0.075\\ 0.070\\ 0.056\\ 0.053\\ 0.025\\ \end{array}$	-0.044 0.072 0.078 0.025 0.015 0.396	16.410 -1.172 1.793 1.951 0.651 0.395 10.453	$\begin{array}{c} 0.000\\ 0.242\\ 0.074\\ 0.052\\ 0.516\\ 0.693\\ 0.000\\ \end{array}$

Table 2.5. Professional identity of novice teachers as influenced by various factors

Legend:

Gender: gender of novice teacher

Age group: the age group for which the novice teacher was trained

Subject – mentor: compatibility between subject of mentor and novice teacher

Age group - mentor: compatibility between age group taught by mentor and novice teacher

Overall support – all aspects of support

Table 2.5 shows that when all variables are taken into consideration together, **professional identity is very significantly influenced only by the level of overall support**. In addition, professional identity is influenced almost significantly by work in the age group and

subject for which the novice teacher was trained.

#### Findings Derived from the Open Questions Based on the Questionnaire

From an analysis of the open questions regarding the advantages of working with the mentor, a match was found with the predetermined categories that came to light in the literature survey: support in terms of the system, pedagogic support and emotional support, including support in development of professional identity.

The system aspect included answers that related to the role of the mentor in the novice teacher's integration in the school in general, and the teachers' lounge in particular: "He helps me integrate well into the educational system in general, and the school in particular"; "one can consult with him and hear about certain processes taking place in the school"; "... she

taught me the school procedures and rules at the beginning of the year". Other novice teachers reveal some of their apprehensions about conducting themselves with the school principal and/or other entities and the contribution of the mentors: "Guidance and support in all aspects of dealing with the school principal" and "at times he backs me up in my interaction with various agencies". In addition, the novice teachers refer to the social aspect as part of the acclimatization process: "assistance in integration into the social life of the teaching staff" and the advantage of working in the same institution from the point of view of approachability and familiarity with the school staff; "My mentor works in the same school as me and so we sit together in the breaks. This is how she introduced me to the rest of the staff and saw to my becoming part of them."

The pedagogic aspect includes the instructional-didactic facet (planning curricula, teaching units and lessons, differential responses, learning environment, familiarization with work strategies and procedures, etc.) and interaction with the students (class management and management of the social climate): (1) Advantage of mentoring from the instructional-didactic point of view: "Helps me in familiarizing myself with and processing learning materials"; "acquiring diverse teaching methods"; "possibility for consultation and for obtaining insights into the professional domain"; "She enables our talks to be very professional and productive, allows me to be a partner in the thought processes and to plan together with her"; (2) The advantages of mentoring from the point of view of interaction with the students: "Advice on coping with disciplinary problems"; "helps in class management and in connecting with the students"; "She teaches me all kinds of tactics in instilling discipline and in approaching the children"; "... answers questions and offers guidance when I am unsure of myself. When I encounter problems with the students, I immediately receive a contribution in the way of help and guidance".

Many novice teachers clearly understand that the processes of coping with their emotions and with the difficulties they encounter have a major impact on them as human beings and on their professional identity, and many of them mention the emotional support they receive from the mentor: "Guidance and support in moments of crisis and conflict"; "First and foremost she supports me emotionally"; "a place to unburden myself"; "There is someone to talk to, consult with, and involve in moments of uncertainty or simply in moments when one needs to know more"; "Support, reinforcement, all sorts of professional tips that help me to cope with difficulties".

Main Categories	System aspect	Pedagogic aspect		Emotional aspect and development of professional identity	
Overall frequency, percent	22%	68%		54%	
Secondary categories	Adjustment to the system	Teaching	Interaction with the students	Personal attitude and feelings	Effect and perception of the system
Frequency in percentages (relative to all the answers) for the secondary categories	22%	46%	19%	36%	18%
Frequency in percentages of the secondary categories in relation to the aspect to which they belong	100%	71%	29%	67%	33%

Table 2.6. Table of frequencies: advantages of working with a mentor

Table 2.6 and Figure 2.4 present the advantages of working with mentors as stated by the novice teachers, with the help of their frequencies.



Figure 2.4. Advantages of working with a mentor

Table 2.6 and Figure 2.4 add an additional dimension and reinforce the significance attributed by the novice teachers to contact with a mentor. Table 2.6 shows the readiness to answer the two open questions, in which the novice teachers were asked to write two advantages and two disadvantages of working with a mentor. Only 6% did not write about the advantages of working with a mentor. All the rest took the trouble to note two or more advantages, as may be seen from the sum of the percentage values in Figure 2.4. In addition, a correspondence may be seen between the advantages of working with a mentor, as stated by the novice teachers, and the difficulties with which the novice teachers have to cope, as appearing in the professional literature. The novice teachers stated in their answers not only the advantages of working with a mentor but also the traits of the mentors as being advantages.



Figure 2.5. Diagram of mentor's traits cited as advantages

Figure 2.5 shows the manner in which the novice teachers regard their mentors and the importance they attach to the mentor's traits. In their answers referring to the advantages of working with a mentor, 32% novice teachers chose to refer to the traits of the mentor as an advantage. In addition, since most of the novice teachers who answered the questionnaire wrote about more than one trait, the total percentage obtained was more than double (73.48%). Figure 2.5 show the traits of the mentor as defined by the novice teachers.

In parallel with the advantages, the novice teachers were also asked to write two disadvantages of working with a mentor. It transpired that most of the novice teachers were pleased with the mentoring process, to the extent that 44.8% of the novice teachers did not cite any disadvantage. Moreover, it appears that the novice teachers related to the role of mentoring only in terms of the personal process they had undergone, and 28% even added positive comments, such as: "I do not find any disadvantages, it is only beneficial and opens up your way of thinking"; "In the specific process I have undergone with my mentor I cannot state that I have experienced any particular disadvantage in working with her"; "There are no disadvantages – my mentor is wonderful, captivating and excellent".

In addition, 36.9% wrote only one disadvantage, and about one half (49%) stated that there was a problem with coordination of timetables and availability: "At times I do not find time to conduct a face-to-face conversation with the mentor, but rather only on the phone"; "the lack of time for meetings – the principal did not fix a proper hour for meetings and chasing after the mentor makes me uncomfortable"; "There is a need to coordinate meetings and at times this is not possible or convenient for both parties"; "He is not available – it is difficult to find time to sit down together because of the timetable"; "There are no predefined hours in the timetable for mentoring ... everything is always done 'on the run' and so I do not succeed in solving difficulties on time and strike while the iron is hot ... I always wait for the end of the day to consult because of the pressure and lack of time".

All the rest of the novice teachers cited disadvantages that were not found to be substantial because of the fact that only a few wrote about them, and these appeared to be isolated cases. Only one novice teacher stated that it was an unnecessary position. Isolated examples of disadvantages cited: 3.8% stated that they did not always feel comfortable asking their mentors questions and consulting with them, 3.3% felt that they were not free to do as they pleased, 3% claimed that they had been assigned an unsuitable mentor, 2.6% felt that the contact created a dependency in them, and with 2% there was no "chemistry". The novice teachers and stakeholders who were interviewed also stated that they did not see any disadvantages. It appears that in such cases, the reference to the position of mentor was highly personal, stemming from a lack of understanding regarding the role of mentor or certain characteristics that sabotaged their relationship and caused a dependency to be formed, affecting the essence of the process and its effectiveness.

**Findings based on the Interviews with the Novice teachers and Stakeholders.** The findings from the content analysis of the interviews provided answers to the predefined secondary qualitative questions, but also to additional questions that arose during the course of the interviews and enabled a broader scope to be achieved and a basic "category tree" to be produced.



Figure 2.6. Category Tree

Reference to the questions in this section will be made with respect to the category tree.

Question 1 – What are the reasons that the novice teachers chose the teaching profession and are they certain about their choice?

The two focus groups (novice teachers and stakeholders) that were interviewed were asked about the novice teachers' reasons for choosing the teaching profession. Figure 2.7 presents the reasons for the novice teachers choosing the teaching profession.



Figure 2.7. Reasons for choosing the teaching profession

Figure 2.7 shows the three main reasons for choosing the teaching profession according to the novice teachers, and two secondary reasons in the humble opinion of the stakeholders and two of the novice teachers.

It appears that "love of children" and "sense of mission" constitutes dominant, central factors in the consideration given by the novice teachers to their choice of teaching as a profession. Example of this may be seen in the words of Miriam: "*I always had good rapport with children. I was a counsellor in a youth movement and I love to work with children. I believe that every child is good and that we must help him to use the good in him*".

Her colleague Yaffa adds to the hidden meaning behind the word "mission": "... people who really wish to make a difference in our society should work in education".

Nurit's answer is similar: "I love working with children and I think I am good at it. I think that through work with children I could make a dent in future society..."

The stakeholders also made a mention of love of children and sense of mission as essential factors in the choice of teaching as a profession, as gathered from talk they hear from the novice teachers in training institutions and in the field. The head of the Teachers Induction Unit has the following to relate: "*Students who have dreamed about becoming teachers come* 

here to learn. They have a longstanding ideology about changing, teaching, educating. They love children and want to be partners in educational efforts".

The DCC adds: "The desire to change the world. The belief that they can influence young children and thus society, resulting in a utopian society that they regard as being the right one".

Experiences, whether positive or negative, undergone by the novice teachers in their youth also impact their choice of profession. Miriam tells about her being a counsellor in a youth movement and Ronit refers to *"the positive experiences throughout my life in the field of training"*. On the other hand, Ruthi describes a negative experience that helped her in making her choice: "... apart from this I had a very unpleasant experience with a teacher in elementary school ... I simply must have a corrective experience ..."

Reference to the two aspects (positive and negative) of past experiences can be found in the statement of the DCC: "At times it's people who have had a meaningful or ruinous experience with their teacher that has impacted their lives significantly and they either wish to emulate her and be like her or the reverse. They want to make the experience 'go away' and create a corrective experience for other children by entering the profession".

The internship coordinator and the workshop moderator suggested also a combination of fields of interest as one of the factors in the choice. The internship coordinator: "Another population deals with people who on the one hand love children and feel that they work well with them, and on the other hand love the specific field (for example: physical training, art, music, etc.) and through their choice of working as subject teachers they get to combine both their loves". The workshop moderator adds: "The wish to delve deeper into a field one loves and remain connected to it, but to instil the love for it in the children too".

In addition, the stakeholders presented the considerations of the students that it is a convenient profession, although they did emphasize that this was before they entered the profession. For example, the inspector of the Internship and Induction Division: "*The thought that the profession is a convenient one to work in* ...".

Or the head of the Teachers Induction Unit: "They think it will be easy for them".

Further, Yaffa, who underwent retraining as a teacher from the field of high tech, states emphatically that it is not an easier profession: "*I worked for a good number of years in high tech and I definitely do not think I worked harder there*".

Nurit mentions the inconvenience felt due to the lack of awareness on the part of novice teachers to set limits and the tendency of parents to take advantage of this: "*Parents feel free to phone at different times of the day...*"

The findings show that now, following the first year of work, the novice teachers are content with their choice of profession, even though some referred to the difficulties, as may be seen from the following examples:

Yasmin: "... It's not easy, but I feel this is a suitable profession for me".

Ruthi: "I am content with my choice. There are days when I find it difficult and I count the seconds to the end of the day, but I love the children and want very much to have my dream come true".

Dalia: "I have no regrets. I knew it would not be easy but this is what I want to do and what I believe I have to do."

The internship coordinator states that "successful absorption and a feeling of fulfilment" influence the sense of satisfaction with the choice, and supporting her statement is the internship workshop moderator: "... let them be seen, let them be helped, let them not be threatened. Indeed successful absorption..."

The DCC harks back to the effect of positive, seminal experiences: "Positive experiences – success with a student who is having difficulties ... the novice teachers come with a desire to make a change and influence, experience every success as a milestone in the process of fulfilment".

It should be noted that despite the factors influencing the choice of profession and the contentment with this feeling, the novice teachers and stakeholders are aware of the problematic image of the teaching profession, stating that the main reasons for this are the low threshold requirements for admission to teaching courses relative to other professions, and perhaps also the relatively low salaries. Ronit and Ruthi fear that this could create a situation in which unsuitable people enter the system, further harming the image of the profession. On the other hand, everyone states the awareness of the hard, complex work and it is possible that the poor image stems from a lack of proportion with respect to the work load, as stated by Nurit: "... when I said that this was my choice, many eyebrows were raised. I am not certain that it is because of the contempt felt for the teaching profession, but mainly because there is at present a feeling that teachers work round the clock without fitting remuneration".

Question 2 – What are the difficulties the novice teachers have to cope with?

Alongside the beliefs and hopes are the difficulties with which the novice teachers coped, comprised of the four types referred to in the literature review: difficulties in adjusting to the educational system, pedagogic difficulties, difficulties in interaction with the students, and emotional difficulties – all of which lead to difficulties in building up a professional identity. The novice teachers who were interviewed referred to the host of problems facing them on entering and adapting to the system – the intimidation on entering the teachers' lounge, and the
feeling of discomfort and lack of belonging, as described by Dalia: "*The difficulties are manifested in belonging to the staff. First of all it's the professional element and then the general school staff, which is in any case huge and in the beginning one feels uncomfortable*".

Rivka tells of her expectations and thus emphasizes the gap between the ideal and the reality: "I thought I would enter the school and the classroom and be received with open arms. In reality, I arrived at the school and entered the teacher' lounge to find each person minding his own business and not even raising his head to see who I was."

Miriam talks about the staff and the students' parents as one and about the lack of tolerance conveyed by the system: "The lack of tolerance on the part of the various entities in the system with respect to my process of adjustment and the ability to contain me. Also the cockeyed view on the part of the parents who had heard that I was new. I feel all the time that I am on trial."

Pedagogic difficulties are mentioned less by the interviewed novice teachers, who focus mainly on the preparation of work programs / curricula, as stated by Dalia: "... I had to learn to prepare work programs, an annual program, a personal program, and so on. Although this is not such a complex task, with the rest of the beginning things it's not simple."

There is the gap between planning and implementation, as Ruthi attempts to explain: "When I started working I saw that the reality on the ground was different from the theory I had studied in college – at times I plan a lesson, but in actual fact a completely different type of work is required."

It is possible that the paucity of references to pedagogic difficulties stems from the fact that all the novice teachers who were interviewed had a mentor assigned to them who taught the same subject and who during mentoring hours dealt together with the novice teacher with subject matter issues. Moreover, Nurit's mentor was also her counterpart, a fact that eased the load in preparing programs and lessons on the pedagogic level: "*My mentor is also my counterpart, so we could prepare work programs and lessons together. In the end, at each meeting we would take on assignments and divide the load …*"

With Yaffa and Dalia the mentor was also the subject coordinator in the school. Accordingly, in addition to the weekly mentoring sessions, they also met at staff meetings and thus subject matter issues were also solved. Although these staff meetings were intended primarily to assist in the process of socialization and belonging, they served in parallel for planning and discussing content common to the entire staff, such that the load in terms of planning and writing the materials was eased. In addition, the steady contact with the mentor, allowed an ongoing process of learning. A clear example of this may be seen in Rivka's statement, which brings into sharp focus the answers she received from her mentor on pedagogic issues while emphasizing her abilities and professionalism: "... she knows how to hold a class and is held in esteem by the other teachers, the school principal and the students. I take pleasure in her professionalism and in her ability to be creative both in planning lessons and in dealing with students who are different ... I see how she enables students with difficulties to be part of the lesson, to participate and find themselves there. This in my eyes is extremely important. It helps me too in the planning that I do ..."

Interaction with the students is not easy for the novice teachers and although they are aware of this, they try to take an optimistic and containing view of the difficulty: Ruthi returns to the negative experience of her childhood: "*It is important for me to deal with children who disturb me with a lot of patience so as not to create a situation in which I am liable to hurt them and leave a bad mark, as happened to me.*"; Yasmin talks about coping with management of the kindergarten based on a love of the children: "I absolutely love the contact with the children and therefore even when it is difficult for me, and there are times when it is really very difficult to manage them, I try to look for other solutions." And Dalia apparently realizes that there are two sides to every coin and tries to see the "light at the end of the tunnel": "Handling of disciplinary problems is a source of difficulty, deliberations and a fair amount of frustration. But on the other hand, success in this area is a source of great satisfaction and allows reflective thinking about one's conduct and the positive influence it has had on the students involved in the incident."

Each of the novice teachers interviewed referred to the difficulties from his personal point of view, but all of them noted that it is possible to classify and catalogue the difficulties. However, there is no real significance to classification since in the final analysis all difficulties create feelings of ambiguity and discomfort, leading to emotional difficulties, as stated by Rivka and Dalia, or in Ruthi's words *"one goes to sleep at night with the discomfiture and frustrations"*. Nurit elaborates on Ruthi's statement: *"Separation is not at all important. Why, everything is related to something else. A difficulty in leading a class activity can create a difficulty in interaction with the students, and in turn a difficulty in class management and naturally in the end an emotional difficulty that will be expressed in questions like: Why do I deserve this? Why can't I succeed? And others."* 

Nurit describes a crisis where she burst into tears because of her inability to cope with the load: "My main difficulties centred around the load that I felt was getting the better of me. Many was the time I found it difficult to set myself an order of priorities and I simply decided that I had to accomplish everything. The number of hours in the day were not enough, I was tired all the time, I did not go out on the weekends and in general I cut down on meetings with friends and family. I just sank. I knew all along that I was making a mistake in the way I was functioning but I was not able to mend the situation even though my mentor herself told me that I had to

decide on an order of priorities. In the end, after a nonsensical remark in the teachers' lounge I burst into tears ..."

Yaffa adds: "... we are talking about people, feelings and adaptation", while Rivka states how, in her opinion, a change in attitude would affect novice teachers entering the system: "... one cannot change the attitude of the students or the parents, but one can certainly influence the teachers and principals. The system must learn to adopt the novice teacher. ... I think that the minute the novice teacher enters the system and feels warmth, concern and a willingness to help, everything will seem less scary and he will find the strength to cope even with things that are truly difficult".

