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A CASE STUDY OF STUDIA UNIVERSITATIS BABEȘ-BOLYAI PSYCHOLOGIA-PAEDAGOGIA JOURNAL

IOANA DRUGAȘ*

ABSTRACT. The fields of Psychology and Pedagogy in Romanian literature represent an infant domain when compared to foreign literature. *Studia Universitatis Babeș-Bolyai Psychologia-Paedagogia* is a well-registered journal (8 international data bases and 53 other international catalogues), and has reached a long history from the first edition (1958), being 56 years old (www.studia.ubbcluj.ro). It is a scientific and academic journal, and it is published twice a year, in June and December. The mission of *Studia Universitatis Babeș-Bolyai*, the official publication of the Babeș-Bolyai" University, is to publish new scientific contributions in all fields of sciences. We observed that almost 40% of the articles were dedicated to the improvement of the educational process. *Studia UBB Psych.-Paed. Journal* provides a lot of researches which present different programs or interventions designed to improve the educational process and school performance of the students. We consider that *Studia UBB Psych.-Paed. Journal* is giving an important contribution to the Romanian literature in the fields of Psychology and Educational sciences.

Key words: *Studia Universitatis Babeș-Bolyai Psychologia-Paedagogia, Psychology, Pedagogy, Education field*

ZUSAMMENFASSUNG. Die Bereiche Psychologie und Pädagogik repräsentieren in der rumänischen Literatur einen blutjungen Domain, im Vergleich zur ausländischen Literatur. *Studia Universitatis Babeș-Bolyai Psychologia-Paedagogia* ist eine gut eingetragene Fachzeitschrift (8 internationale Datenbanken und 53 weiteren internationalen Katalogen), hat eine lange Geschichte seit der ersten Auflage (1958) erreicht und ist 56 Jahre alt (www.studia.ubbcluj.ro). Es ist eine wissenschaftliche und akademische Zeitschrift und es wird zweimal im Jahr veröffentlicht, im Juni und Dezember. Der Auftrag von *Studia Universitatis Babeș-Bolyai*, das die offizielle Publikation der "Babeș-Bolyai" Universität ist, ist es, neue wissenschaftliche Beiträge aus allen Bereichen der Wissenschaften zu veröffentlichen. Wir haben bemerkt, dass fast 45% den Artikeln zur

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Verbesserung des Bildungsprozesses gewidmet waren. Die Zeitschrift *Studia UBB Psych.-Paed.* bietet eine Vielzahl von Forschungen an, die verschiedene Programme oder Interventionen darstellen. Diese sind entwickelt, um den Bildungsprozess und die schulischen Leistungen der Schüler zu verbessern. Wir sind der Meinung, dass *Studia UBB Psych.-Paed. Zeitschrift* einen wichtigen Beitrag zu der rumänischen Literatur in den Bereichen Psychologie und Erziehungswissenschaften eingibt.

Stichwörter: *Studia Universitatis Babeş-Bolyai Psychologia-Paedagogia, Psychologie, Pädagogik, Bildung Feld*

Introduction

The Romanian journals in Psychological and Educational domain represent a small part in the international databases. On July 30, 2013, *Journal Citation Reports* presented the list of all the Romanian Journals registered in *Science Citation Index Expanded* (SCI-EXPANDED), *Social Sciences Citation Index* (SSCI), or *Arts and Humanities Citation Index* (AHCI), and the list included 60 titles (<http://uefiscdi.gov.ro>). 47 of them were from the Sciences domain, 10 were from the Social Sciences domain and only 8 journals represented Arts and Humanities. 2 journals had a citation index both in Social Sciences and Arts and Humanities. Regarding the journals registered in Arts and Humanities, 4 were included in the Philosophy subfield and 2 in the Religion subfield. Making an analysis of Social Sciences, we established that 3 journals were about Social work, Sociology and Political sciences. 3 journals were representing the Economics subdomain, and one journal regarded the Psychological subfield. Not a single Romanian journal that was presented in the Journal Citation Report did target the Pedagogical subfield.

Even if the Journal Citation Reports didn't include a journal in the Pedagogical domain, it doesn't mean that Romanian literature doesn't have an academic research activity in this field. We would like to present in this paper the *Studia Universitatis Babeş-Bolyai Psychologia-Paedagogia Journal* (*Studia UBB Psych.-Paed. Journal*), because its history and international visibility drew our attention.

Studia UBB Psych.-Paed. Journal is a Romanian publication of the Faculty of Psychology and Educational Sciences from Babeş-Bolyai University (Cluj-Napoca, Romania). It publishes the academic and scientific studies of the Romanian and foreign specialists in various fields of Psychology and Educational sciences. The journal aim is to disseminate the results of scientific investigations with a practical-applicative and experimental character, but also theoretical

studies. Combining theory and practice represents an important approach in Educational sciences. Thagard (1992, p. 225) defined a theory as a "coherent collection of hypotheses, which serve to explain a broad range of empirical generalization and facts" and the practice approach represent "a general collection of experimental methods and exploratory styles". Dewey (1904) presented the practice work as an instrument in making real and vital theoretical instruction. The practices of research and standards of evidence utilized within a field such as educational and social sciences may be quite different from those employed within the instructional technologies (Koschmann, 1996).

The *Studia UBB Psych.-Paed. Journal* is dedicated to two fields (Psychology and Pedagogy), and we would like to define what Psychology means and what Pedagogy or Educational sciences represents. American Psychological Association defines Psychology as being the study of the mind and behavior, and this discipline embraces all aspects of human experience: from the functions of the brain to the actions of the nations, from child development to care for the aged (www.apa.org). Even if Pedagogy is not easily defined, we present two complex and comprehensive definitions: Watkins and Mortimer (1999, p. 3) defined Pedagogy as "any conscious activity by one person designed to enhance the learning of another" and Alexander (2003) defined Pedagogy as the act of teaching together with its attendant discourse; it is what one needs to know, and the skills one needs to command in order to make and justify the many different kinds of decisions of which teaching is constitutes.

Because we decided to present a journal dedicated to two fields (Psychology and Pedagogy) we would like to underline the importance of interdisciplinarity. The interdisciplinarity concept is rooted in the ideas of unit and synthesis, evoking a common epistemology of convergence (Klein, 1990). In many articles Psychology and Pedagogy are "working" together (Petrovsky, 1974; Willis, 2007; Zuccherro, 2008; Mohamad et al, 2012; Craft & Masterman, 2013) to present new conclusions, new approaches in literature review. Educators, researchers, and practitioners who provide the interdisciplinarity as a well-funded approach work to answer to complex questions, to explore disciplinary and professional relations, to solve problems that are beyond the scope of only one discipline, and to achieve unity of knowledge, whether on a limited or grand scale. After the next presentation we will see that these objectives can be identified in *Studia UBB Psych.-Paed. Journal*.

In this review, the 25 journal articles published in June and December 2013 issues of *Studia UBB Psych.-Paed. Journal* will be classified based on the subject matter and main objective of the article. Finally, the last section will provide our conclusions.

History of Studia Universitatis Babeș-Bolyai - Psychologia-Paedagogia Journal

The *Studia UBB Psych.-Paed. Journal* first edition appeared in 1958 and its main objective was to publish the results of the scientific activities of Babeș-Bolyai University teaching staff (www.studia.ubbcluj.ro). The editorial activity of this periodical publication was run by The National University Research Council and by The Senate Specialized Commissions. The *Studia UBB Psych.-Paed. Journal* is a publication of Faculty of Psychology and Educational Sciences and its current aim is to disseminate the results of scientific investigations with a practical-applicative and experimental character, but also theoretical studies and analysis.

The Faculty of Psychology and Educational Sciences, in its current structure, was born in 1997. Psychology being closed between 1977-1990, the Department of Psychology, Special Education and Pedagogy has functioned, from 1963 to 1997, as components of the Faculty of History and Philosophy, considering the fact that between 1977-1990 the Psychology was forbidden. Between 1958 and 2013, *Studia UBB Psych.-Paed. Journal* was published under three titles and ISSN numbers (www.studia.ubbcluj.ro): (1) "Studia Universitatis Babeș-Bolyai. Series III. Philosophiy et Oeconomica, Jurisprudentia, Psychologia, Paedagogia" (1958-1961; ISSN: 1220-0409); (2) "Studia Universitatis Babeș-Bolyai. Series Psychologia-Paedagogia (1962-1974, ISSN: 12200468); and (3) "Studia Universitatis Babeș-Bolyai Psychologia-Paedagogia" (1975 until now, ISSN 1221-8111).

Today, *Studia UBB Psych.-Paed. Journal* is a semesterly publication (June and December), and it is indexed in the databases worldwide. The journal aims to promote a high level of academic research on innovative subjects and emergent topics in psychology and educational sciences (www.studia.ubbcluj.ro). In this journal are invited to subscribe specialists from all levels of education, students, practitioners, PhD students and academics, who can improve with their researches, analysis and contribution, the field of psychology and education sciences.

Journal's objectives and editorial board

Studia UBB Psych.-Paed. Journal is classified by the Romanian National Council of Scientific Research of Higher Education (CNCSIS) in the B+ Category. The main objectives of the journal are: to include the journal in the prestigious international databases; to distribute the publication abroad on contract of subscription orders; to increase the number of articles written by foreign authors; to develop the visibility of the electronic versions on the internet; and to increase the quality of graphics of the printed publications (www.studia.ubbcluj.ro).

The editorial board is coordinated by Prof. Vasile Chiș, Ph.D. - editor-in-chief, and Associate prof. Maria Anca, Ph.D. - executive editor. The members of the editorial board are 8 professors and one assistant professor, from Romania and other countries. In addition to Babeș-Bolyai University, the editorial board includes members from the University of Birmingham (UK), the University of Sofia (Bulgaria), and The Hobart and William Smith Colleges (Geneva, USA).

The publication is funded through faculties' extra budgetary resources and sponsorship. Copies of the printed version are sent to the universities libraries and research centers worldwide. *Studia UBB Psych.-Paed. Journal* is registered in 8 international data bases, for example: ProQuest CSA-IBSS (2004); Fachportal Pädagogik (2006); ProQuest Serials Solutions (2007); EBSCO (2009) and CEEOL (2010). The journal is registered in 53 other international catalogues (for example: Worldcat.org; E-Journals Columbia University Libraries; MOBIUS Libraries; Digital Bibliothek; British Union Catalog etc.) Each issue can be consulted on-line on journal's web site (http://studia.ubbcluj.ro/arhiva/arhiva_en.php), being presented the abstract of any article, and the list of the contents of all issues published since 1999. The articles can be purchased online through the Central and Eastern Online Library Germany (C.E.E.O.L.)

Journal articles by theme

The last two issues of *Studia UBB Psych.-Paed.* included 28 journal articles which are listed in Table 1.

Table 1.

The 28 articles published in the *Studia UBB Psych.-Paed.* from June to December 2013

Issue	Article Title	Author(s)
June	1. Strengths and difficulties of native and non-native speaking English teachers: Perspectives from the English language classroom in Israel	Karvonen E. & Chiș V.
	2. A new educational program for improving posture and quality of life among students	Gil I. & Bocoș M.
	3. Development of the self-assessment capacity and its influences upon high-school students' school performances	Stan Cr.
	4. A comprehensive analysis of the views of Turkish teachers on the process of intercultural education	Altun S.
	5. Effectiveness of group counseling based on although approach on elderly depression	Salehi F.
	6. Improving the quality of life of the full edentulous patient application of the prosthesis	Buhățel D., Bodea Hațegan C., Ilea A., Moga M., Ionel A., Talvan E. & Câmpian R.S.