Question 3 – What is the significance of mentoring in the eyes of the novice teachers?

The contribution of the mentor to acclimatization in the teachers' lounge in general, and the subject matter staff in particular, is significant. The novice teachers tell about how the mentors helped them in belonging to the general school staff, in terms of containment and esteem. Yaffa's mentor is also the subject matter coordinator of the school and by virtue of this position is responsible for all matters relating to planning and meetings with the subject matter teachers. The very fact that the mentor also serves as subject matter coordinator in the school attests to the esteem with which he is regarded professionally in the school. Based on this respect and esteem, Yaffa describes how he supported her and saw to cultivating a place for her with the subject matter staff: "... we had staff meetings every week and he allowed me leeway there to express an opinion and act according to my discretion even when I did not receive any support from the rest of the staff."

Dalia's mentor too is subject matter coordinator in her school and she help Dalia be part of the subject matter staff as well as the general school staff. Dalia notices that concern for all the staff members is part of her mentor's personality: "*She helped me find my place both in our joint work and in the way she managed the staff, allowing each of the members their place. Today I am part of the subject matter staff and even part of the general school staff. I think I have become acclimatized! Naturally I give wholehearted credit to my mentor.*"

The feeling of belonging that Dalia has is evident not only in her direct statements but also in the ability to seek and consult fearlessly with other teachers in the school (in addition to her mentor) when she encounters difficulties: "... *it gives me the feeling that I am not alone and that I can consult with more experienced teachers in decision making without fearing that it will stain my image and what people think of me.*"

The very reference made by the novice teachers to the social aspect attests to the importance they attach to their integration into the community of teachers in the school and to the esteem with which they regard a mentor who understands this and tries to help in these

matters. Similar principles are applied by Rivka's mentor: "A lot of course is thanks to my mentor, who introduced me to the people in the teacher's lounge and requested them to look after me and to take me into consideration."

And just like in Dalia's case, the result was: "Today I am already part of the teachers' lounge and I have no inhibitions."

The novice teachers left the impression that they regard the mentors who worked with them with esteem and admiration. An in-depth look at the novice teachers' statements brings to mind the image of the ideal mentor in their eyes, one whose traits are an integral part of his personality and one who is able to fill the position of mentor optimally:

Ronit: "Very dedicated, exertive and caring, even after many years of teaching."

Ronit: "A person who is matter-of-fact, committed and practical."

Miriam: "Reliable, dedicated, likeable and caring."

Yaffa: "My mentor was very professional ... a good teacher, responsible, considerate of the children and a top quality staff member."

Nurit too claims that she has been lucky and tries to view her mentor as she is, without glorifying her: "I am aware of the fact that my mentor is not an uno.eal figure. She tries hard to reach all the children, provide answers, be a friend to the staff and other such things, but she is human and also makes mistakes, and this too is something that I learned from her. Anyone can make mistakes and a person's greatness lies in the fact that he can admit to his mistakes and try to correct them. On the other hand, a great person also knows how to forgive".

The novice teachers and stakeholders were asked to try and describe their mentors and the bond with them using metaphors, and to explain their meaning.

	Figure of the mentor using	Emotional	Belief in the	Pedagogic
	metaphors	protection	ability of the	guidance
		and support	novice teacher	
Yasmin	"Mother Goose – protective,	Protective,	At a certain	Teaches one the
	takes one under her wing,	takes one	stage sends	rules of life
	teaches one the rules of life	under her	her offspring	
	and at a certain stage sends	wing	off into the	
	her offspring off into the		world	
	world"			
Ruthi	"A mother – protects and	Protects	Allows room	Guides and
	guides, supports and critiques,	supports	for	critiques and
	allows room for development	talks and	development	makes
	and makes suggestions, talks	listens		suggestions
	and listens"			talks and listens
Miriam	"A lighthouse – she has lit the	She has lit	But it is I and	Helped

Table 2.7. Metaphors description of mentor's figure in emotional and pedagogic terms

	Figure of the mentor using	Emotional	Belief in the	Pedagogic
	metaphors	protection	ability of the	guidance
		and support	novice teacher	
	way for me, but it is I and not	the way for	not she who	
	she who has stood on the deck.	me she	has stood on	
	She has helped me sail without	has helped	the deck I	
	being irreversibly harmed, but	me sail	navigated	
	I have navigated"	without		
		being		
		irreversible		
		harmed		
Yaffa	"A compass – imparts a sense	Imparts a	But in the end	Points to the
	of security – there is someone	sense of	it is I who has	north and helps
	to rely on, points to the north	security –	to navigate	navigate
	and helps navigate, but in the	there is		
	end it is I who has to navigate"	someone to		
		rely on		
Nurit	"A mother – she knew how to	A mother in	A mother	She knew how to
	give me the tools on the one	my view	believes in you	give me the tools
	hand, guide me and critique	must	and makes you	on the one hand,
	me on the second hand. The	protect and	believe in	guide me and
	idea is that a mother in my	rejoice in	yourself	critique me on
	view must protect, rejoice over	successes		the second hand
	successes and help, but also			
	criticize, train and guide. A			
	mother believes in you and			
Delie	makes you believe in yourself"	Detient		Duccente
Dalia	"A driving instructor –	Patient	At the end of	Presents,
	presents, explains, waits when		the day you	explains, waits
	necessary, patient, and at the		are expected to be able to	when necessary
	end of the day you are		drive	
	expected to be able to drive		independently	
Rivka	independently" "GPS application – directs,	Imparts a	Allows a	Directs
Тлука	allows a choice, provides	feeling of	choice	provides
	information, allows	security		information,
	participation in a group,	Security		allows
	imparts a feeling of security in			participation in a
	unknown territory"			group
				Broup

Using this geno.e there can be discerned some patterns allowing generalization and displaying the intensity of the emotional and pedagogic aspects underlying the perception of the mentor and his position.



Figure 2.8. The mentor as reflected in the metaphors used by novice teachers and stakeholders

Moreover, the internship coordinator and the DCC chose metaphors that were identical to those used by Miriam and Dalia (Driving Instructor and a light house). The other stockholders chose other metaphors:

Internship and Induction Division inspector: "Defence wall, mantle, prayer shawl, mirror, magnifying glass."

Teachers Induction Unit head: "Watering can for delicate plants, driving instructor, the sun on a cloudy day."

Workshop moderator: "An umbrella – protecting one from the rain and hail (sabotaging elements in the system), but also providing a place in the shade. The metaphor is not totally accurate since it implies a separation between the dependant in his protective shade and the world."

**Question 4** – How do the novice teachers define their professional identity, and what is the contribution of the mentoring process to the professional identity of the novice teachers?

In light of the understanding reached regarding perception of the figure of the mentor by the novice teachers and stakeholders, it is important to consider the impact of the mentors on the novice teachers from the point of view of their perception of the educational system in general, the role of teaching in particular, and the feeling of personal adjustment, with all these parameters converging in development of the professional identity during the first year of work. Processing of the data shows that the answers to these questions intermesh, principally due to the fact that all the novice teachers who were interviewed thought that the impact of mentoring on their view of the system, their position and self-efficacy was significant and had left its mark. Yasmin tells about how her mentor worked and her desire to resemble her: "...when I see the way she works I want to do the same. At times there are things that anger me – the unnecessary load, the irrelevant demands, the infuriating parents and other things. Today, after a huge number of talks with my mentor, I understand that this is part of the way the system works and

that it is natural, and in every large system there are things that irritate one. The more we know how to accept them, the less enervating will be the coping and it will allow us to change things."

Similarly, Ruthi tells about the insights she has developed following an in-depth study of her mentor: "... I saw how a focus and commitment to the job affects acceptance of the system on the one hand, but also how it is possible to change things from the same place ... today I understand that I can make a small dent with respect to what happens in my class and, in turn, what happens in the school."

Yaffa recounts how she adopted the approach of her mentor and learned to adjust and focus on positive things: "...following him, it is manifested in my attention to adhere to targets I have set myself, in my attitude to the students and my belief in their capabilities. At the beginning of the year I saw many facets of the system that were not very positive, to put it mildly, and today I know how to wear rose-coloured glasses and be more optimistic, understand the limitations and the resources that can be used to do good."

Nurit underwent a process of personal learning that allowed her to develop deep insights into herself and her way of working, but also into her view of the children and her attitude towards them: " ... and she began to work with me and hold a mirror up before me. She related to all my task, and forced me to classify them. We talked about each task, its importance and purpose. We talked about things that I had never brought up before and she simply listened and only encouraged me to talk, with minimal responses, which in retrospect appears as though she was guiding me in a processes of reflection that I was giving myself ... I learned a lot on the personal level, I learned to appreciate my capabilities and how to overcome weak spots, I learned to set myself an order of priorities and stand behind it. ... in the understanding that I can err but also admit to it and/or ask for forgiveness. And following from this the implications regarding the children – they too are allowed to make mistakes, they too can ask me or each other for forgiveness, they too have good intentions and one must simply strengthen them".

The mentor as a model for emulation appears also in Dalia's statement: "... through her working method and view of the children and the system, the way she placed important things on the agenda, conducted staff meetings and allowed everyone their room. The way in which she spoke to the children, teachers and management personnel. I had and still have a lot to learn from her."

Rivka already sees herself as part of the system based on an understanding and belief in her desire to be a partner, but not before she gives credit to the mentor who accompanied her through the process: "... when I came to the educational system I had certain beliefs regarding my position and place, but I think things underwent strengthening due to my work with my mentor ... she influenced me an the level of the system as well – a lot of the things I do, fight for,

cope with seem to be a product of working together ... the system is not perfect but it is a good one and I want to and believe I will be a partner in its upgrading."

In the interviews it appeared that the stakeholders too recognized the ability of the mentor to influence the novice teacher's view of the educational system. The Internship and Induction Division inspector refers to the quality of the mentor: "As a general rule, everything of course depends on the quality of the mentor. If he has high self-efficacy I imagine he would mentor in a manner reflecting these traits. Exposing the novice teacher to his capabilities alongside the challenges he must face is one of the ways in which the mentor can relate to this trait."

The Teachers Induction Unit head endorses the statement of the Internship and Induction Division inspector and the view the novice teachers have of the way the mentor works and of his being a model for emulation: "*The mentor has a considerable effect on shaping the way the novice teacher perceives the system. It is manifested throughout the mentoring period, the serious approach to the job, leading the novice teacher to the path of success could produce an optimistic novice teacher with a desire to continue succeeding, to be serious like the mentor, and in general the mentor serves as a huge model for creating a successful novice teacher who develops in all fields.*"

The internship coordinator describes in detail how the mentor makes himself a model for emulation through his day-to-day conduct towards both the students and the system: "A serious, persevering and dedicated mentor also conveys to the novice teacher that teaching is important and that one must be dedicated to it and invest efforts in it. The mentor can definitely influence the novice teacher based on his perception of his work and the system. The novice teacher, whether consciously or not, observes things happening around him and naturally his mentor too, and when he sees him speaking pleasantly to his students, trying to bridge the gaps both in the classroom and the teachers' lounge, handling matters delicately with parents, he will see in him a model for emulation and will also try to be such a teacher."

In parallel with their impact on perception of the system, the mentors have also succeeded in influencing the sense of self-efficacy of the novice teachers. Ruthi tells about the encouragement she received and the effect this had on her: "... even the principal who came into my classroom at the end of the year told me that she understood why the mentor had told her how much I had progressed and that one would not recognize the Ruthi from the beginning of the year. This statement gave me a lot and reinforced me ... from it I learned that I was able to apply what I consciously choose to. I learned that even when things don't go so well, if it is really important it is correctible but one must invest efforts and relate in all possible seriousness to things."

The matter of feedback and belief in one's ability repeats itself in the statement made by Yaffa: "... feedback which gave me a full picture and challenged me to go back and learn and develop in the professional domain. He really gave me the feeling that he believes in me and I think this is in fact the thing that has most influenced my feelings."

Dalia describes how the processes taking place during meetings with her mentor were conducted and how they influenced her insights and development, her beliefs and competence: "... apart from this, she entered my classroom many times and after each time we sat down and discussed the lesson – she mostly let me do the talking and only asked leading questions that gave rise in me to thoughts as to what is right, what problematic, what one should improve and how, and what can be done differently. I think that her coming into the classroom during my lessons and the way she conducted her feedback session afterwards helped me more than anything to understand, learn and acquire the feeling of growth and personal development. Today I am aware of what I can do and feel that the sky's the limit, all thanks to her."

Rivka has now, at the end of the school year, developed educational insights regarding the students' needs, a firm belief in them and the teacher's obligations in his capacity as teacher. Close attention to Rivka's words sheds light on how cultivation of her self-efficacy has constituted an integral part of her educational insights and her professional identity: "... the professional talks and she gave me the feeling that I can implement things we planned ... I now believe that every class is a heterogeneous one and in each class this is manifested differently, but it is our duty as teachers to provide all the students with answers, even when it is difficult, even when it appears that they are not interested. We must act on the belief that everyone can advance in one way or another and that this is our professional and moral duty."



Figure 2.9. Novice teacher's perception of teaching and the educational system as influenced by the mentor

Figure 2.9 shows how the mentor can influence the way the novice teacher perceives teaching and the educational system, as seen from the statements of the interviewees.

The mentor as a model for emulation is also perceived through carrying out his duty as educator. The work load and system needs alongside the private life of the mentors at times create situations in which it is technically impossible to meet with the novice teacher on a weekly basis. The attention given by the mentors to performing their job, as reflected in the statements of the novice teachers, conveys an important message to the novice teachers, as stated by Ruthi: *"It's all a matter of will and commitment"*.

In support of this Dalia says: "It depends on the person – a mentor who is really interested in meeting ... will succeed in doing so without any difficulty."

The Teachers Induction Unit head is willing to hold meetings even at the end of the work day and even in a café or one of the homes. The DCC also thinks as she does, but cautions: "*I have seen mentors invite novice teachers to their homes in the evening hours after putting the children to bed, but I am not always sure that this is the solution – the boundaries between friendship and professionalism get blurred.*"

The achievements of the internship year from the point of view of the mentors' impact on the novice teachers are voiced clearly by the novice teachers, as may be seen in Figure 2.9. Further to the request to describe themselves as tenured teachers in the school as the end of the internship year, the novice teachers displayed greater self-confidence and belief in themselves and their ability to cope with difficulties:

Ronit: "... additional ways and solutions to the problems I encountered."

Yasmin: "Every day that passes I make progress."

Ruthi: "At present I have more lessons and I feel that they are good and that I have succeeded in the targets I have set myself. I am coping better with disciplinary problems..."

Miriam: "Today I find it much easier to cope with challenges and difficulties, and I feel I am also succeeding in coping."

Nurit: "This year I learned a lot principally at the level of the way I work ... preparing a lesson, how and where to look for relevant teaching material. How to cope with this or the other problem. Things are still not clenched - I am learning all the time and believe I am also developing all the time ..."

Dalia: "Today I am part of the subject matter staff and even with the general school staff I feel I have been acclimatized."

Rivka: "Today I am already part of the teachers' lounge and have no inhibitions in the matter ... I feel that I have progressed and that I am learning and advancing all the time."

**Question 5** – What strategy used by the mentors is most effective in building up the professional identity of the novice teachers, in the view of the novice teachers?

Mentors use different strategies in the mentoring processes, some of them being built into the requirements of the position (such as four observations a year and one formative evaluation in the middle of the year), some that have developed further to their training (provision of feedback and development of reflective discourse, observation of the novice teacher's lessons beyond that required, use of formative evaluations beyond the formal requirements specified in the Director General's Circular, use of role playing), and some based on the personal interpretations that they have made of their position and their understanding of the processes.

Ruthi and Nurit report that their mentors worked with them in a variety of strategies and that they are not able to define the strategy that especially influenced them. In Ruthi's words: "*I cannot say what influenced me the most and what truly contributed. It depends on the situation, on surrounding elements and in general on all sorts of things that you are not always aware of.*"

Yaffa, Yasmin, Miriam and Dalia claim that the strategy of observation and feedback was the most significant from their point of view. Dalia describes the meetings devoted to dialogue and the way they were conducted, and thus she explains the considerable importance she attaches to observation and in particular to feedback. From this description it may be learned that reflective discourse constitutes an integral part of the processes used by Dalia's mentor: " ... she mostly let me do the talking and only asked leading questions that evoked in me thoughts as to what is right, what problematic, what one should improve and how, and what can be done differently. I think that her coming into the classroom during my lessons and the way she conducted her feedback session afterwards helped me more than anything to understand, learn and acquire the feeling of growth and personal development."

Miriam adds another dimension and also defines what is formative evaluation from her point of view: "Every feedback session I had also served as reflective formative evaluation. She would ask me to re-enact the lesson, to relate what had happened there for the good and the bad, what I would change and why, what I was pleased at and why, what else could be done and how I had chosen to cope with certain cases, the reasons for this and what other options were open to me. At the end of the process we would together write down points of strength that there were in the lesson and points for improvement. Perhaps this was not conducted like a final evaluation but I did learn a lot in these sessions, I developed my own thoughts regarding education and my own credo ..."

Yasmin chose to elaborate on the use of role playing strategy and described her feelings and the contribution of the strategy to her development. In parallel, she took the trouble to clarify her lack of inhibitions regarding role playing: "*I loved role playing with her a lot. It*  brought up different issues and also showed her where I stood in coping with things. Apart from that the process presented me with several behavioural options and how things could evolve from there, something that stimulates thinking. I think that I really connected with this strategy since the very fact of my being a kindergarten teacher means that role playing is part of the way I work with the children and I am not embarrassed by it."

These descriptions provide an elaboration regarding the contribution of the various strategies. However, it was strange that the novice teachers emphasized, on the one hand, the positive traits of the mentor as being something essential and the fact of his being a model for emulation, but on the other hand did not attribute any special significance to observation of mentor's lessons. Perhaps the explanations provided by Rivka and Dalia can shed light on the issue. Rivka describes a professional mentor to the point of envy: "*I was able a number of times to observe her, but did not feel that it helped me a lot. Perhaps it was even a little frustrating to see the way she coped. I had the feeling that it even exacerbated my difficulties, and not necessarily because of her, but more because of me. Perhaps a slight lack of confidence, I find it difficult to explain what exactly."* 

Dalia, on the other hand, in describing the mentor's traits and her success in the lessons ascribes this to her mentor's special personality, and apparently this is the reason that she does not feel that this is the strategy that for her made the most contribution: "*I came to observe three of her lessons, but I don't know to what extent it helped me, because about the ideas, the principles and the course of the lesson I had already heard from her before, and the rest seemed to be a question of personality and charisma. Because she decidedly made the ideas that we had thought of take centre stage, and therefore I also asked her to observe my lessons and help me develop and manage the lessons and the professional ideas on her level".* 

In order to maximize the characterization of mentors as influencing the professional identity of novice teachers, all the interviewees were asked to refer to the question of the need for correspondence between the subject of the mentor and that of the novice teacher, as well as the age group with which they worked. The Internship and Induction Division inspector and internship coordinator support the quantitative findings and believe in the importance of correspondence in the subject but not necessarily in age group. The Internship and Induction Division inspector explains: "*The subject – greatly important only in the context of the novice teacher's development in his subject. Age group – not important provided the mentor is familiar with the characteristics of this age group.*"

The novice teachers who were interviewed too felt that an identical subject was essential, allowing an understanding of key issues with respect to the particular discipline and in creating a common language. However, work with the same age group was only a recommendation, especially in the case of teachers in middle and high school. An explanation of this may be found in the statement made by Ruthi: "It is very important in order to understand the issues that are relevant to teaching of the subject. A teacher of language or any other subject who does not know how to teach mathematics cannot understand mathematical principles and how to provide answers to the different levels in the class, neither in the joint meetings nor during observation and the subsequent discourse. A mentor who does not teach the same subject can provide support at the level of belonging and conduct in the school and on the emotional level and this should not be sniffed at, but missing for me is the professional-pedagogic aspect."

### Summary

The summary is carried out based on the professional literature and the research findings (including the closed questionnaire, two open questions incorporated into the questionnaire, eight interviews with novice teachers and five interviews with stakeholders who are part of the induction system).

A content analysis of the interviews with the novice teachers and stakeholders shows a correspondence between the professional literature and the qualitative findings with respect to the difficulties encountered during the induction stage. At times, the difficulties (systemic, pedagogic-didactic, interaction with the children, development of professional identity) appear directly through a description of the difficulties themselves and at times indirectly by a description of the assistance that was received from the mentors:

Systemic Difficulties – These difficulties [22], [47], [63], [227] focus principally on the need for a feeling of belonging. A total of 22% of the respondents in the open questions referred to the advantages of working with a mentor and the assistance that the mentors had extended them to enable their optimal integration and acclimatization into the school system, including the staff and principal. In the interviews the question of belonging was raised to a significant extent; the disappointment at the reception received and lack of containment, principally on the part of the teachers and the other staff were emphasized, as follows: "... one cannot change the attitude of the students or the parents, but it is certainly possible to influence the teachers and the principals. The system must learn to accept the newcomer ...". Furthermore, the interviews show that the mentors saw to helping the novice teachers in understanding the organizational reality and the work environment, as recommended by F. Nasser-Abu Alhaji, B. Fresco and Reichenberg [113] and D. Pritzker and D. Chen [205]. The interviewees succeeded in coping with these difficulties thanks to the support they received from their mentors; however, during the course of the internship workshops in colleges/universities, they were exposed to harder coping on the part of other novice teachers, prompting them to formulate insights and make suggestions for handling the issue, as suggested by Ruthie, one of the novice teachers: "It won't hurt if the veteran teachers are given a workshop on how to accept new members of the staff, how to support and assist." This statement brings into sharper focus the feeling that although much has been done to maximize the support received by novice teachers, the question arises as to what must be done to make veteran teachers, principals and other relevant partners understand the difficulties, needs and coping problems experienced by novice teachers. It is important to find a way to make it clear to them that they have a major role to play in the absorption of novice teachers into the educational system and that novice teachers who have experienced a feeling of containment will pass it on and serve as significant adults to their students as well, enabling them to experience meaningful learning and an increasing sense of self-efficacy.

Pedagogic-Didactic Difficulties - Although novice teachers complete their course of studies with extensive theoretical knowledge, a gap exists between the knowledge they have accumulated and their ability to apply it – hence the pedagogic difficulties that are manifested on the generic and subject matter level [104], [112]. The interviewees made less reference to pedagogic-didactic difficulties than other difficulties. They did refer to the pedagogic-didactic issue when recounting their activities with the mentor, their work with the subject matter staff and the importance that the subject taught by the novice teacher and the mentor be similar. Such statements also arose in the quantitative analysis and it was found that certainty in choice of profession and the feeling of self-efficacy were higher when the mentor taught the same subject as the novice teacher compared to a situation in which the mentors taught a different subject. The explanation for the unequivocal findings is provided by the novice teachers and stakeholders, namely, achievement of an understanding of the principal issues regarding the novice teacher's level in the subject matter, creation of a common language, and arrival at an understanding of the unique subject-related difficulties of the students. These explanations are in line with the approach of T. Smith and R. Ingersoll [137] and P. Youngs [159] regarding the priority given to mentors and novice teachers teaching the same subject. These researchers state that there is also a preference for correspondence with respect to the age group taught by the novice teachers and mentors, whereas in the present research no differences were found between novice teachers and their mentors who taught the same age group and novice teachers and their mentors who taught different age groups. The issue of similar age group was also raised in statements made by the novice teachers and stakeholders, who felt that this factor was not mandatory: given a common subject, assistance can be received from the mentors at the level of subject matter, as well as at systemic and emotional levels. In the open questions in the questionnaire too, 46% of the novice teachers referred to the pedagogic-didactic assistance they received from their mentors, as shown in

Table 2.3. It follows that the pedagogic issue was perhaps mentioned less in a formal manner, although it was not because it does not constitute a difficulty but because of the handson response that the novice teachers felt they were receiving.

**Difficulties in Interaction with the Children** – These include difficulties that constitute an integral part of class management skills and are a source of disappointment and aggravation for novice teachers [214], [224], [227]. S. Feiman-Nemser [56] presents questions that novice teachers find vexing on their entry into the educational system, and indeed, in the open question it was found that 19% novice teachers stated the advantages of working with a mentor and his assistance in the sphere of interaction with the children, manifested in a number of ways: professional modus operandi and development of an optimal connection with the students, advice on class management and conflict situations, assistance in coping with events relating to interaction with the students, and holding up a mirror to the actions of the novice teachers themselves, enabling them to practice reflection. The interviewed novice teachers too look the subject with awareness, full in the face, equipped with patience and a willingness to cope. It is notable that despite the possibility of classifying the difficulties, the novice teachers state that in the final analysis they all converge in emotional difficulties, creating a sense of ambiguity regarding their professional identity, discomfort and frustration, as stated by A. Shaz-Openheimer [213].

**Difficulties in Development of Professional Identity** – Perception of the "professional self" constitutes an integral part of the professional identity that has begun to crystallize already during the training period and continues to develop by virtue of its dynamic, contextual and professional nature, tending to creation of a coherence between the three, as suggested by C. Rodgers and K. Scott [129] as a basic assumption for its definition. Deriving from this, the professional identity that began to develop during the training stage is influenced to a great degree during the internship stage, including an intermeshing between external demands on the one hand, and the subjective self-image stemming from the very definition and demands of the job, the efficacy of the teacher, the connections between the theories studied and real-life instruction, the learning contexts, and the assignment of the novice teachers on the other [27], [39]. Based on an understanding of the importance of developing the professional identity of the novice teachers as part of their professional development and perseverance in the teaching profession, as well as an understanding of the place of the mentor and the importance of his role during the internship year [59], [67], [102], [179], [214], the foremost question of the research was formulated, namely, What are the factors influencing the professional identity of novice teachers through the mentoring process? Inherent in this question are secondary questions based on the mixed methods approach dealing with different aspects of mentoring and their connection with professional identity components as defined by S. Fisherman and I. Weiss [179].

Effect of Mentor Support on Professional Identity Components - The system of mentor support relates to three aspects (systemic, pedagogic and emotional) and I began my research with an investigation into the connection between each of these aspects and the professional identity of the novice teacher, finally checking to see which aspect had the strongest connection with development of the novice teachers' professional identity. Based on an analysis of the quantitative findings a positive correlation was found between mentor support in the three aspects and overall mentor support on the one hand, and all components of professional identity development in the novice teachers on the other, but the strongest correlations were found in self-efficacy and certainty in choice of profession. In order to ensure that overall support is indeed the factor with the most impact, a hierarchic linear regression was performed, and it was found that additional factors (the gender of the novice teacher, work in the subject for which the novice teachers were trained, work with a mentor who works in the same field and age group for which the novice teachers were trained) do influence the development of the professional identity of the novice teachers, but when all the factors are taken into consideration, the professional identity of the novice teachers is influenced to a significant extent only by the level of support of the mentor (Table 2.5).

A separate examination of each of the aspects of support and reference to support as a component in its own right shows gaps in the connections between support aspects and professional identity components, with the sense of mission and image of the teaching profession being the lowest throughout. On the other hand, the content analysis of the interviews with the novice teachers and stakeholders showed that they related first and foremost to the sense of mission and desire to contribute and influence future society in a meaningful way as the reasons for choosing the teaching profession. This statement is in line with the report issued by the Center for Mental Health in Schools at UCLA [31], which stated that despite the difficulties, the field of education has always drawn top quality people who chose the field out of a deep sense of mission and a readiness to advance children and contribute to society. It is possible that the gaps in the findings between the quantitative analysis of the questionnaire and the qualitative analysis of the interviews derive from the fact that the sense of mission is a subjective feeling [93], [179] which could be better identified when the subjects were able to express themselves in their own words, as they did heatedly during the interview. There is no doubt that it is a question of deep layers existing in the professional identity [22], [31], which could continue to develop provided all entities involved in their integration and success in the educational system knew how to sustain them. Moreover, the interviewed novice teachers stated with satisfaction that at present, at the end of the internship year and despite the difficulties, they are content with their choice of profession. In addition, they tell of the crystallization of their professional outlook, the way they have evolved during the year, the development of their perceptions, and the formulation of their plans for the future. These descriptions are in line with the claims of M. Fokkens-Bruinsma and E. Cano.inus [59] and S. Fisherman and I. Weiss [179] that a teacher who has chosen the teaching profession out of an inner motivation and is at ease with his choice will feel contented with his work and all that is associated with it, and will invest greater efforts in order to succeed and fulfil his aspirations and vision. This insight puts the ball back in the court of policymakers who, though they have developed an optimal absorption program, apparently need to investigate weak points on the ground in order to be able to solve them.

E. Hoffman and D. Niederland [187] present the figure of the ideal teacher as pictured by society, one that includes academic, pedagogic and social skills. On the other hand, **both in the findings of the questionnaire and the qualitative findings, the image of the teaching profession appears as the weakest element in the professional identity of the novice teachers.** The novice teachers and stakeholders try to explain this by claiming that it stems from the low threshold requirements, relatively low salary and lack of proportion between load and demands. It is possible that there is some truth in their statements and that the high expectations from teachers vis-à-vis the low admission conditions relative to other professions lead to disappointment and a situation of "what came first, the chicken or the egg?" - namely, do the low admission requirements attract a weaker population of teachers to the teaching profession and not only those infused with motivation and a sense of mission, creating a high heterogeneity with respect to the abilities of the teachers and not always in a positive way? Or do the low salaries, viewed by society as such relative to the load and responsibility, attract people who simply do not have a range of options to join teacher training/retraining courses?

At present, at the end of the internship year, the interviewed novice teachers exhibited self-confidence and a belief in themselves and in their ability to cope with difficulties and work towards fulfilling the aims and challenges they had set themselves. The novice teachers do not explicitly define the nature of their professional identity but their statements regarding their perception of the job and the educational system point to their personal perspectives via the act of teaching and the crystallization of their professional identity, as stated by A. Shaz-Openheimer [212]. The novice teachers realize that the system is not perfect and they are willing to cope with without losing the sparkle in their eyes. They realize that they can influence what happens in their classrooms as a microcosm but from there the way is open to impact the school and perhaps the educational system as a whole. The sense of mission and the belief in

their choice of the right course continue to reappear, reinforcing the impression on the part of the listener regarding development of the feeling of self-efficacy. It appears that the need for belonging [43], [44], recognition and esteem alongside the need for growth and self-fulfilment [16], [105, p. 106] have created in the novice teachers a synergy with the factors that motivated them to choose the teaching profession in the first place, allowing further development of their professional identity, as in the example given by Rivka: "... it is the teacher's duty to find answers that will suit all the students, even when it is difficult and even when they are not interested. We must believe that everyone can advance in one way or another and that this is our professional and moral duty." Further, if we consider the four ways proposed by A. Bandura [20] that influence development of self-efficacy and synchronize them with the statements of the interviewed novice teachers, we can learn that all of them have been realized in the processes undergone by the novice teachers, leaving their mark on self-efficacy. In light of this conclusion, and in parallel with the findings that the support aspects have a high impact on the component of self-efficacy, and in recognition of the considerable contribution made by the mentor to the novice teacher's positive feelings, which in turn influence his feeling of self-efficacy [63], [130]. I felt that it would be proper to conduct an in-depth study of the connection between the novice teachers and their mentors from the perspective of the novice teachers.

Perception by the Novice teachers of the Mentors and their Modus Operandi - An analysis of the novice teachers' interviews can shed light on the way they cope with the difficulties they encounter and on involvement by their mentors. The influences and demands that the novice teachers experienced explain the way they describe their mentors and the esteem in which they hold them. The novice teachers were asked in the questionnaire: "Indicate two advantages of working with the mentor". The most profound statement on the part of the novice teachers came through the reaction of 32% novice teachers to the word "advantages". Most of the novice teachers who answered the questionnaire wrote about more than one trait, the total percentage obtained was more than double (73.48%). This raised a doubt as to whether the question was clear or whether the novice teachers view the traits of the mentors as so fundamental that their traits appearing in their vocabulary as positive were defined as advantages? It is possible that the answer to this question is evident from the analysis of the interview - the novice teachers describe the way their mentors operate, their support, their attitude to the profession, to the students and their colleagues, and to the rest of the stakeholders in the system, and the way they perceive their position, inserting into their statements traits associated with the mentors ("dedicated", "invests efforts", "caring", "nice", "committed", "practical", "trustworthy", "empathic", "professional", etc.). Perhaps the novice teachers feel content and confident with the process that they had undergone and therefore do not dissociate

the personal process they had experienced from the task of mentoring itself. Thus a correlation may be seen with the findings of other researchers [162], [199] their perception of the role of mentoring and the desirable traits of mentors. Perhaps there is a realization that the traits mentioned by the novice teachers do in fact influence interpersonal relations between people in general, and between teacher and students in particular, such that a mentor in whom these traits constitute part of his personality serves as a model for emulation in the connections that he builds with his students, their parents and the school staff. If so, it is no wonder that the novice teachers speak about their mentors with admiration and that the metaphors that they chose to describe them contain both an emotional and a pedagogic facet. In the analysis of the answers to the open questions it is possible to see a large gap between the willingness to respond to the positive aspects of the question and stress the many advantages there are to working with the mentor on the one hand, and the small number of answers that relate to the disadvantages of working with the mentor on the other. Moreover, the novice teachers who did refer to the disadvantages of the mentor mentioned aspects that apparently pointed to problems that had come up in interpersonal contact between them and their mentor and/or a lack of understanding of the role of the mentor, to the extent of disparaging their effectiveness, although none claimed that it was an unnecessary position.

Effect of the Mentors on the Novice teachers – The novice teachers stated explicitly that they now find themselves in a different and better place, stating that **their world view in all matters relating to their role and their view of the educational system has been influenced by the mentors** as a result of the dialogue conducted with them, the way they view the conduct of the mentors in their daily routine with the students, teachers and the school staff, and the commitment exhibited by the mentors towards them, their students and the system, just as claimed by various researchers [31], [117], [166]. The ability on the part of the novice teachers to appreciate the mentors who had helped them at the beginning of their career strengthens their position and the process of reflection and learning that they have undergone, while strengthening at the same time the position of the mentor and the importance of his role to the educational system.

Strategies in the Mentoring Process – Both the quantitative and qualitative findings point to the connection between mentor support and development of the professional identity of the novice teachers as well as to his influence, stemming from which is the issue that attempts to identity the optimal mentoring strategy from the point of view of the novice teachers. In light of the varied findings it was to be expected that "modelling" would have a significant impact, but surprisingly this was not the case. The next question is therefore: If the mentors are regarded with esteem, why in the statistical analysis was no connection found between the strategy of modelling and development of the professional identity? This question was directed at the novice teachers and they explained it by stating that it undermined their self-confidence and that by their own decision they preferred to learn through trial and feedback. It is possible that the accepted use of the word "modelling" in Israel (observation of a mentor's model lesson) does not reflect its full significance and it is recommended to interpret it as demonstration of conduct in different channels in the educational system (class management, coping with disciplinary problems, meetings with parents, management of relationships within the school, time management, etc.) as suggested by P. Hudson [80]. The novice teachers in the school get to view their mentors in their day-to-day conduct towards their colleagues, management, parents and students. This is an opportunity to see them in action throughout the day and not only in a specific lesson, the emphasis being not only on subject matter but also on generic facets. In light of the novice teachers' statements, there is no doubt that this fact has a major impact on them.