Issue	Article Title	Author(s)
	7. Psychological facial paralysis in children. A pilot study	Ilea A., Andreica B., Sava A. & Trombiţaş E.V.
	8. Identification of students with talent in the technical domains	Ionica-Ona A.
	9. An Inquiry into the ecological opinions and attitudes adopted by managers and employees hired in the industrial sector	Olteanu C.M.
	10. Experimental data on the choice of the theme for bachelor's thesis by students	Manea D.A. & Stan Co.
	11. Disable children school inclusion in mass preschools	Băiescu A.
	12. Verbal comprehension - lexically and grammatically mediated	Bodea Haţegan C.
	13. Second language vocabulary acquisition in children; A developmental perspective	Dolea D.D.
	14. The particularities of applying the methods of written evaluation to the teaching activity. Observational study	Jucan D.
	15. Applications of the teaching film in academic learning, for practical skills training	Stan Co.
	16. Using computer technologies in the resource room	Talaş D.A.
December	17. Testing a Mindfulness-based program on a non-clinical sample of Romanian children: The effects on the levels of internalizing, externalizing and attention-related problems	Natanga A.C. & Rusu A.S.
	18. Psycho-pedagogical intervention structured on components specific to reading and writing activities	Grec C.D. & Chiş O.
	19. Development of tactile strategies and use of tactile resources in emergent literacy at children with visual impairment	Hathazi A. & Bujor M.
	20. The relation between the developmental level of communication skills and the display of challenging behaviors in children with ASD	Crişan C.
	21. Writing proficiency in transparent orthographies: When do Romanian children start to spell correctly?	Dolean D.D. & Andronache D.
	22. The influence of career education on professional success	Stan Co.
	23. Academic policies and strategies to support students with talent in technical domains	Ionica-Ona A.
	24. Modern and traditional pedagogical perspectives in the Mureş Press of the XXth century	Precup A.
	25. Multi- and intercultural education- Dimensions of contemporary education	Cristea N & Maxim A.N.

Table 2 organizes these 25 articles published in the June to December 2013 into 3 fields: Psychology, Pedagogy and Special Education. We added the third field (Special Education) in addition to Psychology and Pedagogy because we saw a possible important frequency of articles dedicated to speech therapy and children with disabilities.

Table 2.

Themes contained in *Studia UBB Psych.-Paed.* articles from June to December 2013

Fields	References	# of journal articles	% of Total
Psychology	• Stan Cr. (2013)	7	
	• Salehi F. (2013)		
	• Ilea A., Andreica B., Sava A. & Trombițaș E.V. (2013)	- 5 articles in June issues;	
	• Olteanu C.M. (2013)	- 2 articles in December issue.	28
	• Dolea D.D. (2013)		
	• Natanga A.C. & Rusu A.S. (2013)		
	• Stan Co. (2013)		
Pedagogy	• Karvonen E. & Chiș V. (2013)	_____	
	• Gil I. & Bocoș M. (2013)	_____	
	• Altun S. (2013)	11	
	• Ionica-Ona A. (2013)	_____	
	• Manea D.A. & Stan Co. (2013)	- 8 articles in June issue;	
	• Jucan D. (2013)	_____	
	• Stan Co. (2013)	- 3 articles in December issue.	44
	• Talaș D.A. (2013)	_____	
	• Ionica-Ona A. (2013)	_____	
	• Precup A. (2013)	_____	
• Cristea N. & Maxim A.N. (2013)	_____		
Special Education	• Buhățel D., BodeaHațegan C., Ilea A., Moga M., Ionel A., Talvan E. & Câmpian R.S. (2013)	7	
	• Băiescu A. (2013)	- 3 articles in June issue;	
	• Bodea Hațegan C. (2013)	- 4 articles in December issue	28
	• Grec C.D. & Chiș O. (2013)		
	• Hathazi A. & Bujor M. (2013)		
	• Dolean D.D. & Andronache D. (2013)		
	• Crișan C. (2013)		

Taking an overview of table 2 we can conclude that pedagogical domain represents almost 50% (44%) of the articles published between June and December 2013, and Psychology (28%) and Special Education (28%) are equally represented in these two issues. But, taking a closer look to the December issue, we can see that the balance is changed. In this issue, 44% (#4) of articles are from the field of Special Education, and Pedagogy (33%) is on the second place.

Journal articles by main objectives in education

Each journal aims to provide fine articles, tending for registrations in prestigious international data bases. For that, the editorial board and reviewers must be very careful when they accept an article. For journals edited in Pedagogy, they must be grounded in contemporary literature. The educational sciences promote quality pedagogy through teacher education, improving the education, equity and diversity (Ladson-Billings, 1995; Olson & Bruner, 1996). The next paragraphs analyze these four objectives and Table 3 presents *Studia UBB Psych.-Paed* through these aims.

1. Teachers' education

Teachers' education plays a relevant role in preparing students for life. For a proper process of students' learning, teachers must adapt to all the changes or challenges imposed by society and culture (Solhaug, 2013). The success of the programs not only depends on the effective planning, material support and financing, but depends on the adult education teacher (Reddy & Devi, 2012). Teachers' background and training represent the basic lines for their performance. Editing journals, where the researchers can present their studies, represent an important support for teachers' training and professional preparation. Journals can aid teachers' training on two ways: the articles can provide news for teachers (about different programs and interventions) or can offer information about teachers (where they are subjects for research).

2. Improving education

To benefit an improved education, the innovations must be infused (Reddy & Devi, 2012). Another means to improve education are represented by providing professional program to upgrade the educators' qualification (Ngidi et al, 2010) or improving teachers' education through inquiry-based learning (Orlieb & Lu, 2011). Libraries should be the second class for students, and they have an extremely important position and function in quality education (Yang, 2011). These strategies are extracted from a great number of researches in the field of educational sciences. In general, a growing social pressure on addressing the issues of improving the quality in administration of education has resulted in various national and international initiatives (Hrnčiar & Madzik, 2013). *Studia UBB Psych.-Paed*. Journal can represent such an initiative, in our opinion.

3. *Equity in education*

In the last two decades, the researches in educational sciences have indicated that more is required to improve school efficiency through equity (Prieto-Flores & Cruz, 2010). To improve school efficiency and equity it is important to look not only at the variations in students' performance caused by changes in different educational inputs, but also to pay special attention to changes in school organization and to the culture that places students' performance at the core of the school project. Table 3 presents if *Studia UBB Psych.-Paed.* journal includes this theme in its topic.

4. *Diversity in education*

Addressing the increasing diversity and ever-changing cultures within student populations is often skimmed over within teachers' education curriculums (Orlieb & Lu, 2011). Often teachers are criticized for dumping-down their instruction, failing to lead students to become critical, creative, and curious thinkers. That's why Freire (1993) said that it is important to know and chase the society requirements and to develop an especially flexible, critical spirit when the society begins to transit from one epoch to another (as cited in Orlieb & Lu, 2011).

Table 3.

Educational objectives in *Studia UBB Psych.-Paed.* Articles from June to December 2013

	Objective	# of journal articles	% of Total
1.	<i>Teachers' education</i>	4	16
2.	<i>Improving education</i>	10	40
3.	<i>Equity in education</i>	5	20
4.	<i>Diversity in education</i>	2	8

Articles included in *teachers' education* category refer to programs for teachers, and the main objective is to provide information about teachers' activity and how they can improve their performance in their job. Article proposed by Karvonen and Chiş (2013) is one study dedicated to this category. This research

record and analyze the experience of thirty novice teachers, teaching English as a foreign language. The conclusions emphasize why the native speaking English teachers' apparent advantage might also prove to cause specific difficulties.

The most often category/theme (40%) encountered in *Studia UBB Psych.-Paed.* journal is *improving education*. This category includes articles which provide different studies where the main objective is to present different strategies and techniques which want to develop education and students' leaning process. In this area, article proposed by Gil and Bocoş (2013) analyze an educational program for improving posture and quality of life among students. The research is developed on the Israeli students, and exam the correlation between correct posture and educating for correct posture, and quality of life. This article provides important values and principle for improving education and quality of life. The authors consider that there is a correlation between posture, or health in general, and quality of life. Another interesting article in the improving education category is proposed by Dolean and Andronache (2013). The results of the research, which involve four hundred and forty four Romanian students, indicate that overall, there were no significant differences in spelling performance of students after 3rd grade. They also suggest that learning the phoneme-grapheme correspondence of regular words reaches ceiling within the 1st year of instruction (97% proficiency).

Equity in education is represented in this journal through articles dedicated to special interventions for children with disabilities (ASD, ADHD and others). For this area, an interesting article is provided by Grec and Chiş (2013). The research investigates the efficacy of the psycho-pedagogical intervention program which wants to develop the organizational skills of students with attention deficit hyperactivity disorder who have reading and writing difficulties. In the context of mainstream school, the teachers' experience and knowledge represent an important element in the teaching-learning process of students with this disorder. The authors propose with this article efficient psycho-pedagogical intervention techniques, which can be implemented by the classroom teacher on the ADHD children, without disturbing students' educational program.

From 100% of articles, only 8% (#2) are representing the diversity in education. These articles are about multi-and intercultural education and the process of intercultural education. One of these two articles analyzes multi- and intercultural education-dimensions of contemporary education (Cristea & Maxim, 2013). The authors emphasize that due to today's tendencies towers globalization, mondialisation and internationalization, the educational system is faced with a great number of challenges. They consider that the intercultural education represents not only one if the major challenges of the contemporary educational system, but also a possible solution for the prevention of the major future national or international crises.

The main objectives in education can be clearly seen in the illustrated articles. We emphasize that in a continuing reformation of the Romanian educational system, the high percentage (40%) of the article in the *improving education* category is reasoned.

Conclusions and discussions

The mission of *Studia Universitatis Babeș-Bolyai*, the official publication of the Babeș-Bolyai University, is to publish new scientific contributions in all fields of sciences (www.studia.ubbcluj.ro). The Faculty of Psychology and Educational Sciences aims (through *Studia UBB Psych.-Paed.* journal) to disseminate the results of scientific investigations with a practical-applicative and experimental character, but also theoretical studies.

We analyzed the content of two issues of *Studia UBB Psych.-Paed.* journal, from June to December 2013. In our review we analyzed 25 articles, presenting the general objectives of the journal, the themes identified in last two issues and if these articles correspond with the main objectives in education. We established that the field of Pedagogy is most frequent in the articles' theme (44%), regarding last two issues of the *Studia UBB Psych.-Paed.* journal. If we analyze each issue separate, we can observe that the field of Special Education is leading in the December 2013 issue. According to this data, we can conclude that is safer for the editorial board to construct the journal around two or more fields, because in this case one issue can be edited. Having a journal dedicated only to Psychology or to Pedagogy can jeopardize the periodicity publication of one issue, lacking articles or authors interest to publish.

We remember that the main objectives of the *Studia UBB Psych.-Paed.* journal are: to include the journal in the prestigious international databases; to distribute the publication abroad on contract of subscription orders; to increase the number of articles written by foreign authors; to develop the visibility of the electronic versions on the internet; and to increase the quality of graphics of the printed publications (www.studia.ubbcluj.ro). Regarding foreign authors, we emphasize that in 2013 *Studia UBB Psych.-Paed.* journal enrolled only three foreign authors (two from Turkey, and one from Israel), two articles were written by two independent authors, and one article in collaboration with a foreign author. In December, not a single article was written by a foreign author. We think that this objective was underachieved and to increase the number of articles written by foreign authors, the editorial board must make more efforts to disseminate the journal and consolidate the connections with the 53 international catalogues.

In another analysis, we observed that almost 40% of the articles were dedicated to the improvement of the educational process. *Studia UBB Psych.-Paed. Journal* provides a lot of researches which present different programs or interventions designed to improve the educational process and school performance of the students. We consider that *Studia UBB Psych.-Paed. Journal* is giving an important contribution to the Romanian literature in the fields of Psychology and Educational sciences.

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THE RELATION BETWEEN STRESS AND ANGER MANAGEMENT IN PEOPLE WITH HYPERCHOLESTEROLEMIA

SEVER MUREȘAN*

ABSTRACT. An individual's relationship with the exterior is considered to be a generating source of positive and negative emotions. Anger as a negative emotion implies the existence of a triggering factor. Stress is a cause of the onset of negative emotions with implications in numerous psychosomatic disorders. The study shows that in case of people suffering from hypercholesterolemia, interpersonal relationships, the environment, professional activity, time management, lifestyle and self-harm, as sources and areas of stress manifestation, are strongly related to anger as a state and as a trait, which implies that the lack of privacy in the psychological space, feelings of personal failure, culpability, disappointments, inability of work and time management, imbalance between activity and rest generate subjective experiences of anger, or as a disposition of perceiving situations as irritating and acting accordingly.

Keywords: *stress, cholesterol, anger.*

ZUSAMMENFASSUNG. Die Beziehung Zwischen Stress und Wut-management in Menschen mit Hypercholesterinämie. Eines Individuums Beziehung mit der Umwelt gilt als eine Generierungsquelle für positive und negative Gefühle. Ärger als ein negatives Gefühl impliziert die Existenz eines Auslösefaktor. Stress ist eine Ursache für das Auftreten von negativen Gefühle, mit Auswirkungen in zahlreichen psychosomatischen Störungen. Die vorliegende Studie zeigt, dass bei Menschen die an Hypercholesterinämie leiden, zwischenmenschliche Beziehungen, die Umwelt, Berufstätigkeit, Zeitmanagement, Lebensstil und Selbstverletzung als Quellen und Bereiche von Manifestationen von Stress sind stark mit Ärger als Zustand und als Eigenschaft verwandt. Das bedeutet, dass der Mangel an Privatsphäre in dem psychologischen Raum, die Gefühle des persönlichen Versagens, Schuld, Enttäuschungen, Unfähigkeit der Arbeits- und Zeitmanagement, und Unausgewogenheit zwischen Aktivität und Erholung generieren subjektiven Erfahrungen der Wut oder eine Disposition die Situationen als irritierend wahrzunehmen und entsprechend zu handeln.

Stichwörter: *Stress, Cholesterin, Ärger*

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Introduction

Theoretical Framework

An English word at its origins, stress refers to a situation regarding the imbalance of organism homeostasis under the action of physical, chemical, biological or psychological factors. It occurs primarily in the psychological sphere because of the significance it holds to the person, its effect targeting the psychophysiological unit of the person; it is essentially psychosomatic (Sîrbu, 1979).

In another acceptation, by stress one understands the interactive configuration between organism and environment, a relation in which the organism is over solicited, exceeding its reaction supplies, with the risk of exhausting them. (Cornuțiu, 2003).

A current synthetic definition of “general stress” is given by A. Von Eiff as being a “psychophysical reaction of the organism, generated by stressors which act on the pathway of the sense organs of the brain, thereby generating – because of the cortical-limbic connections and the hypothalamus – a whole chain of neurovegetative and endocrine reactions, with an impact over the entire organism.” (Iamandescu, 1999 p41).

Regarding psychological stress, it represents a particular case of stress, being triggered by psychological agents. These can have a negative significance (distress) or a positive one (eustress) and operate in the conscience plane only after their decoding and after the evaluation of the “task” they set for the individual. (Iamandescu, 1997). Intrapsychological stressors refer to the conflicts between motivations, intrapsychological conflicts etc. As M. Gelder (cited by Cornuțiu 2003) observed, the reaction to stress implies a psychological response, such as loss of interest, tension, fatigue; in case of organic stress, the responses are mainly somatic (vegetative, endocrine, metabolic), and in the psychological stress the responses are dominated by the psychological system (affection, anxiety, tension etc.) Cornuțiu 2003).

The existence of somatic reactions to emotions is a known fact and, from this point of view, especially the ones who exteriorize their feelings less are more susceptible towards producing responses at alarming heights in the neurovegetative and endocrine fields.

There are numerous disorders with psychosomatic implications: for example in case of cardiovascular disorders, the strict correlation between anxiety and fury on one hand, and the heart activity on the other hand, is well known. Experiencing anger can be understood in the sense of a state as a subjective feeling which varies in intensity, from irritability to intense fury, and in the sense of a subjective trait as a disposition to perceive situations as annoying and to respond to these with a more frequent expression of anger. Anger is a very

intense emotion because of the impact it has on the social interactions, but also because of the effects it produces on the individual. It is a secondary emotion, which has other emotions at its basis, such as fear, humiliation and rejection. It can also be seen as a defense mechanism against painful emotions; it can be associated with failure, low self-esteem and anxiety. So far, the reason for which this kind of emotion in some cases manifests itself as tachycardia, while in others as arrhythmia or symptoms of neurocirculatory fatigue, is unknown. Cardiac patients comply strictly to the social norms, apparently being sociable and open, but at the same time displaying anxiety combined with rigidity in behavior (Luban-Plozza et al, 1996). Regarding the specificity of the emotional factors, it can be said that chronic generalized anxiety and the repressed hostile impulses are important factors in such disorders.

In the essential hypertension, the majority of the studies underline the fact that the repressed hostile tendencies play a very important role in this phenomenon; according to Cannon's observations, anger and fear create an increase of the arterial pressure in the experimental animal. It was shown that the chronically repressed hostile impulses which always associate with anxiety have a significant impact on the blood pressure values (Alexander, 2008).

The individual that has become excessively inhibited under the influence of its early experiences will discover that it is much more difficult for him to manage his aggressive impulses in his adult life. Also, Richard Schekelle (1980) confirms after some research that hostility constitutes a cause for some diseases. Psychological characteristics like depression, fury, hostility or anxiety influence the metabolic syndrome by acting on some physiological pathways, especially the HPA (Hypothalamic-pituitary-adrenal) axis. (Goldbacher, et al 2007).

Repressed aggressiveness, alongside narcissism and childishness are characteristic for patients suffering from irritable bowel syndrome (Freyberger, 1969 cited by Luban-Plozza et al). In the emotional diarrhea, the personality is marked by the fear of authority and the feeling of dependency, and in the patients suffering from spasmophilia the instability and emotiveness and also an unrestrained aggressiveness were highlighted (Mihăescu, 1996).

When it comes to the ties between stress and the high level of blood cholesterol there are numerous studies which demonstrate them. Adrenaline and cortisol, hormones that make their presence known especially during stress, favor the production of cholesterol. This is an organic alcohol identified in the cellular membrane and in the tissues of the organism and is transported by blood. It is absorbed through alimentation; it is concentrated in the liver, the marrow and the brain, having an important role in the organism, many processes having it as a precursor. Under general recommendations it must be under the value of 200 mg/dl.

Hostility is a toxic emotion which, in time, raises the adrenalin level, which in its turn raises the cholesterol and creates a permanent state of agitation, says David Beales, a specialist in behavioral medicine. These people abuse food and smoking more often and their schedule usually doesn't involve physical exercises. They react faster and more powerful to stress, both mentally and physiologically. Consequently, they are prone to being overweight and to having a higher level of cholesterol. Also, some researchers issued the hypothesis that low levels of cholesterol due to medication are associated with a negative emotional state, which can then manifest as hostility (Muller et al, 1995 apud Wilson et al, 2001). Golomb et al. (1997) in their study approach the same issue, underlining the fact that in case of cholesterol reducing medication out of the statin class there can be severe irritability manifestations (such as murderous impulses, destruction of property, threats). Concretely, studies have shown that people with high levels of cholesterol are more hostile than those with low levels. Personality traits such as hostility or impulsiveness are the ones most connected to the metabolic syndrome in general (Sutin et al, 2010).

Research Methodology

Participants

The research lot was formed out of 83 Romanians, out of which 49 women and 34 men. Their age ranged between 22 and 77 years, with a median of 51 years. The cholesterol value was established through laboratory analysis.

Instruments and Work Procedure

The participants received in paper-pencil format an instrument batch containing two questionnaires, one for evaluating anger and one for the investigation of the global intensity of stress. The participants were told they could fill out the questionnaires either on the spot or at home.

To evaluate anger as a state and as a trait, the psychometric scale STAXI-2 (Spielberger, 1998) was used, being the most used instrument on a world scale in anger management. It is an objective instrument, targeting the situational states of anger, personality traits that predispose the exteriorization of anger, the internal experience of stress, the expression and control of the anger.

The stress evaluation was realized with the Stress Level Questionnaire developed by Abraham (1985); an instrument which evaluates the global intensity of stress depending on 6 factors which constitute its sources and areas of manifestation (ambiance A, PE self-harm, interpersonal relationships RI, professional activity AP, time management AT, lifestyle RV). The questionnaire comprises 84 questions with the following answer options: „never”, „rarely”, „often”, and “always”.

The internal consistency of the utilized scales varied between 74-94 (excellent) at subscales which evaluate anger and anger management, and between 73-96 (excellent) at subscales which evaluate the level of stress depending on the 6 factors.

Results and Discussions

To process the statistical data in this research the statistically specialized soft SPSS (Statistical Package for the Social Sciences) version 17.0, and also the correlation coefficient r -Pearson to measure the intensity of the ties between variables.

Between the ambiance subscale (A) and anger as a state, in people with hypercholesterolemia, there was a highly significant correlation $r=.419$ at a significance level of $p=.000$ ($<0,05$), and between the same subscale and anger as a trait there was a highly significant correlation $r=.557$ at a significance level of $p=.000$ ($<0,05$). The highly significant, positive correlation between the variables indicate a direct proportional relation between them, therefore an ambiance without intimacy, inside which the person suffering from hypercholesterolemia doesn't feel relaxation and peace (so it is a stress generator) and is associated with a high level of anger as a trait and as a state.

Between the subscale of self-harm (PE) and anger as a state a highly significant correlation $r=.325$ at a significance level of $p=.004$ ($<0,05$) was obtained, and between the same PE subscale and anger as a trait there was a highly significant correlation of $r=.432$ at a significance level of $p=.000$ ($<0,05$). This indicates a direct proportional relation between them. The more acute the sentiments of guilt and fear are, the more is anger as a state and trait more obvious.

Between the subscale of interpersonal relationships (RI) and anger as a state a highly significant correlation $r=.323$ at a significance level of $p=.004$ ($<0,05$) was obtained, and between the same RI subscale and anger as a trait there was a highly significant correlation of $r=.395$ at a significance level of $p=.000$ ($<0,05$). The highly significant, positive correlations indicate a direct proportional relation between these variables. Consequently, a high level of stress in people suffering from hypercholesterolemia given by financial problems, faulty relationships etc. is associated with a high level of anger as a state and trait.

Between the professional activity subscale (AP) and anger as a state there was a highly significant correlation $r=.232$ at a significance level of $p=.045$ ($<0,05$), and between the same subscale and anger as a trait there was a highly significant correlation $r=.245$ at a significance level of $p=.033$ ($<0,05$). There is therefore a significant and positive correlation, which implies that the stress caused by the incapacity of organizing work, the impossibility of turning down additional tasks, is associated with a high level of anger as a state and trait.

Between the time management subscale (AT) and anger as a trait there was a highly significant correlation $r=.505$ at a significance level of $p=.000$ ($<0,05$). This indicates a direct proportional relation between them, therefore in case of people suffering from hypercholesterolemia, a high level of stress due to lack of time planning, task overload etc. Determines a high level of anger as a trait. Between the same subscale and anger as a state there was a significant correlation $r=.278$ at a significance level of $p=.014$ ($<0,05$). This indicates in case of patients suffering from hypercholesterolemia that stress due to lack of time planning determines a high level of anger as a state.

Between the lifestyle subscale (RV) and anger as a trait there was a highly significant correlation $r=.322$ at a significance level of $p=.004$ ($<0,05$), which shows the existence of a direct proportional relation between the two variables. Therefore the higher the stress caused by the imbalance between activity and rest, the more evident anger as a trait becomes. . Between the same subscale and anger expression and control subscales there was a highly significant correlation $r=.350$ at a significance level of $p=.002$ ($<0,05$). In cases of people suffering from hypercholesterolemia, the higher the stress levels due to lifestyle are, the more pronounced the tendency of anger expression control is.

Between the global level of stress and anger as a state there was a moderate correlation $r=.347$ at a significance level of $p=.005$ ($<0,05$), and also between the global level of stress and anger as a trait there was a highly significant correlation $r=.517$ at a significance level of $p=.000$ ($<0,05$). As a consequence, in people suffering from hypercholesterolemia, the more emphasized the global stress level is, the more is anger as a trait and state more pronounced.

In cases of people with hypercholesterolemia between the ambiance subscale (A) and the self-harm subscale (PE) a highly significant correlation $r=.716$ at a significance level of $p=.000$ ($<0,05$). Therefore, the feelings of depreciation, guilt, anxiety or personal failure are more pronounced when there is a lack of privacy, peace, and quiet in the psychological space.

Also, the ambiance subscale (A) is highly significant correlated $r=.688$ at a significance level of $p=.000$ ($<0,05$) with the interpersonal relationships subscale (RI). So, the same lack of privacy in the personal space perceived at a high intensity can create difficulties in the interactions with others and with oneself, feelings of guilty and disappointment.