Determination of one formative evaluation and observation of the novice teacher at least twice around midyear is a mandatory part of mentoring activities taking place in Israel. The statistical check did not present any one strategy used by the mentors as preferred over the other and when asked, the novice teachers they found it difficult to define a specific strategy. However, they did emphasize the effectiveness of observation and the subsequent feedback they received, as was found by F. Patrick et al. [122]. Some of them described how the feedback session had been conducted and how it had affected the reflective processes that they were carrying out on themselves. Perhaps they were in fact combining most of the strategies? For example: a mentor who observes the novice teacher frequently and provides reflective feedback as part of the formative evaluation process while showing containment and guidance exhibits optimal conduct and in fact refutes the definition of strategy as a specific activity. Such observation is related to Art. 13 of the Romanian Ministry of Education document that offers several strategies for implementation in the mentoring process (modelling, consulting, evaluation, feedback...). Art. 18 elaborates and adds protocols, recordings, etc. [14]. This might explain the statements of the novice teachers with respect to the strategies that were particularly influential and the distinct differences that were found between the novice teachers who received 3-5 constructive evaluations as compared to those who received only one formal evaluation (Table A8. 1). It should be borne in mind that feedback per se is valueless unless use is made of the information obtained in order to improve procedures and narrow the gap between the ideal and the reality [75, p.40]. Here is where the traits of the mentors reappear, helping to consolidate the trust between them and the novice teachers and their ability to convey the required messages. Perhaps this adds another dimension to explaining the statement of facilitating and containing traits being seen as advantages. If so, the question remains of the cases in which trust between the mentors and novice teachers was not optimal, although only a few novice teachers did not write about the advantages of working with mentors (6%) or who wrote about disadvantages that were related to timetables. These novice teachers represented a relatively small percentage of the research sample in particular, and the research population in general, but each of them is an individual in his own right and has the potential to be a top rated teacher if only given the right support.

Problem of Coordinating Time of Meetings between the Mentors and the Novice teachers –The findings emphasize the systemic difficulties relating to **the problem of coordinating joint meetings between the mentors and the novice teachers,** as noted by 29% novice teachers. This finding is similar to those of G. Goldenberg et al. [181, p.33] that 52% of active mentors believe that the shortage of time is a problem that is common to both mentors and novice teachers and is a significant factor in retarding the mentoring process and in the negative feelings that can develop with novice teachers, as presented by J. Rippon and M. Martin [128]. Although the content analysis shows that it is possible to find solutions, some of which are even creative. But there is a problem and there is need to place it on the agenda, if only for those novice teachers whose mentors do not find the time for this or are not sufficiently flexible to come up with alternative solutions. Fixed meetings would also prevent the blurring of boundaries between friendly and formal relations, while providing the novice teachers with a sense of security and the mentors with an aura of professionalism [213].

Conspicuous throughout the course of the research was the unequivocal declarations of the novice teachers with respect to the place of the mentors in their professional lives and their ability to influence them. Precisely in light of these facts, is mentor training, making possible significant contributions to the educational system, as presented by the interviewees. Courses have been developed according to the framework defined by the Ministry of Education [188], [189] although there is leeway in each academic institution to develop this framework according to its own guidelines. In addition, a process has also begun of remunerating the mentors by recognizing mentoring as professional development contingent on their participation in two seminar days.

In summation, this research began from the realization that teachers are the most significant element influencing the quality of education in schools. Since mentors are defined as the element having the most influence on novice teachers it is important to find the golden mean for implementing the mentoring process in a way that will help novice teachers at the start of their professional careers. And indeed, the foremost question of the research is confirmed, it being found that mentor support constitutes the most influential factor in development of the professional identity of novice teachers, both as overall support and in the systemic, pedagogic

and emotional domains. This support impacts the components of professional identity as defined by S. Fisherman and I. Weiss [179]: sense of mission and desire to contribute and influence the education of children, certainty in choice of profession and feeling of self-efficacy. The image of the teaching profession constitutes a relatively weak element in the professional identity of the novice teachers, raising questions relating to the threshold demands of the profession and wage conditions vs. load, and this element was therefore not included in the model. The research exposed the admiration that novice teachers have for their mentors, how mentors implement the mentoring processes in practice and the significant impact they have on the functioning of novice teachers in the framework of their day-to-day work, in crystallization of their educational perspectives and in building their professional identity. In addition, the research shows that no preferred mentoring strategy is identified, but rather a combination of different strategies and mentoring processes structured as "connected vessels" and emphasizing reflective discourse and feedback. Finally, it appears that there is still a fundamental problem in the systemic domain relating to the coordination of mentoring meetings, a fact that the responsible authorities should give thought to and try to find a fitting solution for. In light of these insights the importance of training and professional development of mentors is reinforced, amid a focus on the difficulties in entering the teaching profession and in optimal mentoring processes, including assessment, feedback and reflection.

At the end of the year, the novice teachers were asked an open question about their difficulties and the areas they have worked with their mentors. Analysis of the responses shed light on the content of the meetings, as shown in the following tables:

The subjects	
Class management and disciplinary problems	68.8%
Teacher-student relations and interaction with parents	51.2%
Providing answers to students with special needs and to individual differences	44.8%
Special initiatives and activities in the classroom and the school – parties,	20%
excursions, class and school events, etc.	2070
Cultivation of a class climate and inculcation of values	16%
Time management	13.6%

Table 2.8 . The subjects worked by mentors with the novice teachers in the pedagogic area (generic level)

Table 2.9 . The subjects worked by mentors with the novice teachers in the pedagogic area (subject level)

The subjects	
Work programs, curricula and personal programs	60.8%
Varying teaching strategies, usening of illustrative tools and adaptation of learning materials	49.6%
Planning of teaching units and lessons	48.8%
Subjects relating to children evaluation: preparation of tests, writing of evaluations, preparation of indicators, certificates, etc.	44%
Observing the lessons of the novice teacher and providing feedback, reflection and professional development	37.6%
Using teleprocessing and technology	22.4%

In addition, 53.6% of the novice teachers noted related issues connected to emotional and social needs - integration in the system and the school culture, and team work.

A connection could be seen between the mentors' work/support and the three types of difficulties with which the novice teachers had to cope at the start of their career: (1) **pedagogical difficulties** on the generic level (class management, handling of disciplinary problems, incorporation of teleprocessing and technology, teaching strategies) and the subject level (writing of work plans and curricula, teaching units, evaluation, observation and feedback); (2) integration into the school staff (staff meetings, peer work, collaborative work, events, social initiatives) relate to **environmental difficulties** and represent an answer to the need for contact and belonging as presented by self-determination theory [43], [44]; (3) **emotional difficulties**, which appear at times directly and at other times as an integral part of other issues (assistance in integration with the staff, interaction with the parents, providing an answer to students with special needs, and teacher-student relations [51].

# **3.3.Validating the values of novice teachers' professional identity components formed through mentoring**

In order to check the differences in impact between the experimental group and the control group, both groups of novice teachers were given questionnaires at two different times and a f-test was conducted to examine differences between two groups that are not mutually dependent.

The research hypotheses are as follows:

1. A difference will be found in the degree of autonomous motivation between teachers in the experimental group and teachers in the control group, such that the degree of autonomous motivation will be higher for teachers in the experimental group and lower in teachers in the control group.

- 2. A difference will be found in the degree of integrative motivation between teachers in the experimental group and teachers in the control group, such that the degree of integrative motivation will be higher for teachers in the experimental group and lower for teachers in the control group.
- 3. A difference will be found in the degree of self-actualization between teachers in the experimental group and teachers in the control group, such that the degree of self-actualization will be higher for teachers in the experimental group and lower for teachers in the control group.
- 4. A difference will be found in the degree of teaching competence felt between teachers in the experimental group and teachers in the control group, such that the degree of teaching competence felt will be higher for teachers in the experimental group and lower for teachers in the control group.

The questionnaire examined the integrative motivation and the autonomous motivation, which develop the professional identity of the teacher as described above. In addition, the feeling of competence and self-actualization of the novice teacher were also examined.

The research tool. There were used questionnaires validated in previous researches and where validated again in the present research. The scales were based on commonly accepted indices throughout the world. The questionnaire (Appendix 13) included 43 statements and the subjects were asked to grade the extent of their agreement with the statement on a scale of 1 to 5, with 1 representing "do not agree" and 5 representing "agree to a very great extent". In order to check if significant differences exist between the experimental group and the group control group, I performed a f-test, which examines differences (in Time 1 and Time 2) between the averages of each groups were significant statistically and not simply random. The reliability of the questionnaire according to the alpha Kronbach method was  $\alpha$ =0.910, pointing to the high internal consistency and homogeneity of the items. The reliability of each of the variables appears in Table 2.10.

In light of this, it may be stated that the differences that were found between the groups during the second distribution cannot be attributed to differences that could possibly have existed between the teachers in the different groups at the beginning of the year. To test the research hypotheses I performed four single-factor ANOVA tests with repeated measurements, with a statistical reliability of 0.5.

in the questionnaire

Variable (In SPSS)	General explanation	The components as in the	Reliability according to alpha	
Var (In S	General explanation	questionnaire – Examples	Kron Tim e 1	bach Tim e 2
Autonomous motivation	Autonomous motivation = Identified motivation + Intrinsic motivation Identified motivation = An act that a person performs through identification with a value or behaviour, amid recognition of the importance of the act and an understanding that he will gain something non- material from it. Accordingly, this motivation is accompanied by feelings of satisfaction and choice. Intrinsic motivation = Motivation to do something not in order to profit but because of the satisfaction gained from the thing itself. Questions dealing with this variable are: 19, 20, 21, 22, 23, 24, 27, 28, 32, 34, 35, 36, 37, 39, 40, 41, 43	I will invest efforts in teaching because one of the most important things in my eyes is reaching out each and every child	.90	.86
Integrated motivation	Motivation that is created through inernalization and a high level of self-determination. The emotions accompanying it are positive: satisfaction, interest, enjoyment and choice Questions dealing with this variable are: 23, 24, 25, 26, 29, 30, 31, 33, 38, 42	I will invest efforts in teaching because the attempt at reaching out each and every child is a central component in the professional identity I have formed.	.82	.82
Self- actualizatio	Fulfilment of inner aspirations (personal growth, relationships, involvement in community affairs), accompanied by positive feelings Questions dealing with this variable are: 1, 3, 6, 8, 9, 10, 11, 12, 13	I feel that my choice of the teaching profession gives me a lot of satisfaction	.82	.80
Competence	Competence in teaching (the teacher's beliefs regarding the link between teaching and learning and the extent to which he is able to impact his students at the level of learning, behaviour and achievements) and personal competence (the teacher's beliefs in himself and his ability to succeed in establishing a particular behaviour such that it will lead to the desired results). A high feeling of competence generates intrinsic motivation. Questions dealing with this variable are: 2, 4, 5, 7, 11, 14, 15, 16, 17	When I decide to accomplish a difficult task relating to teaching I am up to it.	.74	,73

Source: [43], [165], [185], [190]

In addition, I performed a Bonferroni correction where necessary. Since there was room to check if changes had taken place in each of the groups in the time between the first and second distributions, I performed, as an extended study, t-tests on each of the variables.

The results section is divided into two parts: theoretical statistics of the research variables and testing of the research hypotheses.

The variable name		T	Time 1		Time 2	
		Averages	Std. Deviation	Averages	Std. Deviation	
Autonomous	Experimental group	4.27	.35	4.76	.21	
motivation	Control group	4.22	.47	4.27	.50	
Integrated	Experimental group	4.37	.41	4.75	.33	
motivation	Control group	4.25	.54	4.24	.50	
Self-	Experimental group	4.14	.53	4.30	.53	
actualization	Control group	4.10	.56	3.97	.58	
	Experimental group	4.35	.40	4.61	.39	
Competence	Control group	4.26	.47	4.49	.50	

Table 2.12. Averages and standard deviation of the research variables

The first hypothesis, that a difference will be found in the autonomous motivation of the experimental group vs. the control group over time, was subjected to a mixed design ANOVA with repeated measurements. Analysis of the data showed a significant interaction effect between the time the questionnaire was handed over to the group to which the teacher belonged (Wilks' lambda = .68, F(1,112) = 51.77, p<.000). Further analysis showed that no significant differences existed in the degree of autonomous motivation between the experimental group and the control group in the first distribution (F(1,110) = .49, p<.05), i.e. no differences were observed in the degree of autonomous motivation between the experimental group (M = 4.27, sd = .35) and the control group (M = 4.22, sd = .47) in the first distribution. Significant differences were found in the degree of autonomous motivation between the experimental group and the control group in the second distribution (F(1,110) = 44.40, p<.000) such that the degree of autonomous motivation between the experimental group and the control group in the second distribution (F(1,110) = 44.40, p<.000) such that the degree of autonomous motivation between the experimental group (M = 4.27, sd = .50). A principal effect was found for the type of group (F(1,110) = 15.26, p<.000) such that the degree of autonomous motivation was higher in the experimental group (M = 4.29, sd = .04) than in the control group (M = 4.24, sd = .05).

In addition, a significant principal effect was found for the time the questionnaire was distributed (Wilks' lambda = .94, F(1,110) = 5.93, p<.05). In the experimental group a significant principal effect was found for time (p<.000 t(56) = -10.91), attesting to an increase in autonomous motivation between time 1 (M = 4.27, sd = .35) and time 2 (M = 4.76, sd = .22). In

the control group no significant principal effect was found for time (t(54) = -1.32, p>.05).



Figure 2.10. Differences in Autonomous Motivation between the Experimental and Control Group over Time

The second hypothesis, that a difference will be found in the degree of integrative motivation in the experimental group vs. the control group over time, was tested using the mixed design ANOVA test with repeated measurements. Analysis of the data showed a significant principal effect between the time the questionnaire was distributed to the group to which the teacher belonged (Wilks' lambda = .85, F(1,110) = 18.90, p<.000). Further analyses showed that there are no significant differences in integrative motivation between the experimental group and the control group in the first distribution (F(1,110) = 1.75, p<.05), i.e. no differences were observed in the degree of integrative motivation between the experimental group (M = 4.37, sd = .41) and the control group (M = 4.25, sd = .54) in the first distribution. Significant differences were found in the degree of integrative motivation between the experimental group and the control group in the second distribution (F(1,110) = 37.13, p<.000), such that the degree of integrative motivation between the experimental group and the control group (M = 4.29, sd = .50). A principal effect was found for the type of group (F(1,110) = 17.20, p<.000), such that the degree of integrative motivation was higher in the experimental group (M = 4.56, sd = .05) than in the control group (M = 4.24, sd = .05).

In addition, a significant principal effect was found for the time the questionnaire was distributed (Wilks' lambda = .86, F(1,110) = 17.90, p<.000). In the experimental group a significant principal effect was found for time (t(56) = -6.36, p<.000), pointing to an increase in integrative motivation between time 1 (M = 4.37, sd = .05) and time 2 (M = 4.75, sd = .04). In the control group no significant principal effect was found for time (t(54) = .07, p<.05).

The third hypothesis that a difference will be found in the degree of self-actualization of the experimental group vs. the control group over time was tested using the ANOVA mixed design test with repeated measurements. Analysis of the data shows that a significant interactive effect between the time of distributing the questionnaire to the group to which the teacher belonged (Wilks' lambda = .92, F(1,110) = 8.85, p<.01).



Figure 2.11. Differences in Integrative Motivation between the Experimental Group and the Control Group over Time

Further analysis shows that there are no significant differences in the degree of selfactualization between the experimental group and the control group in the first distribution (F(1,110) = .14, p>.05). In other words, no differences were found in the degree of selfactualization between the experimental group (M = 4.14, sd = .53) and the control group (M = 4.10, sd = .56) in the first distribution. Significant differences were found in the degree of selfactualization between the experimental group and the control group in the second distribution (F(1,110) = 9.99, p<.01), such that the degree of self-actualization in the experimental group (M = 4.30, sd = .53) is higher than in the control group (M = 3.97, sd = .58). A significant principal effect was found for the type of group (F(1,110) = 4.10, p<.05), such that the degree of selfactualization was higher in the experimental group (M = 4.22, sd = .06) than in the control group (M = 4.03, sd = .06). In addition, in the experimental group a significant principal effect was found for time (t(56) = -2.20, p<.05. There is a clear increase in the feeling of self-actualization between time 1 (M = 4.14, sd = .07) and time 2 (M = 4.30, sd = .07). In the control group too a principal effect was found for time (t(54) = 2.00, p<.05), such that a drop was observed in the feeling of self-actualization between time 1 (M = 4.11, sd = .07) and time 2 (M = 3.97, sd = .07).



Figure 2.12. Differences in the degree of self-actualization between the Experimental Group and Control Group over Time

The fourth hypothesis, that a difference will be found in the degree of teaching competence felt in the experimental group vs. the control group over time was tested using the ANOVA mixed design test with repeated measurements. Analysis of the data shows that the hypothesis is not confirmed. It was found that the interactive effect is not significant between the time that the questionnaire is distributed to the group to which the teacher belonged (Wilks' lambda = .99, F(1,110) = .08, p>.05), i.e. no differences were found in the degree of teaching competence felt between the experimental group and the control group over time. No principal effect was found for the type of group (F(1,110) = 2.43, p>.05).

In addition, in the experimental group a significant principal effect was found for time (t(56) = -4.20, p<.000). There is a clear increase in the feeling of teaching competence between time 1 (M = 4.35, sd = .40) and time 2 (M = 4.61, sd = .39). In the control group too a significant principal effect was found for time (t(54) = -3.35, p<.01) such that a rise was observed in the feeling of teaching competence between time 1 (M = 4.26, sd = .06) and time 2 (M = 4.49, sd = .06).