The professional activity subscale (AP) is highly significant correlated $r=.597$ at a significance level of $p=.000$ ($<0,05$) with the ambiance subscale (A), which indicates a strong and direct proportionate relation between them. Therefore, in people suffering from hypercholesterolemia the more intense the work related stress is, the more emphasized the feeling of lack of privacy and relaxation is.

The same subscale (AP) is highly significant correlated $r=.660$ at a significance level of $p=.000$ ($<0,05$) with the self-harm subscale (PE) in people with high levels of cholesterol, meaning that the work related stress is directly proportionate with the feelings of guilt, anxiety, fear or personal failure.

The professional activity subscale (PE) is also highly significant correlated $r=.678$ at a significance level of $p=.000$ ($<0,05$) with the interpersonal relationships subscale (RI), highlighting a direct proportionate relation between stress related from work activities and difficulties regarding professional or personal relationships.

Between the time management subscale (AT) and the ambiance subscale there is a highly significant correlation $r=.648$ at a significance level of $p=.000$ ($<0,05$). This shows that in cases of people suffering from hypercholesterolemia a direct proportionate relation between the two variables. The lack of time management and the voluntary task overload determine the enhancement of the feelings of lack of privacy, of peace and relaxation and of comfort. The same subscale (AT) is also highly significant correlated $r=.648$ at a significance level of $p=.000$ ($0,05$) with the self-harm subscale (PE). Therefore, an increase in the stress levels determined by lack of time administration capacities will cause emphasized feelings of anxiety, guilt and personal failure.

The time management subscale (AT) is also highly significant correlated $r=.660$ at a significance level of $p=.000$ ($<0,05$) with the interpersonal relationships subscale (RI). In cases of patients suffering from hypercholesterolemia, the lifestyle subscale (RV) is highly significant correlated $r=.576$ at a significance level of $p=.000$ ($<0,05$) with the ambiance subscale (A), which signify a direct proportionate relation between the two variables.

Also, between the same subscale (RV) and the self-harm subscale (PE) there was a highly significant correlation $r=.496$ at a significance level of $p=.000$ ($<0,05$). This signifies a direct proportionate relation between the two variables; a high stress level due to lifestyle is associated with heightened feelings of personal failure or with avoidant and submissive conduct.

The lifestyle subscale (RV) is also highly significant correlated $r=.547$ at a significance level of $p=.000$ ($<0,05$) with the interpersonal relationships subscale (RI) in cases of people with hypercholesterolemia. Therefore, the more intense the stress due to lifestyle is, the more intensely will the interpersonal relationships be marked by feelings of guilt, disappointment etc.

The global stress level in patients suffering from hypercholesterolemia is highly significant correlated $r=.799$ at a significance level of $p=.000$ ($<0,05$) with the ambiance subscale (A), but also with the self-harm subscale (PE) ($r=.864$, $p=.000$ ($<0,05$)) and with the interpersonal relationships subscale (RI) ($r=.862$, $p=.000$ ($<0,05$)). Thus, the higher the global stress level in people with hypercholesterolemia is, the more heightened the feelings of lack of privacy, of relaxation, experiences of personal failure and disappointment in relationships are.

Conclusions and Practical Implications

Stress and anger as a state and as a trait are associated by the fact that people with hypercholesterolemia have a tendency to manifest this negative emotion, either because of the ambiance, interpersonal relationships etc., or because of the correlations between these factors. The relation between an individual and the environment has always been associated with a higher or lower level of stress. This stress can be generated by the lack of intimacy of the psychological space, by personal failure experiences, by blame and disappointment in the interpersonal relationships, by the incapability of managing activities or time, or because of the imbalance between activity and rest. In conclusion, for people suffering from hypercholesterolemia the lack of intimacy and relaxation, the experiences of personal failure and disappointment in relationships determine a heightening of stress, favoring a more pronounced manifestation of anger as a state and as a trait.

Anger is an alarm signal which helps one understand that an inner need is not satisfied. Anger management can protect you from some problems in the personal and professional life, stress related disorders and also from some psychosomatic diseases (ulcer, diabetes, heart diseases). On this line, psychotherapy of anger implies the identification of the feelings which we are confronting when we are angry, the healing of emotional wounds and solving yet unsolved issues from the past.

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ORGANISATIONAL CLIMATE CHARACTERISTICS OF PROSPECTIVE OFFICERS' INITIAL TRAINING ORGANISATION CONCLUSIONS OF A RESEARCH STUDY

CRISTINA PIELMUŞ*

ABSTRACT. This study presents the conclusions of a broader research initiative carried out over a period of three years, between 2008 and 2011. The larger research study focused on making an interpretive analysis of the organisational culture as a determinant of school climate with a view to identify those factors that affect the teaching staff's degree of satisfaction and the students' level of academic achievement in the organizations for the initial training of prospective police officers. The research stage, which is the object of the present study, aims at identifying those features that characterize the climate of the educational organisations in charge of the initial training of prospective officers. Moreover, the study attempts to demonstrate the climate's potential influence on the teachers' job satisfaction and the students' academic performance.

Keywords: *school climate, professional satisfaction, academic achievement, prospective officers' initial training organizations*

ZUSAMMENFASSUNG. Die vorliegende Studie präsentiert die Schlussfolgerungen einer weiteren Forschungsetappe, die sich in der Zeitspanne 2008-2011 entfaltet hat. Diese Studie hat sich auf die interpretative Analyse der Organisationskultur im Schulumfeld aus der Perspektive einer Erfüllungsoptimierung und aus dem Fortbildungsniveau deren Mitglieder in den Ausbildungsfachschulen für die Offizierkarriere gerichtet. Durch diese Forschungsetappe, die den Zweck dieser Arbeit bildet, versuche ich jene Merkmale des Schulumfeldes für die Ausbildung der nächsten Offiziere zu identifizieren. Die Studie kann noch mehr beweisen, dass all diese Kennzeichen der Ausbildungsinstitution ein Einflussfaktor auf die berufliche Erfüllung der Lehrkräfte und auch auf die akademischen Leistungsfähigkeiten der Studenten ist.

Schlüsselwörter: *Schulumfeld, professionelle Erfüllung der Lehrkräfte, die akademischen Leistungsfähigkeiten der Studenten, die Ausbildungsfachschulen für die Offizierkarriere*

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1. Literature review

1.1. Conceptualization of school climate

Climate is a major variable of the educational organization. It is the school's collective personality (Norton, 1984) or that atmosphere which characterizes school's life (Halpin & Croft, 1963) impacting the nature of the inter-human relationships, as well as the quality of the teaching process. The literature shows that the quality of the organizational climate affects the "health" of the school (J.H. Friedberg, 1999), having effects on the staff's motivation and commitment, as well as on the teachers' job satisfaction and the students' academic achievement.

The interest for the study of the educational organization has generated in the speciality literature rather subjective views on school climate.

Climate is closely linked to the organisation's human resource and represents, in fact, the psychological and social atmosphere of the school. "Climate manifests through the nature of the psychological and social relations within school by means of the sort of authority employed, the degree of motivation and mobilization of human resources, the satisfaction or dissatisfaction and the level of cohesion of the school's community" (E. Păun, 1999).

More often than not the concept of climate is associated with that of "school ethos". Nevertheless, climate represents the collective perceptions of the organization's members, both teachers and students, on the school environment and the type of relations acceptable within school, whereas ethos designates the teachers and students' commitment to the school they belong to. However, the one-to-one dependence relation between school climate and ethos cannot be denied. This means that a positive climate is the guarantee of the school members' commitment to their organization and a high degree of the staff's commitment to school can generate a qualitative climate.

One of the pioneer research study on the educational organization was the one done by Halpin (1963), who believed that the concept of climate is equivalent with school's personality, which reflects the social interactions between school head masters and teachers, but also between teachers themselves. It is worth adding to these kinds of interactions those that take place between teachers and students, as the latter category are an important component of the school life, and quality of the teacher-student relation has significant effects on the school climate.

School climate differentiates depending on the inner characteristics of each school, being a set of inner features that distinguish a school from another and influences each member's behaviour (Hoy & Miskel, 1987). Moreover, according to the same authors, climate is the final product of the school's social groups – students, teachers, administrators – who work together to maintain the organizational equilibrium (Hoy & Miskel, 1987).

A similar reasoning is represented by belongs to Hoy, Tarter and Kottkamp's theory (1991) on school climate, which is defined as the relatively stable quality of school's atmosphere, which is shared by all members, influences their behaviours and is derived from their collective perception.

Another view on school climate takes into account the school manager's behaviour as being an influential factor on the climate features, which, in turns, has effects on the teaching staff's motivation and behaviours (Hoy & Forsyth, 1986).

It goes without saying that every school should have the goal of developing a positive and beneficial climate, which cannot be created in the absence of collaborative relations between school members that will reinforce the organization's cohesiveness. Thus, there are important factors that contribute to the quality of school climate, which require the efforts of all members of the educational organization, such as the congruence between the individual and the organizational goals, the acceptance of each participant's role within organization, the positive perception of the school environment, as well as the staff's level of motivation.

Therefore, school climate is an organizational variable that describes the degree of cohesiveness between school's members and it influences the level of the staff's motivation, their degree of satisfaction and, inherently, their achievements.

1.2. Typologies of school climate

The most representative studies, which attempt to describe organizational climate typologies, often start with developing certain instruments for the investigation of the quality of organizations' climate, including school, and end with providing various taxonomies corresponding to certain criteria taken into consideration in the scientific investigation. These criteria define the type of relationships established between the members of the organization: the level of motivation, the decision-making and the degree of control. According to these criteria a certain climate typology arises, which corresponds to three distinct axes: open-closed, authoritative-participative, human-custodial (D. Ion Barbu, 2009).

Starting from Halpin and Croft's (1963) instrument called *Organizational Climate Descriptive Questionnaire*, Hoy and Forsyth (2001) develop a new typology of school climate. This is a result of a combination between the teachers' and the school manager's behaviours, which range from open to closed. Our research study resorts to this typology, more specifically to the first two types of climate it describes, as these are the most frequently used in research.

- *Open climate* has basic features such as cooperation and respect between school members. It is a stimulating, normal climate, which is characterized by the members' high degree of commitment to the accomplishment of the school's objectives, professionalism, collaboration, collegiality, as well as satisfaction and

trust. The school manager provides support to the teachers, while being a role model, showing appreciation of the teachers' professional training, being careful not to overburden teachers with extra tasks or resort to an excessively controlling management and very strict rules.

- *Closed climate* is at the opposite pole. It has features such as teachers' non-involvement or disinterest for teaching, their lack of motivation, discontentment, non-commitment, routine, all of which generating a conflicting atmosphere. In such a climate, the school manager is ineffective, inflexible, intolerant, exerting an excessive control on school's members and imposing rigorous tasks. For this reason, the inter-human relations within school are characterised by tensions and the level of performance is low.

These two types of climate are the most realistic of all typologies described in the literature, having easily identifiable features of any organization, including school.

2. Research study

2.1. Research problem

The *problem* that was at the core of our *research study* consists in determining the extent to which school climate is a determinant of the teaching staff's professional satisfaction and the students' academic achievement within the educational organizations responsible for the initial training of prospective police officers.

2.2. Objectives and hypotheses

The *purpose* of our research study was to investigate the teaching staff and the students' perceptions on the climate features of the higher education institutions within the Ministry of Internal Affairs in charge of the initial training of prospective police officers.

From a *scientific point of view*, the study attempts to demonstrate the validity of the following hypotheses:

- *Hypothesis 1: The characteristics of the educational organization's climate vary according to the perceptions of each socio-professional group.*
- *Hypothesis 2: The quality of the educational organization's climate influences the teaching staff's job satisfaction and the students' academic outcomes.*

The research study pursued the following *objectives* derived from the working hypotheses:

- *Objective 1: To identify the climate features characteristic of the educational organization responsible for the initial training of prospective officers.*
- *Objective 2: To determine whether the organisational climate influences the teachers' professional satisfaction and the students' academic performance.*

2.3. Population sampling

The population sample subject to our research approach included both teachers and students of the faculties in charge of the initial training of the prospective officers of The Ministry of Home Affairs, which are part of the "AL. I. Cuza" Police Academy in Bucharest, namely The Police Faculty (specialisation: police, border police, gendarmerie, penitentiaries) and The Firefighters Faculty (specialisation: firefighting).

In sampling the population included in our research study we resorted to setting up a representative sample by random sampling technique. The sample was selected starting from a list of homogeneous groups of individuals (teachers and students), and the selection of the individuals included in the scientific investigation was carried out so as to cover several research variables such as: age, gender, socio-professional group, specialisation, seniority, which were going to be used later on in the data analysis and interpretation.

Numerically speaking the sample population totalled **356 respondents** as follows:

- **a number of 274 students** enrolled in all years of study (from the 1st to the 4th) from both faculties, both males and females from all specialisations (police, border police, gendarmerie, penitentiaries, fire-fighters);
- **a number of 82 teachers** from each department of the two faculties, both males and females, including teachers with various seniority degrees ranging from beginners to senior teachers, who had been teaching for more than 10 years.

Therefore, the research sample included persons (representing the two categories mentioned in the paragraph above), who were selected according to various criteria, so that the scientific study could benefit from a broader range of opinions on the research questions such as:

- socio-professional group: the population sample includes both teachers and students belonging to the educational institutions included in the research study;
- teachers' seniority and students' year of study: the population selected as a sample consists of teachers ranging from beginners to those close to retirement, whereas the students cover all years of study starting with freshmen and ending with those on the point of graduation;
- specialisation: teachers were selected so as to represent all curriculum areas and the students are representatives of the entire range of professional specializations they are allotted to during the academic cycle;
- gender: the teachers and students that make up the population sample are representatives of female and male genders.

2.4. Research methods

The quantitative research methods we resorted to in order to carry out our research study included:

• **Administration of questionnaires**, which included closed-ended, multiple choice, and Likert-scale questions, as well as open-ended questions (two questionnaires were designed, one that was administered to teachers and the other to students as representatives of the two socio-professional categories that made up the sample population).

In order to design some of the questionnaire items we resorted to:

• *Likert scale measurement method* to find out the level or frequency of the respondents' perception on or option for the various topics included in the questionnaires.

In order to facilitate the analysis and interpretation of quantitative data collected through questionnaires we used *descriptive statistical methods* such as the arithmetic mean, the weighted arithmetic mean, relative frequency per unit, absolute frequency per unit, percentage cumulative relative frequency.

2.5. Data collection and procedure

The process of data analysis consists in determining the main *features of the climate* in the organization under study as they are perceived by the respondents, teachers and students.

Table 1.

What are the climate features of the educational organization you belong to?

Climate features	Relative frequency per unit		Percentage relative frequency		Absolute frequency per unit	Percentage cumulative relative frequency
	Teachers (82)	Students (274)	Teachers	Students	Teachers + Students	Teachers + Students
1. friendly atmosphere	48	116	19%	16%	164	17%
2. efficiency	50	102	20%	14%	152	16%
3. satisfaction	40	77	16%	11%	117	12%
4. motivation	35	116	14%	16%	151	16%
5. tensions/ conflicts	27	105	11%	15%	132	14%
6. dissatisfaction	16	67	6%	9%	83	8%
7. lack of motivation	25	73	9%	10%	98	10%
8. inefficiency	14	62	5%	8%	76	7%
TOTAL	255	718	100%	100%	973	100%

For this reason the questionnaires administered to both teachers and students included mixed, multiple-choice questions, which are either closed-answer or open-answer questions, offering the respondents the opportunity to choose from a series of climate characteristics (both features of open and closed climate) those which mostly characterize the organization they belong to. Moreover, in order to collect balanced opinions, the respondents were asked to add other climate features that adequately describe their organization in their opinions.

For each of the two types of climate referred to in the questions included in the questionnaires we chose the most illustrative indicators as follows:

- ▶ *Open climate* is described by indicators such as friendly atmosphere, satisfaction, motivation, efficiency, whereas
- ▶ *Closed climate* is represented by the following indicators: tensions/ conflicts, dissatisfaction, lack of motivation, inefficiency.

The table above shows the statistical data expressed in numbers and percentages, which reflect the teachers' and students' perceptions of their organization's climate, taken both separately as representatives of two distinct socio-professional groups and, as a whole, as members of the same organization.

In order to facilitate the process of data analysis we resorted to the calculation of the weight of each type of climate as they are perceived by the respondents. The results are displayed in the table below.

Table 2.

The weight of the educational organization's climate features reflected in the respondents' options

Climate features	The weight of the respondents' options (teachers)	The weight of the respondents' options (students)	The weight of the respondents' options (teachers + students)
Open climate (items 1-4)	69%	57%	61%
Closed climate (items 5-8)	31%	43%	39%

Furthermore, for the clarity of the analysis, we converted the statistical data collected in graphs so as to easily analyse comparatively the differences in the perception of climate of each socio-professional group.

2.6. Results and discussion

Here are the detailed results expressed in percentages, which represent the proportion of the respondents' options for the open and closed climate features:

- 69 percent of the teachers perceive the organization they work in as being characterized by features of the *open climate* and 31 percent of the teaching staff consider that they organization has features of the *closed climate*;
- 57 percent of the students think that their organization has features of an *open climate* and 43 percent of them opted for features of a *closed climate*;
- on the whole, both teachers and students chose features of an *open climate* in a 61 percent and for those of a closed climate in a proportion of 39 percent.

Therefore, we can draw the conclusion that both socio-professional groups, taken either separately or as a whole, tend to have a positive perception of the organizational climate, though some of the features of a closed climate are also present. It is a known fact that the climate of an organization cannot be exclusively open or closed, but rather features of both climates coexist in the organization, only one of them being prevalent.

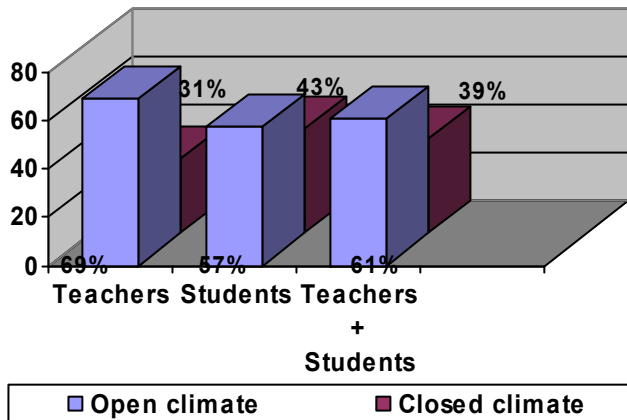


Figure 1. Graphical representation of the weight of the organization's climate features reflected in the respondents' opinions

However, it is worth mentioning that in the case of the organizations under study respondents did not overwhelmingly opt for the open climate as the average 60 percent in favour of the open climate proves. In our opinion, the overall rapport of 60 percent for the open climate to 40 percent for the closed

climate does not suggest a clear-cut direction towards a positive climate, but a relative balance between the two climates with a slight predominance of the open climate features. The percentage of 40 percent in favour of the negative climate, which demands attention, urges for a detailed analysis of the features of each type of climate in the organization under research, so that we could identify the features that determine either of the percentages recorded for the two climates.

Given the particular characteristics of each socio-professional group, the teaching staff and the students, we consider that it is relevant to analyse how representatives of each of these two groups perceive the climate features. Subsequently, we shall analyse the global perception on the climate characteristics of all respondents as representatives of the organization.

Thus, in the graph below the values 1 to 4 represent the following features of the two types of climate: 1- *friendly atmosphere vs. conflicts*; 2 - *efficiency vs. inefficiency*; 3 - *satisfaction vs. dissatisfaction*; 4 - *motivation vs. lack of motivation*.

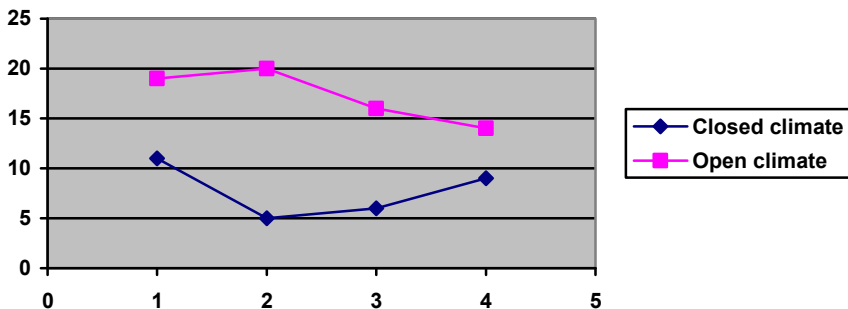


Figure 2. Graphical representation of the values of both open and closed climates in the respondents' opinions (teachers)

The graphical representation of the teachers' perception of the characteristics of the open and closed climates shows that:

- climate is characterised by both friendly and conflicting relations, though there is a slight tendency for harmonious interactions as the proportion of 19 percent for *friendly atmosphere* and the 11 percent for *tensions/conflicts* proves;
- teachers consider that the organisation they belong to is efficient; as the graph shows while efficiency increases, inefficiency decreases (the rapport *efficiency-inefficiency* is 20 to 5 percent);
- the teachers' level of *satisfaction* is relatively high, reaching a maximum value of 16 percent, whereas *dissatisfaction* has a low value of 6 percent;

- the teaching staff's level of motivation is relatively low, as the graph shows that motivation has a tendency to decrease, whereas lack of motivation has a slightly increasing tendency (the rapport between *motivation* and *lack of motivation* is of 14 to 9 percent).

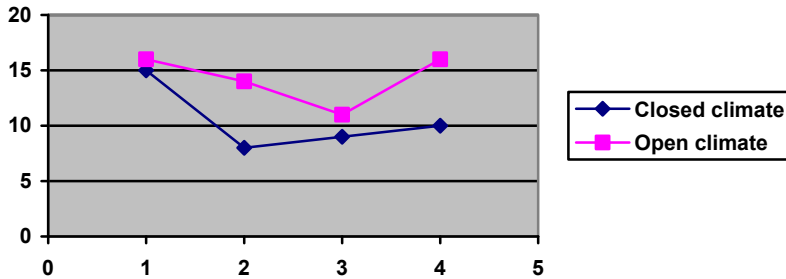


Figure 3. Graphical representation of the values of both open and closed climates in the respondents' opinions (students)

The graph above shows the same features of the open and closed climate under values 1 to 4 in the students' opinions.

As to the students' perception of the organisational climate, we can conclude that:

- the organisation's climate is characterised equally by friendly and conflicting relations; the graphical representation shows the tendency to overlap of the two climate features (the rapport friendly atmosphere – tensions/ conflicts is 16 to 15 percent);
- students perceive their organisation as efficient (the graph shows that students opted for efficiency in a considerable proportion of 14 percent, whereas inefficiency was chosen in a lower proportion of 8 percent);
- the students' level of satisfaction is rather low if we take into consideration that satisfaction has a decreasing tendency, whereas dissatisfaction an increasing (the rapport satisfaction-dissatisfaction is 11 to 9 percent);
- the students are relatively motivated (we can notice that the level of motivation takes rather maximum values, whereas the lack of motivation has average values, the rapport between the two climate characteristics being 16 to 10 percent).

Thus, it can be noted that the perceptions on the climate characteristics differ from a socio-professional category to another. This difference is due to the particularities of each group. The teachers display a tendency to perceive climate features more positively than the students, as the two groups of respondents are

not equally exposed to the rigors imposed by the military discipline and, in addition, the role expectations imposed to each professional group differ as well. The teachers have to accomplish qualitatively the role of instructors of the future officers, whereas students have to take on both the role of future officers and the responsibilities and behavioural norms associated with this role.

However, this does not mean that teachers are not required to observe the behavioural norms and the demands of the officer's profession, all the more so as they hold police ranks. Yet, the pressure imposed on them as to the role expectations they have to meet in the organisation is not as high as that imposed on the students, who will work as police officers after graduation.

Therefore, a comparative analysis of the two socio-professional categories' perceptions on organisational climate shows that:

Table 3.
Teachers' and students' perceptions on organisational climate

TEACHERS	STUDENTS
average friendly relations	relatively low friendly relations
high efficiency	relatively average efficiency
relatively high satisfaction	low satisfaction
relatively low motivation	relatively average motivation

These differences of perception on climate between teachers and students will bring along different results in the global analysis of how teachers and students together perceive the climate characteristics of their organisation.