Figure 2.13. Differences in the degree of teaching competence felt between the Experimental Group and the Control Group over time

The findings of the control experiment show significant differences in integrative motivation and autonomous motivation of novice teachers in the experimental group versus novice teachers in the control group. This finding supports the claim that people around us can help or hinder autonomous motivation or integrative motivation, affecting the sense of bonding and belonging, competence, and crystallization of values and goals, while imparting meaning to a person's actions [165], [185]. The statistical findings underscore the components of professional identity according to S. Fisherman and I. Weiss [179], which led to the elaboration of the model and which constitute an integral part of selfdetermination theory [43], [44]. In other words, teachers who feel that they can meet their basic needs at work and realize goals and values underlying their identity are impelled by integrative motivation, constituting an outcome of the full process of internalizing external motivation, such that a very high level of self-determination is created, constituting an integral part of their professional identity [185], [190]. It appears that these teachers had undergone mentoring in an environment that supported their basic needs, allowing them to feel confident and develop their professional identity. Developed relationships allowed the novice teachers to carry out processes of self-exploration regarding their choice of teaching, as suggested by H. Kaplan and R. Zafrir [190]. And indeed, in the framework of content analysis performed on the feedback from teachers describing their work with mentors, it was found that the mentors worked with the novice teachers in three areas: (1) Professional: assistance in the teaching-learning process, in ways to evaluate students, in class management and in cultivation of professional thinking; (2) Environmental: assistance in familiarization with procedures, rights and obligations, and in integration into the school culture; (3) Emotional: assistance in development of relations based on trust and in cultivation of a professional self-image [4951].

Autonomous motivation and integrated motivation that express internalization of professional identity; it also appears that mentors in the experiment group succeeded better in "getting ahead" with their teachers. It is possible that they had internalized the difficulties that novice teachers face in their job from a different reference point, had incorporated talks around the subject of identity such as "Why do I want to be a teacher?", "What are my values?", etc., and perhaps because they use assessment tools not as a means for personal advancement (external motivation) but rather to prompt reflective dialogue, aimed at achieving growth on the part of the novice teacher. E. Deci and R. Ryan [43] claim that just as providing positive feedback can promote autonomous motivation and integrated motivation, so negative feedback can harm it. K. O'Connor [117] too claims that teachers use their emotions to direct, shape and justify their professional decisions as part of the process of building their professional identity, and hence factors affecting their emotions cannot be ignored. There is no doubt that the strategies and means leading to proper use of assessment tools and tests, cultivate positive emotions, which in turn lead to a feeling of competence and identified, integrative and intrinsic motivation [43], [165], [190]; these impart meaning to the work of the novice teacher and allow him to justify his perseverance in the profession even through difficult and challenging moments, thus reinforcing his feelings with respect to the certainty in choice of profession, competence and sense of mission (as presented in the model) - a process that builds his professional identity [117], [127], [146], [223].

The third hypothesis was confirmed and although no differences were found between the two groups in the first distribution of the questionnaires, significance was found in selfactualization in the experimental group in the second distribution. In other words, the degree of self-actualization was higher in the experimental group than in the control group. The explanation for this finding could possibly be in the support strategies that were used on the novice teachers in the experimental group, enabling them to begin to realize their wishes and leading them to choose teaching as a profession. On the other hand, the decrease in the feeling of self-actualization in the control group was somewhat surprising in view of the significant role that mentors played throughout the research, prompting recommendation of additional research.

The response to the three aspects turn the spotlight on the fourth hypothesis, which states that a difference will be found in the degree of teaching competence felt in the experimental group vs. the control group. Although this hypothesis was not confirmed and no differences were found between the two groups in time 2 in the feeling of competence, in the t-test conducted a significant increase was found in the feeling of competence both in the experimental group and in the control group. The increase in the feeling of competence can be explained by the intensification of the themes that came to light in the content analysis of the mentors' activities with the novice teachers, and the emphasis on aspects relating to teaching processes and pedagogy (such as class management, disciplinary problems, work programs, curricula, personal children's programs, issues involving integration in the system and the school culture, team work, planning of teaching units and lessons, issues relating to evaluation, and others). What might possibly be involved is the maturity of the novice teacher to receive additional tools that will enable him to develop professionally, the desire on the part of the novice teacher to prove himself and his capabilities, or perhaps his way of strengthening his professional identity. The teachers who had been recommended for an additional probation year also emphasized the support and help they had received pedagogically [54], [176]. In any event it appears that the activities that led to a rise in the averages of the feeling of competence in the two groups affected the feeling of success and self-satisfaction on the part of the novice teachers, both because of the tools and support they received and because of the positive feeling that arose from the favourable opinion of an important person (the mentor) [63], [130]. This is in line with the theory of A. Bandura [20], who views learning processes as crystallizing personality by emphasizing the social dimension and who attaches great importance to the other person (in the present case the mentor) as being a model for emulation and wielding influence.

#### **3.4.** Conclusions on chapter **3**

According to the procedure, in Israel mentors are required to undergo training to help them develop a perception of their task, including guiding skills, identification and understanding of novice teachers' difficulties, while imparting tools for creating reflective dialogue, feedback and assessment. In practice the vast majority of them are appointed to their position with no training due to the considerable load they bear in their ongoing roles as teachers, and they fill their position based on intuition, professionalism and empathy. This program emphasizes the intuition and the skills that mentors have acquired during the course of their professional career, and offer to look further and try to find a way of maximizing the process. In summation, these findings point to the considerable contribution made by mentors to the development of the professional identity of teachers at the start of their career.

The important role of mentors is clearly seen in the significant increase in the feeling of competence on the part of novice teachers, both in the experimental group and the control group, such that each mentor (whether he had undergone training or not) can assist the beginning teacher in boosting his feeling of competence. Nevertheless, the significant differences found point to the fact that with novice teachers in the experimental group integrative and autonomous motivation, which constitute an integral part of their professional identity, are higher. Further, in light of the findings it is important to brand the role of mentoring such that mentors will feel the need to participate in training courses, enhancing the status of their role and their professionalism. I wish to propose two possible ways of remuneration: (1) remuneration by the Ministry of Education: monetary remuneration on a monthly basis in the payslip; (2) addition of mentoring hours in the mentor's timetable as part of his work hours, thus answering the need for recompensing the mentor for his work and for the difficulty in coordinating meetings as evidenced in the open questions and the interviews with the novice teachers. In addition, in the framework of the storytelling and poster competition, the novice teachers reveal emotions and thoughts that exist within themselves on deeper levels, although on rare occasions they refer to the mentoring processes directly. In order to reveal the significant work being performed it is recommended to extend the range of competitions and add a contest that relates directly to novice teacher-mentor bonds.

The meaningful connection between support provided by mentors to teachers at the start of their careers and the development of their professional identities is a common thread throughout the research. In light of the fact that the professional development of teachers has an impact on effort invested, perseverance in the teaching profession and willingness to overcome difficulties, adapt and succeed, the position of mentor must be nurtured in all possible ways: on the one hand by demanding that training be part of a mandatory procedure, but on the other by seeing to proper remuneration and training for mentors.

### GENERAL CONCLUSIONS AND RECOMMENDATIONS

The theoretical and practical results addressed the determined objectives at the beginning of the research and contributed to substantiation of the *Pedagogic model for developing novice teachers' professional identity through mentoring* that represents the **scientific problem solved in our research**. Synthesis of the data led us to the following conclusions:

1. The concept of novice teachers' professional identity development is associated to a series of psycho-pedagogic needs, difficulties, factors and principles that, being correctly addressed, could generate an appropriate response. Besides, novice teachers' professional identity development stipulates efforts and contributions to be made by the novice teachers themselves. To this end work must be done with them on practising optimal self-reflection and on developing a sense of competence and a feeling that they are assuming responsibility for their work. This must come out of recognition of the stage they are at in terms of their professional career, with its uniqueness, difficulties and dilemmas involved while developing their professional identity.

2. Mentoring appears as a facilitating condition for the development of novice teachers' professional identity, considering the fact that it shapes the way in which novice teachers understand themselves and their work, thus playing an important role in moulding professional standards and profession itself over the long range. Accordingly, the mentor must have professional knowledge, confidence in his abilities and experience that have been acquired throughout the period of his work. These characteristics will trigger in the mentor a willingness to share the knowledge and experience he has accumulated with the novice teacher and assist him in enhancing his understanding of the subject in particular, and teaching in general.

3. The success of induction programs is determined by: (1) Ongoing learning and professional development between training and induction stages; (2) Nurturing reflection among novice teachers in order to assume responsibility for their professional development and for forming professional identity, as proposed in the model of the European Union; (3) Treatment of each novice teacher individually while meeting his personal needs; (4) Consideration of novice teachers' emotional needs; (5) Participation of novice teachers in various networks, allowing them to share their problems and discuss ways of dealing with them, based on a relationship of trust, support and choice. (6) Creation of a fertile ground for learning, motivation, perseverance and professional development by the novice teachers through an organizational culture of professional development, clear procedures, and a relationship of mutual trust in schools.

4. The theoretical components of novice teachers' professional identity, principles, criteria, indicators, objectives, contents and technologies, as well as the practical ones – operational models of assisted internship, organization and monitoring of professional training for mentors and professional evaluation of novice teachers – generated a *Pedagogic model for developing* 

*novice teachers' professional identity through mentoring*. It includes complex functions: integration of modern views regarding the two educative-formative processes; forming, evaluating and improving professional training and professional evaluation of novice teachers. All these allow the development of a unique program for novice teachers' support during their induction into the educational system.

5. Testing the attitudes of novice teachers, mentors and principals towards the model proved that the research subjects value its many advantages: raising the level of novice teachers' professionalism, mastery of pedagogic aspects and general culture. The model was highly appreciated when presented at scientific meetings.

6. The **directions of solving the problem** of novice teachers' professional identity development through mentoring are:

- Approaching each novice teacher's needs and difficulties individually ;
- Providing mentoring services as stipulated by self-determination theory;
- Permanently surveying novice teachers' professional activity;
- Create a mentor-novice teacher partnership based on mutual respect, understanding and professional cooperation;

In conclusion we underline that the findings of the current study are consistent with the high importance of novice teachers' professional identity development and mentoring, mainly in novice teachers' perspective. In this vein, this study contribution focuses on the strong effects of mentoring on enhancing novice teachers' professional identity, subsequently reducing dropout from the profession and emphasizing life-long professional development

## **Practical recommendations:**

1. The model for development of novice teachers' professional identity during internship and the conduct of the final examination offers the authors of educational policies and university psycho-pedagogic curricula, school principals, mentors and inspectors suggestions for improving novice teachers' professional formation and evaluation.

2. Reconsideration of educational policies regarding novice teachers' professional identity should include remuneration of mentors.

3. The system and process of professional training of novice teachers should be restructured according to the methodology of assistance during internship that represents the modern view of novice teachers' professional identity development.

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Dear Novice teachers,

The induction stage in teaching is an extremely significant one in the process of your integration into the educational system.

The purpose of this questionnaire is to learn about the mentoring processes you are undergoing and their impact, aimed at deriving conclusions that would advance your optimal absorption into the system.

Kindly complete the questionnaire in full. There are no "correct" or "incorrect" answers but only answers that are suited to you. The information you give is anonymous and will be used solely for the purposes of the research.

The questionnaire is worded in the masculine gender but is intended for both men and women.

Thank you for your cooperation.

#### Part One

Statements 1-27 refer to your perception of the teaching profession. Please rate them on a scale of 1 to 5 indicating your agreement with the statement, 1 being agreement to a very small extent and 5 being agreement to a very great extent.

	Statement	1	2	3	4	5
		Agree to a	Agree	Agree to	Agree	Agree to
		very small extent	to a small	a moderate	to a great	a very great
		extent	extent	extent	extent	extent
	I am certain that I did the right					
1	thing in choosing the teaching					
	profession					
2	I am happy to be engaged in					
-	education					
3	I have the characteristics needed to					
	be a good teacher					
4	I always felt my mission was to be					
	a teacher					
5	I am drawn to the teaching					
	profession					
6	I think I am a professional teacher					
7	I have the right professional skills					
,	to be a good teacher					
8	I do not foresee leaving the					
Ŭ	teaching profession					
9	I have the right approach to the					
	students					
10	The work of teaching draws me					
11	I regard the teaching profession as a					

	Statement	1	2	3	4	5
	Statement	Agree to a very small extent	Agree to a small extent	Agree to a moderate extent	Agree to a great extent	Agree to a very great extent
	mission					
12	I am not sure I will remain in the teaching profession for long					
13	I am satisfied to be engaged in teaching					
14	I feel fulfilled in teaching					
15	I am glad I chose the teaching profession					
16	I have a command of the intricacies of the teaching profession					
17	I am certain that I have acquired the qualifications to be a good teacher					
18	When people think of me as belonging to a different profession I correct the mistake and explain that I am a teacher					
19	I am whole with my choice of the teaching profession					
20	I know what to do and how to do it in teaching					
21	Teaching for me is a mission					
22	I often have doubts about whether I am suited to be a teacher					
23	I think teaching is the profession most suited to me					
24	I feel fulfilled in teaching					
25	When I see a teacher I feel esteem towards him					
26	personally					
27	I think there are only a few teachers who can define themselves as being professionals					

#### Part Two

Circle the answer that is relevant to you:

- 28. My mentor specializes in the same subject as me: Yes/No
- 29. My mentor works with the same age group as me: Yes/No
- 30. State two advantages of working with your mentor:
- a.

b.	
31.	State two disadvantages of working with your mentor:
a.	
b.	

Statements 32-60 deal with your connection with the mentor. Please rate them on a scale of 1 to 5 indicating your agreement with the statement, 1 being agreement to a very small extent and 5 being agreement to a very great extent.

	Statement	1 Agree to a very small extent	2 Agree to a small extent	3 Agree to a moderate extent	4 Agree to a great extent	5 Agree to a very great extent
32	The mentor helped/advised me to adapt the learning materials and teaching methods to the students' needs					
33	The mentor helped me to review the curricula in depth					
34	The mentor exposed me to the procedures and norms of the school					
35	The mentor helped me fit in with the school staff					
36	The mentor supported me emotionally and encouraged me to cope with frustrations					
37	The mentor familiarized me with the school environment and staff					
38	The mentor helped/advised me in evaluation of the students' achievements					
39	The mentor helped/advised me in issues relating to time management					
40	The mentor put me in contact with the various entities in the school (principal, secretariat, counsellor, superintendent, nurse, etc.)					
41	The mentor helped me in arrangement of activities such as parents meetings, excursions, class committee, parties, etc.					

	Statement	1	2	3	4	5
	Statement	Agree to a	Agree	Agree to	4 Agree	Agree to
		very small	to a	a	to a	a very
		extent	small	moderate	great	great
			extent	extent	extent	extent
42	The mentor helped/advised me on					
12	the subject of homework					
	The mentor helped/advised me in					
43	coping with didactic problems and					
45	study-related difficulties arising					
	during the course of my work					
44	The mentor helped/advised me on					
44	discipline problems					
	The mentor helped/advised me on					
45	pedagogic problems with the					
	students					
	The mentor helped me in coping					
46	emotionally in the classroom					
46	(stress, load, frustration, lack of					
	confidence)					
	The mentor contributed to					
47	increasing my motivation in					
	working in the teaching profession					
	The mentor advised me on how to					
48	increase the students' motivation to					
	study					
	The mentor helped/advised me on					
49	creation of a positive climate in the					
	classroom					
50	The mentor contributed to raising					
50	my self-confidence as a teacher					
	The mentor helped/advised me on					
51	coping with practical problems in					
	the classroom and the school					
	The mentor helped/advised me on					
52						
	students					
53	The mentor was available for	1		1		
55	consultation					
	The mentor helped/advised me on			1		
54	coping with the students' personal					
	problems					
55	The mentor helped me in filling					
55	additional positions in the school					
	The mentor prepared me for					
56	interaction with the parents and					
50	advised me on problems that could					
	arise					
57	The mentor helped/advised me on					
57	the use of teaching aids					
L				1		

	Statement	l Agree to a very small extent	2 Agree to a small extent	3 Agree to a moderate extent	4 Agree to a great extent	5 Agree to a very great extent
	(photographs, library, computers, screening of films, use of overhead projector, etc.)					
58	The mentor helped/advised me on coping with difficulties other than study-related ones arising during the course of my work					
59	The mentor advised me on preparation of study materials (lesson planning guides, work sheets, assignments, etc.) solicited for the students					
60	The mentor engaged me on the subject of the Bible and the observance of religious commandments					

#### **Part Three**

Circle the most suitable answer in each of the following questions. If your answer is "yes", add an explanation.

61. Did the mentor observe your lessons and give you feedback? Yes/no. How many lessons did he observe during the period of Novice Teachers internship?

62. Did you observe the mentor's lessons? Yes/no. How many lessons did you observe during the period of Novice Teachers internship?

63. Did you work with the mentor on development of reflective ability (personal contemplation of your actions in hindsight, factors influencing them, alternative strategies and creation of new actions to improve performance)? Yes/no. How many times did you work in this manner during the period of the mentoring processes?

64. How many times did the mentor provide you with constructive evaluation? a) once formally in mid-year; b) a number of times throughout the year (including once formally in mid-year); c) other \_\_\_\_\_

65. Did you conduct any role playing with the mentor in order to cope with difficulties or conflicts that had occurred in the classroom? Yes/no. How many times did you work in this manner during the period of Novice Teachers internship?

#### **Part Four**

Circle the most suitable answer in each of the following questions and fill in the blanks where necessary:

66. Gender: a) male; b) female

67. I work with the age group for which I was trained: Yes/no

68. I teach the subject for which I was trained: Yes/no

69. Teaching position: a) class teacher; b) subject teacher; c) special education teacher; d) kindergarten principal; e) substitute kindergarten principal (rotating on a permanent daily basis between different kindergartens); f) special education kindergarten teacher; g) other\_\_\_\_

70. Work sector: a) state educational system (Jewish); b) state educational system (Arab); c) state educational system (Bedouin); d) state religious educational system; e) ultraorthodox educational system; f) other:

71. Training framework: a) regular studies towards degree and teacher's certificate; b) academic retraining program; c) outstanding students for teaching program; d) top rated academics for teaching program; e) other:

72. Name of the college or university in which I studied:

73. Name of the college where I participated in the Novice Teachers internship workshop:

Thank you for your cooperation and good luck in your future endeavours!