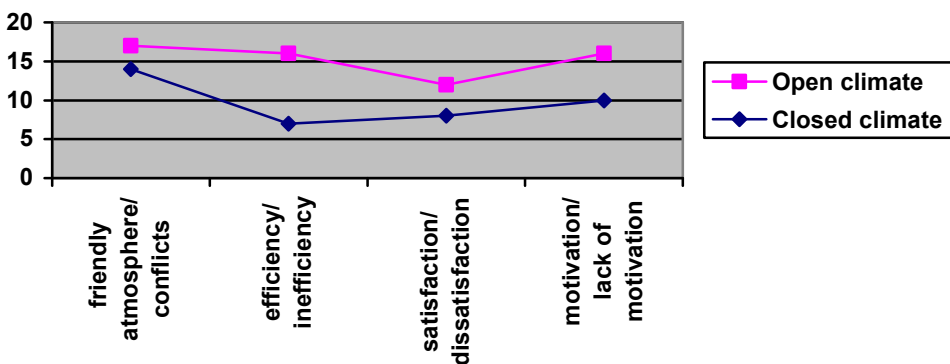


Figure 4. Graphical representation of the values of both open and closed climates in the organizations under study

The graph above shows the proportion of each dimension of the two types of climate as perceived by the respondents, teachers and students, which will allow us to make further comparative observations and reach some conclusions.

On the one hand, the values of the *open climate* expressed in percentages are as follows: *friendly atmosphere* 17%; *efficiency* 16%; *satisfaction* 12%; *motivation* 16%.

On the other hand, the percentages corresponding to the values of the *closed climate* are: *tensions/conflicts* 14%; *inefficiency* 7%; *dissatisfaction* 8%; *lack of motivation* 10%.

If the percentages obtained are contrasted, the following conclusions can be drawn:

- the organisational climate is characterised by both friendly relations and tensions/conflicts (as the rapport friendly atmosphere 17% - tensions/conflicts 14% proves, showing a rising tendency for both);
- the organisation is relatively efficient (we can note that efficiency is represented by 16 % and inefficiency only 7%);
- the degree of satisfaction of the respondents is relatively low (the graphical representation shows the decreasing tendency of satisfaction and the increasing tendency of dissatisfaction, the rapport between the two being rather close of 12% and 8%);
- the members of the organisation are motivated in an average proportion (according to the graphs, the levels of motivation and lack of motivation have a rising tendency, which demonstrates that the respondents are partly motivated, partly unmotivated, as the rapport motivation 16% - lack of motivation 10% proves).

Table 4.

To what extent the teaching staff's job satisfaction in your organization is influenced by the quality of the organizational climate?

The degree of intensity of the climate's influence on the teaching staff's job satisfaction	Number of respondents (teachers)	Percentage
very much	31	38%
considerably	41	51%
moderately	9	11%
slightly	-	-
not at all	-	-
TOTAL	81 (1 respondent didn't answer)	100%

The percentages discussed in the previous paragraph demonstrate that the score between the features of the open and closed climates is rather tight, with a slight tendency towards a positive perception, which justifies the overall rapport of 61% for the open climate as compared to 39% for the closed climate.

Another issue our research study focused on was to identify the teaching staff's and the students' perceptions on the effects the organisational climate may have on their professional satisfaction and academic achievement.

As concerns the teachers, 89% consider that the level of their own job satisfaction is due in a very high and considerable proportion to the quality of the organisational climate. Moreover, the remaining percentages of the teachers considered that the climate's influence on their satisfaction is moderate.

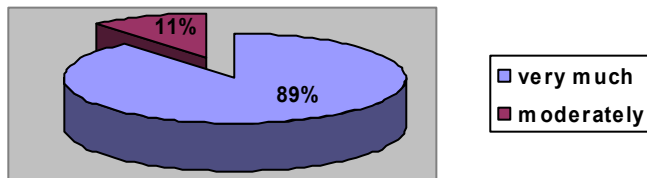


Figure 5 *The graphical representation of the degree of intensity of the climate's influence on the teaching staff's job satisfaction*

In their turn, the students opted in a proportion of 51% in favour of the opinion according to which the organisational climate has consequences on their academic performance, 43% considered that the influence is moderate, and only 6% answered that the level of their performance is little or not at all influenced by the organisation's climate.

Table 5.

To what extent the students' academic achievement is influenced by the quality of the organizational climate?

The degree of intensity of the climate's influence on the students' academic achievement	Number of respondents (students)	Percentage
much	140	51%
moderately	116	43%
slightly	14	5%
not at all	2	1%
I don't know	-	-
TOTAL	272 (2 respondents didn't answer)	100%

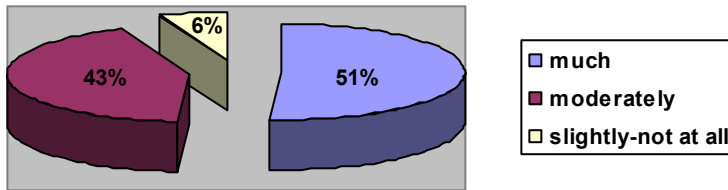


Figure 6. The graphical representation of the degree of intensity of the climate's influence on the students' academic achievement

3. Conclusions

The research study revealed that the respondents' perceptions on the organisational climate vary from a socio-professional group to another. These variations of perception can be explained by the characteristics specific to each group. The teaching staff displays a tendency to perceive climate in a more positive light than the students, as they are not as exposed to the rigors imposed by the military discipline as students are and, moreover, the role expectations they have to fulfil differ from those of the students. The teachers have to provide qualitative training for the prospective officers, whereas students have to meet the role expectations associated with the officer career and whole-heartedly embrace the responsibilities and behavioural norms brought along by this profession. Thus, these specific cultural characteristics of the organisation under study are accountable for the fact that respondents did not expressed a very definite option for the features of the open climate as the slightly above the average 60 % in favour of the open climate proves. In our opinion, the overall rapport of 60 percent for the open climate to 40 percent for the closed climate does not suggest a clear-cut direction towards a positive climate, but a relative balance between the two climates with a slight predominance of the open climate features.

Moreover, the research approach showed that although the organisational climate is characterised by a higher proportion of positive features, the levels of motivation and satisfaction of both teachers and students are relatively average-low. These results can be accounted for by the "weaknesses" of the organisational culture, which correspond to those cultural characteristics determined by the structure of the organisation, which impacts negatively on its climate. The broader research endeavour showed that the organisation included in the study is bureaucratic, where the staff's roles and statuses correspond to the positions

they occupy in the organisational hierarchy, the rules and behavioural norms are formal, there is a clear focus on the accomplishment of tasks and a preference for social control, as well as a predominantly centralised decision.

Last but not least, the research demonstrated that the teachers' degree of professional satisfaction and the students' academic outcomes are dependent on the quality of organisational climate. However, the teaching staff's job satisfaction and the students' academic achievement are not determined exclusively by the organisational climate, but only to a certain extent. For instance, the literature has identified several endogenous and exogenous factors, which influence the degree of the teachers' professional satisfaction such as the working conditions, their salaries and bonuses, the nature of organisational relations, especially those established between the school manager and the teachers, the teachers' involvement in decision-making, as well as their students' behaviours, the managerial control and organisational resources. As far as the students are concerned, their academic performances are not only due to the quality of the organisational climate, but also to other factors such as their teachers' experience and professionalism, the quality of their interactions, their own knowledge, as well as their own seriousness.

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INITIAL TEACHERS TRAINING PROGRAM TRAINERS' OPINIONS

CRISTIAN STAN*

ABSTRACT. The quality of the education process and the preparation level of the students are elements that are in a relationship directly related to the efficiency of the initial training program of future teachers. Many of the directions of Romanian educational reform have targeted directly or indirectly, the teacher training system but few of them have been inspired by the concrete reality in universities. Having as a starting point the above considerations, this article aims to highlight the opinions of trainers effectively involved in the initial preparation of future teachers regarding the efficiency of this program and how it could be restructured in order to be optimized.

Keywords: *teacher, trainer, initial teachers training, teaching skills.*

ZUSAMMENFASSUNG. Die Qualität des Bildungsprozesses und das Bereitschaftsniveau der Studierenden sind Elemente, die in einer direkte Beziehung mit der Wirksamkeit der Erstausbildung der künftigen Lehrer sind. Viele der Richtungen der rumänischen Bildungsreform waren, direkt oder indirekt, das System der Lehrerausbildung gezielt, aber nur wenige von diesen haben sich von der konkreten Realität in den Universitäten inspiriert. Nimmt man als Ausgangspunkt das bereits erwähnte, soll dieser Artikel die tatsächlichen Meinungen den Trainern in der Vorbereitung künftiger Lehrer über die Wirksamkeit, mögliche Optimierungen oder Umstrukturierungen dieses Programms markieren.

Schlüsselwörter: *Lehrer, Trainer, Erstausbildung von Lehrern, pädagogische Fähigkeiten.*

1. Introduction

Specialty literature devotes ample spaces to the issue of initial training of future teachers. The interest shown for this issue is caused by the obvious correlation which exists between the quality of the educational process in a

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country and the level of development of that society (Saw, S.H., 2010). Moreover, most of the actions to reform the contemporary educational systems were primarily aimed at restructuring, in the sense of optimization, of the programs of initial training of future teachers. The effort to streamline these programs is objective, determined by the convergent action of a complex of factors that define not only the school as an institution but also society as a whole.

We refer in this respect primarily to the finding that, as statistics indicate, due to the economic crisis and thus the low wages in education, the motivation for choosing the teaching profession is increasingly lower among young students and this lack of motivation may lead to a superficial treatment of the profession (Pontes, A., Ariza, L., 2010). Another factor to be taken into account in the efforts to improve the teacher training system is the degradation of the educational climate, with acts of indiscipline and violence becoming more varied forms and being an increasingly widespread phenomenon among students (Harding, J.D., 2008). This reality determines the reconsideration of the teacher training program towards the development of their skills including classroom management and conflict resolution. Paying increased attention to the quality of the initial training programs for future teachers is also imposed by the decrease in the students' motivation for learning, element implying endowing them with new strategies and methods, able to ensure the active participation of students in lessons. In the absence of undertaking a real reform of the initial training program of future teachers, based on the needs imposed by the concrete educational reality, the quality of teaching and the level of training of graduates will record major declines.

2. Major research coordinates

National evaluations at the macro level, due to their unitary and their high level of standardization represent one of the most loyal indicators of the quality of the educational system (Chiş, V., 2001, Stan, C. 2000). The results obtained in recent years by both students at the baccalaureate exam as well as by teachers in competitions indicate a passing rate of approximately 60%. The existing causality relationship between the two situations is an obvious one: the existing deficiencies in the training programs for future teachers are reflected on the quality of their professional preparation, which determines the appearance of clear negative consequences regarding the level of academic performances of students.

Taking the findings above as a starting point, the main purpose of our research was to identify the perceptions and opinions of the trainers directly involved in the initial teacher training program regarding its advantages and disadvantages. The reason we considered this approach appropriate and useful was because getting an inside perspective of some viewpoints from

those directly involved regarding the organization and functioning of the initial training program for future teachers enables us to bring necessary additional knowledge to the field.

Thus, the sample of subjects consisted of 78 people, teachers in higher education, with the rank of trainers in the training program for future teachers. The institutions of origin are representative for the Romanian universities that offer these training programs: Cluj, București, Iași, Timișoara, Brașov, Constanța, Sibiu, Galați etc. The primary method of investigation used was the questionnaire based survey, coupled with interviews and the focus group method. The questionnaire included seven questions with possible answers. The results obtained were statistically processed and the percentages obtained for each item and each choice are summarized in a tabular form.

3. Presentation and interpretation of results

The first of the questionnaire items sought to highlight the trainers' opinions on the efficiency of the initial training program for future teachers.

Table 1.

Opinions regarding the efficiency of the initial teachers training program

Answer	N	%
Very efficient	10	12.5%
Pretty efficient	34	43.6%
Slightly efficient	33	42.3%
Not efficient at all	1	1.3%

As we can see in the table above, the data obtained show an obvious polarity of the responses. If 56.1% of respondents believe that the current preparation system for future teachers is very efficient or fairly efficient, at the other extreme lie 43.6% of trainers who view this program as slightly efficient or not efficient at all. The interviews conducted, combined with the focus group method revealed that, although there is no significant difference statistically, usually teachers with a greater seniority in education (79.5% were teachers with more than 10 years experience) tend to be more dissatisfied with the offer of training while subjects with less seniority (20.5% were teachers with less than 10 years experience) consider the program as quite efficient. We explain this state of things in that an increased seniority in education allows, due to experience, a more objective and more pertinent analysis to the training needs of those who are

to become teachers. People with less seniority in education, products of the training system for teachers in question, are clearly less willing to criticize or bring major objections to the program whose direct beneficiaries were themselves. Grouping on the two extremes of the responses thus indicates not only the existence of certain malfunctions in the operation of the program but also a significant divergence of perspectives, divergence expressed through the manifestation of two different major trends of opinion.

The next item of the questionnaire aimed to identify the components of the initial teacher training program that the trainers involved consider deficient.

Table 2.

Components considered deficient in the initial teachers training program

Answer	N	%
The psycho-social component	13	16.7%
The pedagogical component	14	17.9%
The methodical component	19	24.4%
The practical component	32	41%

The data presented in Table 2 show that most of the subjects, 41%, consider that the most deficient component of the initial teacher training program is the component of teaching practice. The methodological component of the program is considered deficient by 24.4% of the trainers while the psychosocial and pedagogical components are considered deficient by 16.7% and 17.9% of subjects. As expected, the trainers involved in the program consider that giving greater attention to the preparation of teaching practice is useful and necessary to guarantee appropriate skills for future teachers.

The results related to the percentage of time spent regarding the subjects of the teachers training program are summarized in Table 3.

Table 3.

The percentage that the initial teachers training program should have out of the total hours of preparation at undergraduate level

Answer	N	%
15%	8	10.3%
25%	24	30.7%
35%	11	14.1%
50%	27	34.6%
75%	8	10.3%

INITIAL TEACHERS TRAINING PROGRAM TRAINERS' OPINIONS

As we can see in the table above, 34.6% of the trainers surveyed believe that the subjects included in the training program of teachers should be allocated approximately 50% of the total hours of undergraduate training while 44.8% of them calculated that a percentage of 25-35% should be enough. Only 10.3% of respondents consider that this percentage should be reduced to 15% or increased to 75% of the total hours.

The results presented above are also validated by the trainers' responses to the item regarding the opportunity of separating the didactic profile from the scientific profile. The data is presented in Table 4.

Table 4.

The agreement regarding the separation of the didactical profile from the scientific profile

Answer	N	%
Yes	44	56.4%
No	34	43.6%

As we can see, the analysis of data in Table 4 indicates the fact that more than half of the trainers, 56.4%, consider that they agree with the establishment of an educational institution specializing in training future teachers, being, in their opinion, the solution for providing the appropriate methodological environment for promoting psychopedagogical disciplines and the optimal development of skills and competences necessary for the teaching profession.

Another item of the questionnaire aimed to capture the degree to which trainers consider that their students grant the appropriate interest to the disciplines included in the training program of future teachers. The results regarding the extent to which students are determined to become involved in the initial teachers training program are shown in Table 5.

Table 5.

The importance that students grant to the initial teachers training program

Answer	N	%
Very important	2	2.6%
Pretty important	22	28.2%
Slightly important	41	52.6%
Barely important	11	14.1%
Not important at all	2	2.6%

The trainers' responses to this item, presented in the table above, offers a disturbing perspective, knowing that there is a directly proportional relationship between the degree of motivation of engagement in the task and the level of performances. Thus, we can observe the fact that only a third of trainers (30.8%) believe that their students grant enough importance to the disciplines associated with the initial teacher training program while 69.2% admit that the students they teach to pay little or very little importance to this group of disciplines.

One of the possible explanations of this situation, as can be seen in Table 6, is that not all students participate in the initial teacher training program.

Table 6.

The need for the pre-existence of special skills for the teaching profession

Answer	N	%
Yes	62	79.5%
No	16	20.5%

The data above reveals that exercising the profession of a teacher requires, in the opinion of 79.5% of trainers, the pre-existence of special skills, while only 20.5% of the respondents consider that this is not necessary and any person can be prepared successfully in this regard. In other words, most of the trainers tend to believe that teaching is more an art than a science.

The last item of the questionnaire sought to identify the subjects' opinions regarding the opportunity of introducing an admission system to the initial teacher training program. The results are summarized in Table 7.

Table 7.

The agreement regarding the introduction of an admission system to the initial teachers training program

Answer	N	%
Yes	56	71.8%
No	22	28.25%

According to the data presented in Table 6, the responses summarized in the table above confirm a general trend of opinion regarding the existence of a potential innate skill necessary to become a teacher. Thus, 71.8% of the trainers consider the introduction of an admission system to the training program for future teachers appropriate, with the selection carried out based on the skill spectrum previously mentioned.

4. Conclusions

The analysis of the opinions expressed by the trainers involved in the the initial teacher training program reveals some important aspects for its optimization process. We are referring primarily to the fact that almost half of us believe that, in its present form, it is slightly efficient or not efficient at all, with the same percentage of respondents expressing the belief that a greater percentage should be allocated to the teaching practice component. The solution that almost two thirds of respondents see is the establishment of a specialized teacher training institution, context in which, as proposed by the majority of trainers, the percentage of the disciplines included in the training program should be at 50%. Moreover, three-quarters of the trainers consider that the optimal exercising of the teaching profession requires the pre-existence of a skill set that should be checked by a system of admission to the training program. An appropriate restructuring of the system of training of future teachers requires, in our opinion, at least one profound act of reflection regarding the opinions based on the concrete experience of those directly involved in this program.

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THE RELATION BETWEEN THE DEVELOPMENTAL STAGE OF EXPRESSIVE AND RECEPTIVE LANGUAGE AMONG CHILDREN WITH PDD-NOS

CLAUDIA CRIȘAN*

ABSTRACT. The present study, carried over a period of four years, investigated the existing relation between the developmental stage of receptive and expressive language in the case of two children with PDD-NOS (Pervasive Developmental Disorder - Not Otherwise Specified). The participants benefited from the intervention based on language and communication stimulation method applied in the case of children with Autism Spectrum Disorder (LCSMA - Language and Communication Stimulation Method in Autism; Dascăl Crișan, 2012). According to the results obtained, significant differences were noted between the receptive and expressive language developmental stage, however there were no differences recorded regarding the receptive developmental stage and mental age.

Key words: *autism, expressive language, receptive language, LCSMA.*

ABSTRAKT. Diese Studie, die über einen Zeitraum von vier Jahren durchgeführt wurde, hat die Beziehung zwischen der Höhe der Entwicklung der rezeptiven und expressiven Sprache untersucht, wenn 2 Kinder an PDD-NOS leiden. Die Teilnehmer erhielten die Intervention auf der Grundlage der Verfahren zur Stimulierung Sprache und Kommunikation für Kinder mit Autismus-Spektrum-Störungen (MSLCA; Dascal Crisan, 2012), und durch die Ergebnisse, zeigten sich signifikante Unterschiede zwischen der Entwicklung der expressiven und rezeptiven Sprache, aber keine signifikanten Unterschiede zwischen der Höhe der Entwicklung der rezeptiven Sprache und geistige Alter bemerkt.

Stichwort: *autismus, rezeptiven Sprache, expressiven Sprache, LCSMA.*

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Introduction

Even though there is a general agreement upon the fact that one of the main characteristics of Autism Spectrum Disorders involves language impairments, the nature of these features are far from being understood. Although the deficiencies in language comprehension (both verbal and nonverbal) does not constitute a diagnosing criteria for ASD, there is evidence pointing in this direction (however more limited than in the case of expressive language). Therefore the studies carried by Bartak, Rutter & Cox (1975; 1977) represented a reference point towards this direction for many scientific circles. In a comparative study, the authors assessed both the expressive and comprehension language skills in the case of two groups of participants, respectively autistic versus individuals with severe receptive language impairment. According to the results obtained, the authors emphasized the existence of a significant impairment of autistic participants, compared to the other group, regardless of the same nonverbal IQ. Moreover, it was noted that language comprehension skills were more deficient compared to verbal expressive language. In a further study, Paul & Cohen (1984) noted that this group had a much lower performance at the standardized tests measuring language comprehension, compared to the aphasic or mentally retarded individuals, with a similar nonverbal IQ. However, other studies (Jarrold, Boucher & Russel, 1997) presented evidence regarding the lack of a significant difference between verbal utterance and comprehension by comparing autistic children with individuals diagnosed with Asperger Syndrome or severe language impairments. as a response to this research, Kjelgaard & Tager-Flusberg (2001) initiated a large study that investigated various verb features (phonological utterance and vocabulary, language comprehension, semantic and grammar features) in the case of 89 autistic children. At the end of the study results showed a significant heterogeneity in the obtained performance, with a part of the participants having appropriate mental age performance whereas the others having a below mental age performance. Chan & colleagues (2005) support these conclusions with the results obtained in their study. According to the results, they identified three different situations, respectively it was noted that 21% of the participants showed appropriate aged performance, yet with significant verbal skills impairments, 42% presented themselves with deficiencies both regarding expressive and receptive language and 37% had a close to normal performance. These results highlight the existence of a developmental continuum that children with autism follow, so that we can find people with major impairments regarding expressive language and language comprehension, while others no not present such deficiencies. Moreover, the authors noted that these difficulties are not entirely influenced by the general developmental level (intelligence quotient), given that the participants of the study were both high functioning or low functioning (Chan & colab., 2005).

Description of the method

Launched in 2007 under the name of “The intervention technique for stimulating the communication in autism” (Dascăl Crișan, 2007), the method was subjected to various content changes, being currently known as LCSMA, respectively the Language and Communication Stimulation Method in Autism (Dascăl Crișan, 2012). The method can be defined as the result of a coherent combination of several intervention procedures and strategies dispersed across various research studies, complemented with new elements where gaps were found. Therefore the elaborated method is based on the Receptive Language Stimulation Method (Bricher & Bricher, 1972), PECS (Bondy & Frost, 1983), VIA (Siegel, 2003) and a series of ABA techniques. Moreover, the devised method incorporated strategies for stimulating the communication skills of preverbal children recommended by Schuler, Prizant & Wetherby (1997) or strategies for stimulating the communication skills of children in the more advanced stages of language acquisition developed by Prizant, Schuler, Wetherby & Rydell in 1997. Thus an attempt was made to elaborate a comprehensive approach can be applied for all ASD children, despite of their communication and language acquisition stage development, of their learning pace, their developmental stage or their current and future needs.

The method is addressed to those individuals who display a lack of interest towards speech significance or are unable to utilize speech in a functional manner. Based on the principle of gradually increasing the complexity of tasks and implicitly of communication behaviors, LCSMA is built upon three main progressive levels, each of them consisting of a series of behavioral sequences based on the Chaining technique (Tabel 1-1).

Table 1-1.

Phases and steps of LCSMA (Dascăl Crișan, 2012, Crișan 2014)

Phases	Description of the phases
<p>Phase 1: Acquisition of early intentional communication and receptive language behaviors.</p>	<p><i>1.1. Early intentional and anticipatory behaviors.</i> <i>1.2. Replacing the ideosyncratic (unconventional) communication and problem behaviors with conventional communication behaviors.</i> <i>1.3. Receptive language stimulation.</i> <i>1.4. Teaching verbal labels for common objects and practicing simple actions with those objects.</i> <i>1.5. Objects differentiation.</i> <i>1.6. Complex verbal instructions.</i></p>

Phases	Description of the phases
Phase 2: Communication using 3-D objects	<i>2.1. Communication by the use of symbols of natural shape and size.</i> <i>2.2. Discrimination among symbols.</i> <i>2.3. Expanding the communication area.</i> <i>2.4. Transition from communication using natural size symbols to communication using miniature symbols.</i> <i>2.5. Associating the miniature object with the right picture.</i>
Phase 3: Communication using pictures	<i>3.1. Vocabulary expansion and formulating simple sentences.</i> <i>3.2. Formulating complex sentences.</i> <i>3.3. Initiation and maintaining simple conversations.</i> <i>3.4. Making spontaneous comments and descriptions.</i> <i>3.5. Acquisition of conversational skills and strategies.</i>

The method proved itself to be efficient for developing the communication skills in the case of 6 children with autism and other PDD (Dascăl Crișan, 2012), for acquiring protoimperative and protodeclarative communication skills (Crișan, 2013a), and for decreasing problem behaviors derived from acquiring communication skills (Crișan, 2013b; Crișan & Stan, 2013).