#### Appendix 2. Detailed presentation of the questionnaire parts, components and structuring

The questionnaire was composed of four parts. Part (a) was used during ascertaining and control experiments. The others – during the formative experiment, to check the dynamic of novice teachers' professional identity development.

(a) **Professional identity-** The first part included 27 statements that measured the professional identity of the novice teachers. The subjects were asked to rate their agreement with the statements on a scale of 1 to 5, where 1 represented agreement to a very small extent and 5 was agreement to a very great extent. This part was taken verbatim from the questionnaire of S. Fisherman and I. Weiss [179], which was geared to measuring the professional identity of teachers, except for a change that was introduced in the order of the items. The questionnaire originally included 41 items, but when S. Fisherman and I. Weiss [179] performed a factor analysis, 14 loaded less than 0.4 and they were therefore eliminated from the final version. The factor analysis yielded the following four factors: (1) certainty in choice of profession; (2) self-efficacy; (3) sense of mission; (4) prestige attached to teaching [179].

Following is a breakdown of the components as they appeared in the questionnaire in the present research: certainty in choice of profession (items 1, 2, 5, 8, 10, 12, 13, 14, 15, 19, 22, 23, 24); self-efficacy (items 3, 6, 7, 9, 16, 17, 20); sense of mission (items 4, 11, 21); prestige attached to the teaching profession (items 25, 26). The reliability of the 27 items that measured professional identity according to the alpha Cronbach method, as found with S. Fisherman and I. Weiss [179], was  $\alpha = 92$ , indicating high novice teacheral consistency and homogeneity of the items. In a reliability test conducted for the entire first part in the present research a value of  $\alpha = 94$  was obtained, showing that the high reliability of the tool was maintained from the outset.

(b) The Mentor-Novice teacher Relationship - This part included two items relating to whether the novice teacher and the mentor work in the same subject and the same age group. Following this two open items were incorporated, in which the subjects were asked about the advantages and disadvantages of working with the mentor. In addition, 29 statements were presented that dealt with the relationship of the novice teachers with the mentors. The subjects were asked to rate the extent of their agreement with the statement on a scale of 1 to 5, with 1 being agreement to a very small extent and 5 being agreement to a very great extent. The statements were based on statements in a questionnaire that was prepared by Goldberg et al. [181], which examined the didactic, emotional and system-related content of the discussions between mentor and novice teacher in the framework of their weekly sessions. The questionnaire was originally intended for mentors whereas the present one was geared to novice teachers and the wording was changed accordingly. The reliability of the variable "general mentor support"

and that of its three components – emotional support, didactic support and systemic support – was tested separately. The following alpha Cronbach test results were obtained:

- Didactic support by mentors (items 32, 33, 38, 39, 42, 43, 44, 45, 57, 59; question 60 failed the reliability test)  $\alpha = 0.917$ .
- Systemic support by mentors (items 34, 35, 37, 40, 41, 51, 55)  $-\alpha = 0.889$ .
- Emotional support by mentors (including items 36, 46, 47, 48, 49, 50, 52, 53, 54, 56, 58) α = 0.94.
- In the reliability test of general mentor support  $\alpha = 0.965$ .

(c) **Five strategies in the mentoring process -** observation of the novice teacher's lessons and sending feedback to the novice teacher, demonstration of lessons by the mentor, development of a reflective ability on the part of the novice teacher by the mentor, provision of formative assessment, use of role playing as a means of coping with difficulties in the classroom.

(d) Background variables - background questions on descriptive variables: gender, whether the novice teacher works with the age group and subject for which he was trained, the novice teacher's teaching position, the sector in which he works, the training framework, the college/university in which he studied and the college/university in which he is participating in his Novice Teachers internship workshop. The background questions were presented as closed items, with the novice teacher being asked to choose the most suitable answer of the alternatives presented for each item. In items referring to the novice teacher's teaching position (no. 69), the sector in which he works (no. 70) and the training framework (no. 71), the subjects were given the opportunity to choose "other" as a possible answer and add text accordingly. Frary [62] claims that it is better to avoid use of the term "other" as a choice in a multiple choice question, because the subjects could be "careless" and avoid responding. This is true especially when room is reserved for answering the "other" option, when the answers are not always clear and cannot always be coded. Frary [62] states two exceptions: when the reference is to a very few, clear categories where the subjects could feel uncomfortable in the absence of a suitable choice; and when the researcher did not succeed in including all existing options. In the questionnaire that I distributed the "other" option was added in the fourth part, namely, as part of the background questions, because I wanted to be certain that there was no option that I did not think of.

#### Appendix 3. Request letter addressed to the novice teachers to fill the questionnaire

Dear Novice teacher,

Subject: Request for Your Participation in a Research Study Dealing with the Professional Identity of Teaching Novice teachers and their Relationship with their Mentors

The induction stage in the teaching profession is an extremely significant one in the process of integrating novice teachers into the educational system. I therefore believe that optimal pedagogic guidance and absorption could help them in moulding their professional identity, developing their commitment to the profession, and enhancing their feeling of success and their desire to continue working in the educational system.

Accordingly, as part of my studies towards a Ph.D. degree in education I have chosen a framework devoted to investigating self-identification on the part of novice teachers and their perception of the difficulties, to the extent that these exist, in joint work with their mentors.

Collection of data is planned to be carried out by means of a questionnaire to be completed by the novice teachers. Should you agree to participate in the research, I would appreciate your filling in the questionnaire online by clicking on the following link:

https://docs.google.com/forms/d/1be0Rlv2A7KbGyHC8Slkum7lcTFK6WNoAt4DouVB-SVY/viewform

I wish to emphasize that the information gathered through the questionnaire will be anonymous: the respondents will not be asked to enter any detail that could reveal their identify or that of their mentors.

In addition, in the framework of the research I would be interested in conducting an interview with the novice teachers in order to help me gain an in-depth understanding of the significance that they attribute to the mentoring process in which they are participating, and the impact that the process has on their perception both of self and the teaching profession. The interview will be recorded with the aid of a Dictaphone, and the interviewees will be requested at the outset not to mention any detail during the course of the interview that would serve to identify them or an officer in the educational system. If by accident or due to the context in which a statement is made an identifying detail about any of the above is recorded, the detail will be deleted immediately from the recording on conclusion of the interview.

If you are willing to be interviewed, I would appreciate your contacting me personally (Tel. 054-4934981), allowing us to fix a meeting at a place and time convenient to you.

It is clarified that all the data gathered by me (through the questionnaires and interviews) will be used solely for the purposes of the research and will be published in a manner that will not allow the research subjects to be identified.

Sincerely, Esther Fairstein Researcher

#### Appendix 4. Questions for semi-structured interview with novice teachers

- What were the factors that motivated you to choose the teaching profession?
- How do you view the job of teaching? In your opinion what prestige is attached to the profession? What are the reasons for this?
- Are you satisfied with your choice?
- What were the main difficulties you encountered on entering the educational system?
- Can you differentiate between pedagogic, emotional, systemic or other difficulties? If so explain them to me.
- What would you change in the process of induction into the educational system (in terms of the educational system itself)?
- Imagine yourself at present a tenured teacher in which aspects do you feel you have made significant progress throughout the present year? Did the mentor you worked with have any influence in your achieving this?
- Describe the mentor with whom you worked and tell me what you think of him.
- Describe your work procedures with the mentor.
- How in your opinion has the mentor impacted your feeling of competence?
- In your opinion did the mentor have any influence in shaping your perception of the system? If so, how do you think this is expressed?
- What in your opinion is the activity that has most affected or benefited you in your work with the mentor? Why?
- Did you work with the mentor on any of the following strategies: observation and feedback, observation of the mentor's lessons, reflective dialogue, role playing, other? Which strategies were more beneficial than the others? What is special about it?
- Which metaphor would you use to describe the role of the mentor in general, and his impact on you in particular?
- How significant in your opinion is the fact that the mentor specializes in the same subject as the one you work in, and why?
- How significant in your opinion is the fact that the mentor works with the same age group as you, and why?
- Novice teachers report that there is a problem in coordinating meetings with the mentor for reasons relating to timetable, high pressure, busy mentor schedules, etc. How in your opinion can the problem be overcome?
- It has recently been determined that mentors who are interested in having their position officially recognized as professional development must among other things participate in two symposium days. What in your opinion are the most important elements that should be addressed during these two days?
- What else would you like to say about the mentor, your work with him and your induction into the system? In general, what else comes to mind in this context?

#### Appendix 5. Questions for semi-structured interview with stakeholders

- What in your opinion are the factors that motivate young people at the start of their careers to choose the teaching profession?
- Based on your experience how do students who are being inducted into the system view the job of teaching? What prestige is attached to the profession?
- What in your opinion are the factors affecting the sense of satisfaction on the part of novice teachers with their choice of profession?
- How in your opinion can the role of the mentor, according to the form it has assumed in Israel, affect the novice teacher's competence?
- In your opinion does the mentor have an impact on shaping the novice teacher's perception of the system? If so, how in your opinion is this expressed?
- Which activity in the framework of the mentor's job in your opinion most impacts/benefits development of the novice teacher's professional identity? Why?
- Which metaphor would you use to describe the mentor's role in general, and his influence on the novice teacher's professional identity in particular?
- How significant in your opinion is the fact that the mentor specializes in the same subject as the novice teacher, and why?
- How significant in your opinion is the fact that the mentor works with the same age group as the novice teacher, and why?
- Do you see any disadvantages in an novice teacher working with a mentor? If so, what are they?
- Novice teachers report that there is a problem in coordinating meetings with the mentor for reasons relating to timetable, high pressure, busy mentor schedules, etc. How in your opinion can the problem be overcome?
- It has recently been determined that mentors who are interested in having their position officially recognized as professional development must among other things participate in two symposium days. What in your opinion are the most important elements that should be addressed during these two days, in terms of the contribution to the novice teacher's professional identity?

#### Appendix 6. Content Analysis – Expansion

In quantitative content analysis two processes are followed: firstly, the degree of response on the part of the subjects was calculated both in absolute numbers and in percentages (did the subjects answer both the questions and did they write the two points in each question as requested). Secondly, after the categories were defined a count was made of the number of times words appeared that related to each category. When many cases are involved a comparison can be made between them with the help of quantitative tools, and the frequency of appearance in each category can attest to the importance that is attributed to them by the subjects. In any event, it is important that these quantitative findings be described alongside the verbal responses of the subjects, and it is thus that the scope and depth of the phenomenon is obtained [216, p. 108]. Qualitative content analysis of the data, with the focus being on what the subjects say and not how they say it. For the purpose of the thematic analysis it is possible to distinguish between two sources of information: primary sources obtained from the subjects, i.e. the novice teachers, and from in-depth interviews with them; and secondary sources obtained from in-depth interviews with key persons involved in the process of novice teacher induction [216, p. 67].

Following collection and preliminary reading of the data, initial content analysis was carried out. At this stage the categories that were defined in the theoretical introduction were identified and a deductive procedure was conducted in which the defined categories representing the various subjects were tied in with the data, allowing arrangement of the bits of information according to their relevant characteristics [41, p. 61]. Following definition of the principal categories, sub-categories were coded, describing the phenomena examined in the research, and providing a rich and extensive description of the social reality. These sub-categories are in fact the characteristics of the main categories to which they belong. This stage is typified by a mapped data analysis, constituting a conceptual process with the help of which I tried to combine the categories that remained and find connections between them. Formation of the connections allows a distinction to be made between different levels of categories in accordance with their interrelationship as well as creation of a mapped data diagram during which the primary categories are liable to change due to new treatment of the data and the meanings arising from them [216, p. 100]. I described the categories and sub-categories and their interconnections with the help of a "tree" of categories [216, p. 106]. In parallel, the Findings chapter presents not only quotations stemming from the categories and the theoretical background, allowing the reader to understand the basis for the interpretation, but also diagrams showing the relationships between the categories and the concepts arising from the content [123, p. 503-504], [161]. This decision stemmed from the fact that "when we advance with

information aimed at its presentation, we choose the report concepts based on certain judgments and not randomly ... the researched phenomena are presented as a rich story, reflecting at the same time the manner in which we interpret the data from which the story is constructed" [216, p. 206]. The attention given to the gathering of data, selection of categories, coding of categories and interpretation of results from the qualitative content analysis support the quantitative findings and give them and the phenomena that they represent added validity [161].

Validity, reliability and objectivity are categories that are used to evaluate the quality of quantitative research [161], with "objectivity" assuming the meaning of correct, factual and true [216, p. 227]. On the other hand, Lincoln and Guba [97, p. 178] proposed the term "trustworthiness" as a criterion in qualitative research. This term is based on the following criteria: (1) credibility; (2) transferability; (3) dependability; and (4) conformability [97, p. 328], [161], [216, p. 229]. Trustworthiness in the present research is based on the careful attention given to the interviews and their meticulous transcription, content analysis, and provision of explanations based on a broad-based literature review. In addition, different explanations were examined for the findings up to the writing up of the conclusions, while the possibility of generalizing the research could be tested by a critical reading. In order to establish the credibility of the findings, a detailed description was written of the course of the research, the research tools and the bond that was formed with the subjects, as proposed by Shlasky and Alpert [218, p. 118].

## Appendix 7. Statistical Tables for Examining the Correlation Between Support Aspects and Professional Identity Components According to S. Fisherman and I. Weiss [179]

A Pearson correlation analysis was conducted in order to test hypothesis No 1.

Table A7. 1 presents the correlation between mentor support in the didactic domain and professional identity of novice teachers.

Table A7. 1 - Correlation between Mentor Support in the Didactic Domain and Professional Identity of Novice teachers

Indicators of professional identity Support element	Certainty in choice of profession	Self- efficacy	Sense of mission	Image of the teaching profession	Overall profession al identity
	R	R	R	R	R
Support in the didactic	0.32***	0.35***	0.26***	0.24***	0.38***
domain					
Legend: 0.001>S	ig***	$\pm 1 r \rightarrow 0$	•	•	

Table A7. 1 shows that a significant positive correlation exists between support by the mentor in the didactic domain and all professional identity indices, the strongest correlation being in self-efficacy and certainty in choice of profession.

A Pearson correlation analysis was conducted in order to test hypothesis No 2.

Table A7. 2 presents the correlation between mentor support in the system domain and the professional identity of novice teachers.

Table A7. 2 - Correlation between Mentor Support in the System Domain and Professional Identity of Novice teachers

Indicators of professional identity	Certainty in choice of profession	Self- efficacy	Sense of mission	Image of the teaching profession	Overall professional identity
support element	R	R	R	R	R
Support in the system	0.29***	0.35***	0.22***	0.17***	0.34***
domain					
Legend: 0.001>S	g***	$\pm 1 r \rightarrow 0$			

Table A7. 2 shows that a significant positive correlation exists between mentor support in the system domain and professional identity in novice teachers for all professional identity indices, the strongest relationship being in self-efficacy.

A Pearson correlation analysis was conducted in order to test hypothesis No 3.

Table A7. 3 presents the correlation between mentor support in the emotional domain and the professional identity of novice teachers.

Table A7. 3 - Correlation between Mentor Support in the Emotional Domain and Professional Identity of Novice teachers

Certainty in choice of profession	Self- efficacy	Sense of mission	Image of the teaching profession	Overall professional identity
R	R	R	R	R
0.36***	0.32***	0.29***	0.22***	0.40***
	in choice of profession R	in choice efficacy of profession R R	in choice efficacy mission of profession R R R	in choice ofefficacy ficacymissionthe teaching professionprofessionRRR

Legend:  $0.001 > \text{Sig}^{***} \pm 1 \text{ r} \rightarrow 0$ 

Table A7. 3 shows that a significant positive correlation exists between mentor support in the emotional domain and professional identity in novice teachers for all professional identity indices, the strongest correlation being in certainty in choice of profession.

A Pearson correlation analysis was conducted in order to test hypothesis No 4.

Table A7. 4 presents the correlation between overall mentor support and professional identity of novice teachers.

Table A7. 4 - Correlation between Overall Mentor Support and Professional Identity of Novice teachers

Indicators of professional identity	Certainty in choice	Self- efficacy	Sense of mission	Image of the	Overall professional
support element	of profession R	R	R	teaching profession R	identity R
Overall support	0.36***	0.37***	0.29***	0.24***	0.41***
Legend: 0.001>Sig***	±1 r →	0	•		<u>.                                    </u>

Table A7. 4 shows that a significant positive correlation exists between overall mentor support and professional identity in novice teachers for all professional identity indices, the strongest correlation being in self-efficacy and certainty in choice of profession.

#### Appendix 8. Statistical tables for tests between two independent groups

A 'T' test on independent groups was conducted in order to test hypothesis 5.

Table A8. 1 presents the correlation between the number of formative evaluations given by mentors to novice teachers and the professional identity of the novice teachers.

Table A8. 1 - Correlation between number of Formative Evaluations Given by mentors to Novice teachers and Professional Identity of the Novice teachers

Professional identity indicators		Mean	Standard deviation	Т	df	Sig
Certainty in choice	1	3.76	0.70			
of profession				-3.801	595	0.000
	2	3.98	0.69			
Self-efficacy	1	3.76	0.58			
				-4.697	595	0.000
	2	3.98	0.56			
Sense of mission	1	3.91	0.73			
				-3.154	595	0.002
	2	4.10	0.74			
Image of the	1	3.91	0.79			
teaching profession				-1.314	595	0.189
	2	3.99	0.79			
Overall professional	1	3.79	0.57			
identity				-4.431	595	0.000
	2	4.00	0.55			

Legend:

1 - One formal formative evaluation in mid-year (N = 53%)

2-3-5 formative evaluations during the course of the year (including one formal mid-year evaluation) (N = 47%)

Table A8. 1 shows that a significant difference exist in certainty in choice of profession, self-efficacy and sense of mission, with those who received a number of formative evaluations having a significantly higher professional identity as compared with those who received only one.

A T test on independent groups was conducted in order to test hypothesis 6.

Table A8. 2 presents differences in the professional identity of novice teachers whose mentors teach the same subject.

Table A8. 2 - Differences in Professional Identity of Novice teachers Whose Mentors Teach the Same Subject

Professional		Mean	Standard	t	df	Sig
identity indicators			deviation			
Certainty in choice	0	3.7179	0.76731			
of profession				-2.742	604	0.006
	1	3.9118	0.68484			
Self-efficacy	0	3.7339	0.63584			
				-2.963	604	0.003
	1	3.9076	0.56765			
Sense of mission	0	3.8952	0.81024			
				-1.764	604	0.078
	1	4.0266	0.72097			
Image of the	0	3.9194	0.85869			
teaching profession				-0.500	604	0.0617
	1	3.9595	0.78109			
Overall professional	0	3.7595	0.62891			
identity				-2.940	604	0.003
	1	3.9280	0.55273			

Legend:

 $0-\ensuremath{\mathsf{Mentors}}$  do not teach the same subject as the novice teachers

1 - Mentors teach the same subject as the novice teachers

Table A8. 2 shows that significant differences exist in certainty in choice of profession and self-efficacy when the mentor teaches the same subject as the novice teacher. It was found that both certainty in choice of profession and feeling of self-efficacy were significantly higher when the mentors taught the same subject. In contrast, significant differences were not found when the mentor and novice teacher taught different age groups.

#### Appendix 9. Formative Assessment for Novice teachers in School Teaching



### State of Israel Ministry of Eduation Teacher Training and Professional Development Administration Novice Teachers internship and Inudction Division

# Formative Assessment for Novice teachers in School Teaching

Based on Assessment Indices for Novice teacher Evaluation

To be filled in by the principal and mentor by 15 January

The formative assessment is given as a written summary of the performance dialogue held with the participation of the school principal, the mentor and the novice teacher with a view to providing the novice teacher with feedback on his work performance and guiding him in his future work.

The formative assessment will make reference to the assessment indices appearing in the new kit for novice teacher evaluation, the kit serving as a basis for dialogue and an indicator during preparation of the feedback. The last page presents the table of indices appearing in the evaluation kit.

The formative evaluation will be presented to the novice teacher on this form. A copy of it will be sent by the novice teacher to the Novice Teachers internship coordinator in the college or university. An additional copy will be kept in the novice teacher's personal file in the school.



Telephone numberAdditional telephone number (mobile)					
Trained for teaching specialization		Name of teac	cher training	institution	
Details of work du	Details of work during the Novice Teachers internship period				
Name of sch	ool	I	From (date)		To (date)
Name of school	Telephone nu	mber of		Symbol of	institution
principal	school				
Name of mentor	Telephone n	umber		I.D. nu	Imber
Name of mentor	(mobile)	unioci		1.D. IIU	IIIIOCI
		] No			
Email address of	Graduated mentor			If yes, where?	
mentor	training course				
		C	] Yes		
			No		
Subjects taught by	Percentage		The	C	lasses taught by
the novice teacher	position held during novice tea		cher is a	the nov	vice teacher
	Novice Teachers	class tea	acher		
	internship				

Mid-Year Feedback Based on Assessment Indices for Novice					ovice					
			te	eache	er Ev	valuatio	on			
	To	be complete	d by the prine	-			ed on perfo	rmance di	ialogue	with the
				no	ovice t	eacher				
	The	feedback is c	ompleted base	ed on						
		Principal's	observation	of	the	novice	teacher's	lessons	on	date(s)
		Mentor's	observation	of	the	novice	teacher's	lessons	on	date(s)
Dialogue with the novice teacher with reference to assessment indices for novice teacher evaluation (see table of indices at end) General impressions and reports received only						vice teacher				
Strong points in the novice teacher's work:										

Behaviours necessitating improvement in the novice teacher's work:

Evidence supporting the above (including specific examples from the novice teacher's work):

 Brief description of the novice teacher's absorption in the school:

# **Remarks:** Signed: Name of principal Signature Name of mentor Signature Name of novice teacher Signature Name of additional evaluator if any Signature

Date of performance dialogue



#### Appendix 10. Kit for Analysis of Observations

State of Israel Ministry of Education Office of the Deputy Director General

Assessment of Teaching and Administrative Staff

Kit for Analysis of Observations and Determination of Targets

Concrete Examples of Effective Teaching Behaviours for Advancement of Learning and Achievement

#### Area: Climate and Learning-Enabling Relations

Koy dimonsions	Concrete examples of effective educational and teaching behaviours
Key dimensions	for advancement of learning and achievement
Creation and maintenance of caring, close and supportive relations between teacher and students	<ul> <li>Interested in the welfare of the students and their feelings, and creates a personal bond with each one of them</li> <li>Relates to personal events in the students' lives, exhibits warmth, concern and interest</li> <li>Aware of the students' personal needs, conveys understanding and acceptance, provides support, encouragement and help</li> <li>Relates to all the students, even when they are not present, and sees to the establishment of contact with them</li> <li>Listens in a candid and focused manner to the students' statements and checks to see if their verbal and non-verbal messages have been understood</li> </ul>
Creation and maintenance of caring, sensitive and supportive relations between the students themselves	<ul> <li>Encourages and reinforces student behaviours attesting to attentiveness, interest, concern, and positive and mutually supportive relations</li> <li>Reminds the students, where necessary, of the rules governing relations, while emphasizing their connection with the understanding, caring and support needed for all</li> <li>Reminds the students, where necessary, of the rules of discourse, focusing on mutual attentiveness</li> <li>Brings the feelings and thoughts of others to the attention of the students</li> <li>Protects the students from obstructive reactions such as ridicule over errors, disparagement or hurt</li> <li>Restricts eruptive students by repetition of the rules in a positive manner</li> <li>Converses with the students on relations between them and supports them in continuing to cultivate them</li> <li>Initiates activities relating to the teaching of classmates, making reference to the framework of relations and behaviours</li> <li>Teaches collaborative behaviours while clarifying both the benefits and efforts involved</li> </ul>

#### Area: Familiar and Clear Routines and Support in Learning-Enabling Behaviour.

Key dimensions	Concrete examples of effective educational and teaching behaviours for advancement of learning and achievement
Creation of routines	• Support at the start of the lesson for students in the transition from outside the classroom to inside by repeating his/her expectation of the

through clarification of	students for a peaceful transition in a calm and positive manner
unough claimeanon of	
expected behaviours, and	• Makes sure that the lesson plan is clear and is known to the students
consistent maintenance of	• Supports transitions between one activity and the next by reminders and clarifications of behaviours expected of the students, and
these routines in order to	provides positive reinforcement to students acting according to agreed behaviour
inculcate them	• Explicitly reminds and clarifies behaviours relating to independent coping with assignments
	<ul> <li>Towards the end of the lesson, informs the students calmly that the lesson will end shortly, repeats the rules for ending a lesson, and reinforces students who act accordingly</li> </ul>
Guidance in student	• Clarifies to the students the importance of learning-enabling
behaviour for	behaviour and connects them with their ability to advance and gain achievements and results
advancement of their	• Supports students having organizational difficulties in order prevent
learning	them wasting time in searching for learning materials and tools. Provides positive encouragement to students who need this in order to start working
	• Identifies easily distracted behaviour and demands effort from students who tend to become lax
	• Responds calmly, level-headedly and assertively to undesirable
	behaviour, while clarifying expectations once again in a positive manner
	• Responds unequivocally to behaviours that are hurtful to others while repeating the rules and clarifying expectations

#### **Concrete examples of effective educational and teaching behaviours Key dimensions** for advancement of learning and achievement Creation of motivation for • Initiates student involvement in the lesson aims (What is our goal? What do we wish to know, and know to do in the context of the learning and mediation subject? Why is it important? How will it help us?) and involves the regarding the relevance of students in his/her considerations in deciding about the subject of the lesson and ways to learn it, while clarifying the value and benefits of the learned material for the learning students, while involving • Helps students connect the current lesson with the previous one • Asks questions and presents problems that stimulate and challenge the students in the aims curiosity and interest • Invites the students to phrase questions and problems as a springboard for learning • Invites the students to connect with the subject they are learning through concrete examples from real life, connecting the learned material to actual and relevant issues from their own lives Exposure of previous Withholds his/her knowledge in order to give the students an opportunity to think for themselves knowledge and current • Asks questions or initiates activities that encourage the students to thinking on the part of the express how they perceive the subject and how they think about it at this stage, calls on many students in order to allow the majority to students express themselves • Requests additional clarifications in order to better understand the students' thought processes and previous knowledge • Listens to the students' thoughts in an empathic and accepting manner and expresses regard and admiration for the way they think at this

#### Area: Development of Knowledge and Cultivation of Thinking

	Concrete examples of effective educational and teaching behaviours			
Key dimensions	for advancement of learning and achievement			
Initiation of practical, active experiences in accordance with the students' perceptions Mediation to support development of knowledge	<ul> <li>stage</li> <li>Initiates diverse experiences for the students with objects, articles, pictures, diagrams, etc., in order to evoke wonder and fresh thinking as regards their previous knowledge, and allow them to hypothesize and ask original questions where previous and new knowledge meet</li> <li>Designs together with the students learning experiences with materials in accordance with the hypotheses raised by the students and the questions they ask, amid organization of the resources required for this purpose</li> <li>Supports the students both emotionally and cognitively in coping with their thinking challenges</li> <li>Initiates dialogue between the students in order to expose them to different ways of thinking and make them examine their own thoughts</li> <li>Rephrases students' statements to enable them to repeat them, listen to themselves and reconsider their words, for the ultimate purpose of advancing understanding</li> <li>Asks questions that are intended to help the students reorganize their knowledge</li> <li>Conceptualizes the students' statements when they exhibit the first</li> </ul>			
Development of thinking in diverse ways according to the subject learned and the learning situation	<ul> <li>signs of understanding in the encounter between previous and current knowledge</li> <li>Asks open questions that challenge thinking</li> <li>Allows time for thinking and organizing responses</li> <li>Uses the language of thinking and encourages the students to do so too</li> <li>Encourages the students to apply thinking strategies such as: (a) ask questions; (b) take a stand, reason, justify, explain; (c) present knowledge in different ways; (d) plan and organize</li> </ul>			
Teaching of meta- cognitive strategies	<ul> <li>Asks questions that stimulate the students to think about the assignments and to think about thinking</li> <li>Invites the students to perform reflective thinking about their learning</li> </ul>			
Teaching of learning strategies	<ul> <li>Teaches central learning strategies explicitly while clarifying their value and benefits</li> <li>Demonstrates learning strategies and guides the students, while providing them with aids and means to assist them in applying these themselves</li> <li>Discusses learning strategies with the students and helps them verbalize them</li> <li>Helps the students to think ahead and view the steps necessary for execution, while guiding them on how to plan through recognition of steps, management of time, and monitoring of progress</li> </ul>			

# Area: Assessment and Feedback for Advancement of Learning

Key dimensions	Concrete examples of effective educational and teaching behaviours for advancement of learning and achievement
Provision of personal learning-enabling	• Provides specific information to the students relating to: (a) the performance level of the assignment; (b) their learning process,
icanning-chaoning	including reference to their previous performance, while avoiding comparison with others

Vou dimonsions	Concrete examples of effective educational and teaching behaviours
Key dimensions	for advancement of learning and achievement
feedback Mediation with respect to a feeling of self-efficacy and optimism	<ul> <li>Points initially to successes and achievements, expresses regard and appreciation of them, and emphasizes learning behaviours that led to them, dwelling only afterwards on aspects and procedures that are worth refining</li> <li>Helps the students to set clear, realistic and challenging targets for further learning</li> <li>Provides specific information to the students as well as explicit explanations of the learning processes that will help them to continue progressing</li> <li>Makes sure that the student has understood the feedback and can derive benefit from it in order to narrow the gap between the manner in which he conducts assignments at this stage and the improved manner in the future</li> <li>Encourages the students to invest efforts in dealing with the information given in the feedback</li> <li>Emphasizes in different ways faith in the ability of the students to succeed and incorporates in his/her statements messages that convey a belief in their ability to effectively use the feedback and continue to progress</li> <li>Points to successes that he/she identifies in them, and connects them with learning behaviours that motivated these successes</li> <li>Encourages and reinforces the faith they have in themselves and in their ability to improve their performance, make progress and gain achievements</li> <li>Reinforces an optimistic approach on the part of the students and supports them in taking active steps to seek positive solutions and</li> </ul>
Development of the	ways that will allow them to realize that which is possible
Development of the	• Teaches the students to analyze the factors responsible for success or failure, while emphasizing learning-enabling behaviours
capability of own	• Guides the students in analyzing the process and manner in which
feedback and feedback of	goals are achieved and examining the quality of the results
colleagues	• Allocates the students time and tools to correct mistakes and improve performance
	• Incorporates assessment of colleagues in the feedback and assessment
	process and allows the students to discuss with their classmates how to improve elements that call for improvement
## Appendix 11. Auxiliary kit for analysis of observations and delineation of targets ahead of performance feedback dialogue

Area	To what extent are the components	Behaviours observed during the lesson	Relevance to teacher
	manifested		assessment kit
Class climate and	• Creates caring, close and supportive		Nature of the teacher-
learning-enabling	relations between him/her and the students		student bond and routine
relations			of meetings
	• Creates caring, emotional and supportive		Student participation and
	relations between the students themselves		class interaction
Familiar routines and	• Creates routines by clarifying expected		Lesson management:
support of learning-	behaviours and maintains them consistently		structure, time use and
enabling behaviour	• Supports student behaviour that advances their learning		flexibility
Development of	• Creates motivation for learning, acts as		Activities to create
knowledge and	mediator in terms of the relevance of the learned material for the students and		involvement by the
cultivation of	involves them in the aims		students
thinking	• Initiates activities for exposure of previous knowledge and current thinking on the part of the students		Differential teaching
	• Initiates practical and active		Diverse teaching,
	experimentation in accordance with the students' perceptions		learning and assessment
	real real real real real real real real		methods
	• Acts as mediator in supporting		Activities geared to
	development of knowledge as well as dialogue for development of thinking		cultivation of high order
	• Teaches thinking and meta-cognitive strategies		thinking

Area	To what extent are the components	Behaviours observed during the lesson	Relevance to teacher
	manifested		assessment kit
	Teaches learning strategies		
Assessment and feedback for	• Provides personal feedback that advances learning		Provides learning- enabling feedback
improving learning	• Mediates feeling of self-efficacy and optimism		chaoling recuback
	• Develops ability for own feedback and feedback for colleagues		

Decision-making ahead of the performance feedback dialogue – selection of targets for reinforcement and targets for improvement

Key targets for commendation and reinforcement	Key targets for advancement and improvement			

## Appendix 12. Pedagogic dialogue through observation feedback

National Assessment and Evaluation Authority

Draft Observation – October 2010 Ministry of Education

Pedagogic Dialogue Through Observation and Feedback Support Kit

- 1. Discussion prior to observation of lesson
- 2. Documentation of the lesson
- 3. Feedback discussion following observation of the lesson
- 4. Conclusions from the pedagogic dialogue
- 5. Possible examples for documentation of the observations

#### 1. Discussion Prior to Observation

Great importance is attached to the preliminary discussion between the principal and the teacher prior to observation of the lesson. In this discussion the teacher will present to the principal the lesson plan and the auxiliary materials required for it. A number of basic questions are proposed for this preliminary discussion. At the same time, its scope can be broadened and adapted to the teacher and the specific observation.

- 1. Present a description and general characteristics of the class students while also referring to students with special needs, outstanding students, etc.
- 2. What are the aims of the lesson planned by you? What do you want the students to learn?
- 3. How does this lesson fit in with the broader study unit you planned? What did they learn earlier in the context of the lesson and what will they learn following it?
- 4. To what extent are the aims compatible with the needs of the students in the class as well as with the broader aims (subject, school perspectives, Ministry targets for the academic year, etc.)?
- 5. How do you plan to involve the students? What will be your place in the instructional process?
- 6. What is planned for the students to do? And how will they cope with the challenges and activities planned for the lesson (planning of assignments and time) (from the cognitive, meta-cognitive, physical, social, moral and other points of view).
- 7. What facilities, auxiliary materials (physical, technological, etc.) and instructionallearning methods are planned for the lesson? Are there additional materials that you recommend perusing prior to the lesson?
- 8. How do you intend to develop interactive contact between yourself and the students during the course of the lesson? And between the students themselves?
- 9. What responses, difficulties and successes do you expect the students to need to cope with during the lesson? How do you plan to evaluate the lesson and its aims? What activities, means and tools will you use? (teacher's evaluation, evaluation by the students, self-evaluation and evaluation by peers).
- 10. How do you plan to use the results of the evaluation obtained as a result of the process?
- 11. What else would you like me to know before the observation?

## 2. Observation of the Lesson

Name of the teacher:	Class:	Type:	_ Date of observation:/	/
First/second observation:		Subject and topic of the lesson:		
Placement of the lesson in the study un	nit:	Lesson location:	Number of students:	
•				

Evaluation index	Index components	Description	Rating	Rating skilled
Instructional	Lesson management and organization			ng sc ed lev
planning and	Lesson aims			Rating scale is skilled level (3, 4
organization				as follo 4), outst
Teaching, learning	Use of a variety of methods and means			follows: below bas outstanding level (5,
and evaluation	Differential work catering to			below ng leve
methods	dissimilarities in the students			v base el (5, 6
memous	Development of high order thinking			÷ _
	Use of feedback and evaluation during the			evel (0), base 1 master level (7)
	course of the lesson (on the personal,			), base level (
	group and class level)			se leve
	Incorporation of information and			el (1,
	communications technology (ICT)			, 2),

Evaluation index	Index components	Description	Rating	Rati (5, 6
Subject	Knowledge of subject			Rating scale as follows: (5, 6), master level (7)
	Familiarity with the curriculum			ale as 1ster l
	Use of professional language			s follo evel (
	Reference to typical problems			s:
Interrelations and	Encouragement of involvement and active			elow
class atmosphere	participation by the students			base lev
	Dynamic study interaction			el (0), ba
	Physical environment:			ase le
	Classroom appearance and organization			vel (1, ;
	Activity-oriented study environment			below base level (0), base level (1, 2), skilled level (3, 4), outstanding level
	Development of an atmosphere geared to			l leve
	study and active experiences			1 (3, 4
	Other			4), out
				stand
	Other			ing le
				vel

## **Overall evaluation:**

#### 3. Feedback Following the Observation

Feedback is part of the pedagogic dialogue that takes plan all the time between the teacher, the principal and other officers. Observation of lessons represents a milestone in this dialogue and its aim is to serve as a springboard for improving the quality of teaching and learning in a constructive way through dialogue.

It is important that the feedback discussion with the teacher take place after the principal has summed up for himself the observation of the lesson, taking into account the evidence gathered in the classroom. It is advisable that this meeting take place without the pressure of time but not too long after the observation.

Following are a number of basic questions that can be posed during the pedagogic dialogue held after the observation. At the same time, the scope can be broadened and adapted to the specific teacher and observation.

- In general, was the lesson a success? Did the students learn what you had intended to teach them? How would you know this? If not, do you know why? What do you think should be done in future?
- 2. To what extent were different students involved in the lesson?
- 3. Did you alter the original plan during the course of the lesson? What new goals cropped up and why?
- 4. What can be learned from the results of the students on their involvement and understanding?
- 5. Do you have any comments on the things that occurred in the classroom, students' behaviour, use of space? To what extent did these contribute to learning?
- 6. Do you have any comments on the instruction given activities, groups, materials and resources? How effective were these?
- 7. If you had the opportunity to give this lesson again to the same students, would you do things differently? Why?

## 4. Conclusions from the Pedagogic Dialogue

The dialogue between the principal and the teacher that took place following the feedback discussion over the observation leads to a number of conclusions that may be seen as actions to be taken in the future – for the teacher and at times for the principal as well.

Write down the conclusions you have reached together following the feedback discussion. These conclusions are especially important after the first observation.

Principal's conclusions

Evaluation index	Index components	Examples
Subject	Knowledge of the subject Familiarity with the curriculum Use of professional language Reference to common problems	<ul> <li>Expressing concepts, principles and processes that are related to instruction in the subject</li> <li>Expressing ways of thinking and inquiry that are suited to instruction in the subject</li> <li>Applying the content of instruction, learning and evaluation to advance understanding and intensify thinking</li> <li>Encouraging diverse ways of presentation and open learning situations to express a variety of viewpoints</li> <li>Adapting the content to the peculiarities of the students and their needs</li> </ul>
Planning and organization of instruction	Lesson management and organization: Aims of the lesson	<ul> <li>The aims of the lesson are clear and are reflected in the lesson. Adequate time is devoted to the different parts of the lesson</li> <li>The lesson is focused in terms of its goals and their</li> </ul>
instruction	Lesson management	<ul> <li>achievement, while giving due attention to the students' needs</li> <li>The learning aims reflect high expectations</li> <li>The aims of the lesson are at times broadened or receive a different emphasis during the course of dialogue with the students</li> </ul>
Teaching,	Diverse methods and	• Diversification and adaptation to the aims of the lesson
learning and	means	and the students' needs; the teacher acts responsively and varies the methods in accordance with lesson
evaluation	Differential approach	<ul><li>development</li><li>Attention to differences in the students' abilities and</li></ul>
methods		<ul> <li>needs in order to elicit maximum utilization of their potential, with reference to one or more of the following elements:</li> <li>Teaching and learning time</li> <li>Materials and facilities (including technological)</li> <li>Teaching methods</li> <li>Learning tasks</li> <li>Learning frameworks (independent, collaborative)</li> <li>Choice</li> </ul>
	High order thinking	<ul> <li>Encouraging searching, hypothesizing, investigating and demanding</li> <li>Using open questions; allocating time for thinking and organizing responses; encouraging questioning by the students; using mistakes for more in-depth inquiry; eliciting comparisons, generalizations and conceptualizations; using the language of thought: reason, proof, assumption; using thought organizers, encouraging critical thinking and processes of thinking about thinking (meta-cognition); encouraging creativity; connectivity to previous knowledge</li> <li>Allowing the students time to plan and organize their thoughts and encouraging them not to arrive at hasty solutions, thus conveying the message that thinking is a process that requires time</li> </ul>
	Information and communications technology (ICT)	<ul> <li>For example, extensive use of information sources in websites, using rich media amid extensive mobilization of the students. Using opportunities for investigative learning. Using diverse data banks on the novice teacheret and in libraries. Using virtual worlds and laboratories to check assumptions. Using communication</li> </ul>

# 5. Possible Examples for Documenting the Observation

Evaluation index	Index components	Examples
	Index components         Feedback and         evaluation         Encouraging active         involvement and         participation by the         students         Dynamic study         interaction         Physical environment         Classroom appearance         and organization         Mobilizing study         environment	Examples         for the purpose of collaboration with peers and experts throughout the world         Providing feedback and evaluation to advance learning, e.g. explaining the error or deficiency in the student's response, the merits in the student's response, task-orientation rather than student-orientation, conveying care and concern and adaptation to the student's needs         Devoting time and tools for the students to correct their mistakes, improve their performance and rewrite work         Cultivating reflective skills in the students         Incorporating elements of self-evaluation and/or peer evaluation on the part of the students in the learning process         Teacher-student relations. Creation of communication between the teacher and the students and the students simply answer the questions and respond to the teacher's guidance; the teacher asks questions and the students answer in most cases in a few words or sentences, and in most cases answer correctly, i.e. their answers are acceptable and confirmed as correct by the teacher study communication between the students takes place only with the teacher's mediation         Student-teacher relations. The students exchange ideas and conduct a discussion among themselves, with or without the teacher's help         Multidirectional relations between all the individuals in the classroom depending on the needs of the task at hand         The space in the classroom reflects the subjects under study. The appearance and organization of the classroom are updated according to the activity plan         Teacher-student relations between all the individuals in the classroom is neat and clean
		<ul> <li>stimuli, enhancing the student's involvement</li> <li>The means displayed in the environment in which the teacher operates assist in learning and in active involvement by the student</li> </ul>
	Development of an atmosphere that is study-oriented and encourages active experience	<ul> <li>Clear behavioural norms exist: listening, patience, tolerance, manners, appearance and dress</li> <li>The time boundaries of the lesson are observed</li> <li>Disturbances, conflicts and oppositions are treated matter-of-factly and efficiently, while maintaining an attitude of respect</li> <li>The teacher is calm and restrained, even during moments of crisis and frustration</li> <li>The teachers are tuned to the differences existing between the students</li> </ul>

Evaluation index	Index components	Examples
		• The lesson is conducted in a pleasant, relaxed and collaborative atmosphere
		• Relations between the teacher and the students are warm and respectful
		• There is a high level of social cohesion in the class, combining concern and care alongside an ability to advance aims, action plans and feedback
		• The teacher shows an awareness of and sensitivity to the emotional needs that arise during the course of the lesson

#### Appendix 13. Questionnaire of the intervention

Kaye Academic College of Education Growth Resources in the First Year of Teaching

Dear School and Kindergarten Teachers,

The aim of this questionnaire is to find out what teachers feel on the start of their careers in teaching, what shapes their outlook and perceptions during the year following Novice Teachers internship, and what motives them. To this end, we would appreciate your help in filling in this questionnaire.

Please answer all the questions in the questionnaire. There are no "correct" or "incorrect" answers, but rather only those that are most appropriate to you. We intend to send you an identical questionnaire at the end of the school year and therefore request you to write your ID number in order to allow us to tie in the two questionnaires. We assure you that we will keep all your answers confidential. Please note that the questions are at times phrased negatively.

The questionnaire is intended for both school and kindergarten teachers.

Background informati	on:			
Serial number				
Male Fe	emale	_Age		
Subject taught				
Educational framewo	ork in which you	work: regular	special	
kindergarten pr	imary school n	niddle school	_high school	
Academic institution i	n which you studied			
Bedouin sector	Jewish sector	place of r	residence	
Religion – Jewish	Muslim	Christian	Other	

#### Part One

Following are statements referring to thoughts and feelings that you may have in connection with teaching or work in kindergarten. Please circle the answer most appropriate to you. Pay attention to the phrasing of the question (whether positive or negative).

Kindergarten teachers - the word "teaching" also refers to your work as kindergarten teachers

	Agree to a very great extent	Agree to a great extent	Agree to a small extent	Agree to a very small extent	Do not agree
1) I feel that my choice of the teaching					
profession gives me a lot of					
satisfaction					
2) When I decide to accomplish a					
difficult task relating to teaching I am					
up to it					
3) I feel that teaching allows me to					
realize my capabilities					
4) I can succeed in various tasks					
relating to teaching if I decide to carry					
them out					
5) I feel I really want to be a teacher					
6) I am satisfied with my decision to					
study teaching					
7) At times I feel that even if I make					
an effort I will not be a great success					
as a teacher 8) Teaching is a profession that suits					
my capabilities					
9) I feel my professional identity as a					
teacher continues to take shape in the					
course of my work					
10) I regard teaching as a mission					
11) I have good teaching skills					
12)Teaching allows me to contribute to					
society					
13) I am proud to be a teacher					
14) I can meet the needs of my					
students or children well					
15) Teaching will allow me to impart					
values to children or youths					
16) Teaching will allow me to promote					
the aspirations of youths or children					
living under conditions of distress					
17) I have the traits or qualities of a					
good teacher					
18) Before I chose teaching I was not					
sure in which profession I would want					
to be engaged					
19) Teaching interests me					

## Part Two

Following are possible reasons for investing efforts in the teaching profession. Next to each reason indicate the one that is most appropriate to you.

\*\*\*\*\*

When I invest efforts in teaching (planning, participating in meetings, devoting time for personal talks with students or parents, diversifying teaching methods, conducting different activities in the classroom or school assignments, etc.) it is because ...

	Agree to a very great extent	Agree to a great extent	Agree to a small extent	Agree to a very small extent	Do not agree
20) I will devote time to personal talks					
with the students because it is important					
for the parents to feel that I know their					
children well					
21) I will diversify my teaching methods					
because I feel that it is a shame that there					
are teachers who do not invest efforts					
22) I will try my utmost to find new					
teaching methods and interesting subjects					
for learning because it is important for me					
to be up to date with teaching innovations					
23) I will invest efforts in teaching because					
education and teaching are key issues in					
my life					
24) I will hold personal discussions with					
the students because it is always possible					
that way to learn about what is happening					
in the class					
25) I will invest efforts in teaching because					
I will be able in this way to learn and					
develop in new directions					
26) I will invest efforts in teaching to					
prevent the principal from supervising my					
work too closely					
27) I will invest efforts in teaching because					
I am sure that I will enjoy finding unique					
solutions for children with special needs					
28) I will invest efforts in teaching because					
it is important for me to give the children					
the feeling that I care about them					
29) I will invest efforts in teaching because					
that way I can better realize my primary					
goals as a teacher					
30) I will invest efforts in teaching so as to					

	Agree to a very great extent	Agree to a great extent	Agree to a small extent	Agree to a very small extent	Do not agree
prevent disturbances during the lessons					
31) I will invest efforts in teaching because					
working in education is an especially					
important component in my identity as a					
teacher					
32) I will invest efforts in teaching because					
it is part of my obligations as a					
schoolteacher					
33) I will invest efforts in teaching because					
the attempt at reaching out each and every					
child is a central component in the					
professional identity I have formed					
34) I will invest efforts in teaching because					
it is important for me to feel that I am					
helping people					
35) I will devote time to personal talks					
with the students because I enjoy being in					
contact with children/ youths					
36) I will invest efforts in teaching because					
one of the most important things in my					
eyes is reaching out each and every child					
37) I will invest efforts in teaching because					
I enjoy my work as a teacher					
38) I will invest efforts in teaching in order					
to apply the professional concepts I have					
formed					
39) I will invest efforts in teaching because					
that way I will be able to achieve better					
results as a teacher					
40) I will invest efforts in teaching because					
I enjoy establishing a bond with people					
41) I will invest efforts in teaching because					
it is a process that brings me a lot of					
satisfaction					
42) I will invest efforts in my work					
because a serious attitude to each lesson is					
one of the most important principles for me					
as a teacher					
43) I will try my utmost to find new					7
teaching methods because independent					
creation of something new is always fun					

#### STATEMENT

I, the undersigned, declare on my own responsibility that the materials presented in the present doctoral thesis are the result of my own researches and scientific achievements. I confirm this fact; otherwise, I will bear the consequences in accordance with the law in force.

Sincerely,

NO

Fairstein Esther

20.05.2016

#### **Curriculum Vitae**

#### **Esther Fairstein**

Date of birth:	07.01.1965
Place of birth:	Israel
<b>Citizenship</b> :	Israel
Address:	Anafa 3a, Mazkeret Batia, Israel, 7680400
Mobile:	+972- 544-934981
E-mail:	estishm@gmail.com

#### Studies:

- 2007 M.A Organizational Behavior, Polytechnic University, New-York
- 2000 MED Management in Education, The University of Derby, England
- 1996 BED degree for Elementary School, Levinsky College, Israel
- 1987 Senior Teacher for Elementary School, Levinsky College, Israel

#### Novice Teachers internships:

- 2015 Novice Teachers internship coordinator professional development (1), Mofet Institute
- 2015 Professional development for supervision (2), Ministry of Education
- 2014 Novice Teachers internship coordinator professional development (3), Mofet Institute
- 2014 Professional development for supervision (2), Ministry of Education
- 2013 District counselor and coordinator workshop (2), Ministry of Education
- 2013 Novice Teachers internship coordinator professional development (2), Mofet Institute
- 2014 Professional development for supervision (1), Ministry of Education
- 2012 Novice Teachers internship coordinator professional development (1), Mofet Institute
- 2012 District counselor and coordinator workshop (1), Ministry of Education
- 2012 Novice Teachers internship workshop guidance, Mofet Institute
- 2011 Instruction qualifications, Ministry of Education
- 2011 County leaders in mathematics instruction, Ministry of Education
- 2011 Computer integration in teaching mathematics, Ministry of Education
- 2010 Mathematic guides, Ministry of Education
- 2010 Evaluation in mathematics, Ministry of Education
- 2010 Mathematic guides, Ministry of Education
- 2009 Mathematic guides, Ministry of Education
- 2009 Instruction coordinators national
- 2009 Instruction qualifications, Ministry of Education.
- 2008 Instruction qualifications, Ministry of Education
- 2008 Intensification of Mathematic guides, Weizmann Institute
- 2008 Mathematic guides, national, Ministry of Education
- 2007 Leading Mathematic guides, CET (The Center for Educational Technology)
- 2000 2006 Mathematics' Education
- 2000 Geometry, Ministry of Education
- 1995 Computer coordinators, Ministry of Education
- 1993 Computers basic, De Anza College, California
- Areas of scientific interest: Induction and entering the teaching profession

Professional activity: Ministry of education and Kay College

#### Work experience

### 2012 - Now Kay College, Beer Sheva

- Head of unique programs at the college
- Work with new teachers' mentors and responsible for the connection with the field.
- 2011 Now Ministry of Education, Jerusalem
  - Head of the area of optimal absorption

	- Coordinates training and job placement of the unique programs.
	- Responsible for the program of job placement of teacher with disabilities
	<ul> <li>National Guide in the specialization and entering to teaching department</li> <li>Responsible on novice teachers' assessment</li> </ul>
	- Coordinates the activity of the DCC (District Coordinates and Consular)
	- Coordinates the forum induction's coordinators from the colleges and
	university
2009-2012	"Pisga" (Center of Professional Development of teachers), Rehovot
	- Head of Mathematic section
2010	Ministry of Education, Beer Sheva, South County
	- Elementary school mathematic guide
	- Coordinator of Professional Development for managers and mentors
	- Regional guide for Novice Teachers internship
2007	Ministry of Education, Beer Sheva, South County
	- Guide of "Projects and Entrepreneurship"
1996-1997	The Center for Educational Technology (CET), Tel-Aviv
	- Responsible for "excellence" projects in several schools involving pupils
	with excellent mathematical skills and their teachers
1994-2001	Ministry of Education, Center County
	- 4 <sup>th</sup> to 6 <sup>th</sup> grades teacher in "Ben- Zvi" elementary school, Kiryat Ekron
	- Mathematics coordinator
	- Computer coordinator
1997	Ministry of Education, Center County
	- Deputy Director of "Ben- Zvi" school, Kiryat Ekron
	- Computer guide in 5 schools
1990-1994	Stay in California, U.S.A (husbands' job)
1987-1990	Ministry of Education, Center County
	- 4 <sup>th</sup> grade teacher in "Tarbut" school, Rison Lezion
	- 6 <sup>th</sup> grade teacher in "Vitkin" school, Rison Lezion
-	- 1 <sup>st</sup> grade teacher in "Bery" school, Rison Lezion
Participation	in scientific forums: Forum of the induction's coordinators from all the

colleges and university in Israel; "Growth Resources" - Kaye Experimental Induction Unit.

Scientific works published: Nine articles have been published in Moldova and Israel.

Languages: Hebrew and English