Research Questions

Q1. Are there significant differences between the expressive and receptive language developmental stage if the child benefits from treatment based on the language stimulation method using augmentative and alternative communication means such as LCSMA?:

Variable 1 (V1) Expressive language developmental stage (EL) includes both verbal language and augmentative and alternative communication means;

Variable 2 (V2) Receptive language developmental stage.

Q2. Are there significant differences between language developmental stage (expressive and receptive) and mental age in the evolution of the participants in the study?

Variable 1 (V1) Expressive language developmental stage (EL) includes both verbal language and augmentative and alternative communication means;

Variable 2 (V2) Receptive language developmental stage;

Variable 3 (V3) Mental age (MA).

Method

Participants

The present study included 2 preschoolers diagnosed with PDD-NOS (2 boys), aged 3 years and 8 months, respectively 3 years and 6 months. During the intervention the children benefited from therapy based on LCSMA within a special school for disabled, their inclusion in the research being done in accordance with the participation agreement signed by their family or legal caregiver.

Assessment instruments

The assessment instruments used in the present study: the whole 5 sub scales of Portage Development Scale for assessing the general developmental stage respectively mental age and more specifically the language section for assessing the development of expressive language (including AAC means) and Peabody Picture Vocabulary Test-Revised (PPVT-R) for the assessment of receptive language development.

Peabody Picture Vocabulary Test-Revised (Dunn & Dunn, 1959; 1980) is a standardized test addressed to nonverbal individuals aged between 2,6-40 years old. The instrument is used to assess the receptive developmental stage, by indicating the verbal label of the item demanded by the assessed person on an assessment worksheet with four pictures among which only represents the correct word. The test includes 684 input-words, decided into two series, L form and M form, each containing 175 worksheets distributed across three levels (180 for preschool level, from 2,6 to 5 years old; 204 for intermediary level for children aged 5 to 10 years old; and 300 for advanced level, children above 10 years old and adults). The distribution of input-words across the two series is well balanced regarding the inclusion of verbs, nouns and adjectives and does not neglect the difficulty level, once you advance in using the instrument. The two types of statistical operations used to determine the internal consistency of the scale were the reliability correlation coefficient (rtt) and standard error of measurement (SEM). According to the results obtained for each age group, the internal consistency coefficient in the case of children and young individuals is between .67 and .88 for L form (mean .80) and between .61 and .88 for M form (mean .81).

Portage Development Scale is an assessment instrument used in the case of children aged 0-6 years old, designed with the purpose of determining the intelligence coefficient, respectively mental age and the developmental stage across 5 developmental areas (motor, communication, social, cognitive and personal autonomy). The assessment consists of a checklist including behaviors and skills that is supposed to be completed by the child's caregivers, thus resulting in a thorough performance assessment across the 5 developmental

areas. The 526 items of the scale are structured according to the age levels of normally developed children. Regarding internal consistency, results indicated the following: social .80, communication .81, personal autonomy .73, cognitive .70, motor .75, and .80 for the whole scale.

Research design, intervention procedure

The present intervention-research was based on the single subject experimental design ABAB, carried out through 3 longitudinal case studies over a period of 4 years. According to the methodology imposed by the current research approach, the design of the study has the following structure:

The first phase consists in assessing the level of expressive and receptive language of the participants in the current study with the purpose of collecting the information and data for establishing the baseline level. Thus the children were assessed using the PPVT-R and Portage Development Scale. The second phase of the study followed, consisting of the experiment. Within this stage the study involved the implementation of AAC intervention programs based on LCSMA and monitoring the obtained results through regular evaluations every year throughout the four years, in order to determine the expressive and receptive developmental stage (expressive language includes the augmentative and alternative communication means). The third phase of the study consists of the final assessment aimed at determining both the existing differences between the two language components from initial and final stage of the experiment and the efficiency of the method used and it included analyzing the results obtained from the participants in the study over the 4 years of intervention.

Data analysis and interpretation

The results obtained by the two participants in the study according to the purpose and the research questions (Table 1.2.) show a significant difference between expressive and receptive language at the beginning of the study that gradually decreases in the case of the two children diagnosed with DPP-NOS.

Table 1.2.

Results obtained by the two participants in the study across months.

Assessment	Participants							
	N1				N2			
	CA	MA	EL	RL	CA	MA	EL	RL
Initial Assessment	46	28	9	23	42	12	2	-

INITIAL TEACHERS TRAINING PROGRAM TRAINERS' OPINIONS

Progress Assessment 1	58	40	24	38	52	20	18	25
Progress Assessment 2	70	50	31	40	66	37	31	34
Progress Assessment 3	82	58	44	54	78	52	42	49
Final Assessment	94	63	60	66	90	57	48	55

The analysis of the reference data for participant N1 (Figure 1) show significant delays of approximately 18 months between the developmental stage according to the biological age (46 months) and mental age (28 months), which is also similar (5 months delay) to the receptive language developmental stage (23 months). Moreover, there were significant differences noted between the expressive language developmental stage (9 months) and the receptive language developmental stage (23 months), resulting in a 14 months delay regarding these two language components. The results indicate that N1 has a higher level of language comprehension skills compared to the level of communicating what he already knows or wants to communicate, a fact that is a consequence of lacking functional communication skills.

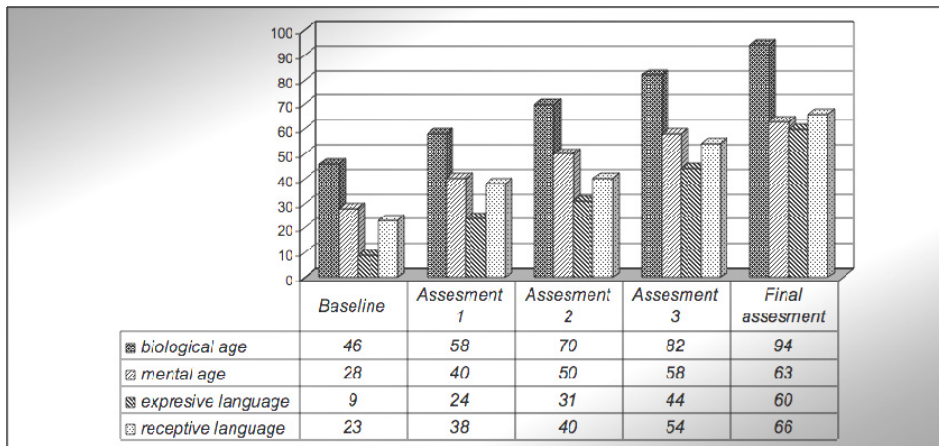


Figure 1. Progress of participant N1

According to the results obtained, N1 benefited from an individualized intervention based on LCSMA, over a period of 4 years. During this time, the obtained results show a progress regarding the child's language acquisition (expressive and receptive language). Therefore after one year of intervention during which the child was taught to use augmentative and alternative communication means (AAC) across various environments, the delay between

expressive language developmental stage (including the communication through AAC) and the receptive language developmental stage decreased from 23 months (during initial assessment) to 14 months during the first progress assessment.

The progress maintained during the following years, with the delays between the two language components gradually decreasing. Therefore during the second progress assessment the developmental delay between EL and RL is 9 months, during the third progress assessment the delay is 10 months and during the final assessment the existing delay is only 6 months. Additionally, it can be noted that the receptive language development is very close to the child's mental age, with minor differences (the delay between MA and RL during the second progress assessment is 10 months, during third progress assessment is 4 months and during final assessment is 3 months).

According to the obtained results the LCSMA proved to be efficient in the case of N1 regarding the acquisitions within language and communication areas (expressive and receptive), yet the evolution between the two components is different. The data shows significant differences between the expressive and receptive language development stages, with the latter recording a better improvement and closer to the child's mental age. Moreover, the child showed a gradual progress, but lacking constancy, respectively the child went through both fast and slower paced acquisition periods. What we need to emphasize is that throughout the end of the study the child uses both verbal and AAC communication means, with the verbal language being the dominant one.

In the case of N2, the second participant to the study, the results obtained (Figure 2) show a much slower progress compared to the first participant.

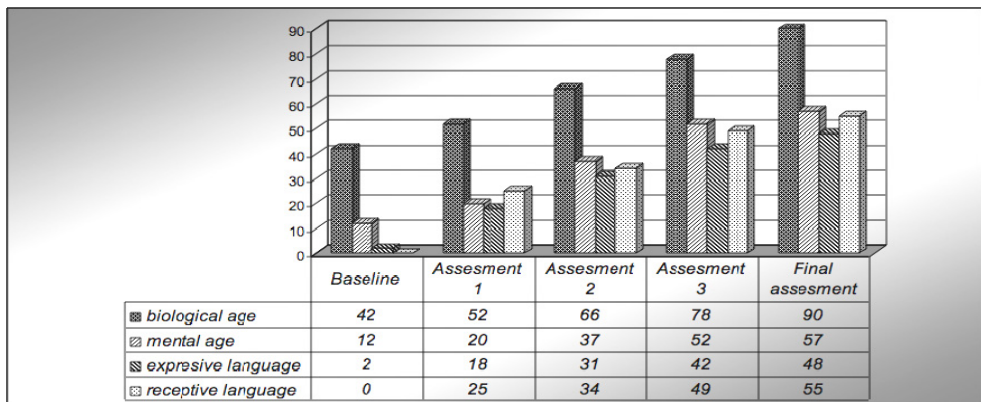


Figure 2. Progress of participant N2

According to the baseline assessment, significant delays were recorded, of 30 months, between biological age (42 months) and mental age (12 months). As a consequence of the low mental age, N2 could not be tested using PPTV-R during this stage, due to the fact that his capacity of associating an image with the verbal label was not yet developed. Thus the score obtained by N2 regarding receptive language developmental stage was 0. According to the results obtained on Portage Development Scale, the child showed a very low expressive language stage, of approximately 2 months.

Based on these results, the participant benefited from a 2 years LCSMA individualized intervention for communication and language stimulation. After the intervention the child showed a remarkable improvement once he was taught how to use AAC across various environments. This after one year of intervention, the performance of N2 regarding the receptive and expressive language (including AAC) corresponded to that of an 18 months old child, and regarding receptive language, the comprehension level corresponded to that of a 25 month old child. Even though there is a delay between the two language components (expressive and receptive) of approximately 7 months, the results obtained are noteworthy, given that LCSMA proved its efficiency in this case.

During the following three years of intervention, the progress assessments showed a positive evolution in language development, yet with existing delays between expressive and receptive language. Therefore after the second year of intervention there was an approximately 3 months delay between EL (31 months) and RL (34 months), during the third progress assessment the delay remains constant and during the final assessment there was a 7 months delay between EL (48 months) and receptive language (55 months).

Additionally, analyzing the obtained results, it can be noted that the receptive language developmental stage of the child is very close to his mental age, yet lower than the appropriate level for his biological age.

Discussions and conclusions

According to the results obtained by the two participants in the study, the scores show significant differences between the expressive language developmental stage and the receptive language developmental stage, with a delay varying across the research period from a difference of 10 months to a much lower one of approximately 3 months towards the end of the study. These results indicate that in the case of the children with PDD-NOS included in the study, the language comprehension stage is much higher than their capacity of using verbal language or other AAC means to express what they know or what they want to convey to others.

Another important aspect to be noted is the efficiency of LCSMA in the treatment of nonverbal children with PDD-NOS. Therefore, once the individualized treatment for language and communication stimulation was introduced, a remarkable improvement was recorded, the most notable being in the case of N2 during the first year of intervention. The children were taught to use AAC means and subsequently verbal ones in a functional manner through specific methods, strategies and techniques, in various social contexts, which led to positive effects both regarding language development and new acquisitions within other developmental areas assessed with Portage Development Scale. Within the present study, the mental age established with Portage Scale shows an approximately close level to the receptive language stage, even though it is lower than the biological age of the participants.

Additionally, the results indicate variations within the evolution of the participants, having recorded both fast paced and slower paced periods regarding the rhythm of the acquisitions noted. This fact was shown both regarding the expressive and receptive language development.

In conclusion, there were significant differences recorded in the case of the two children with PDD-NOS under study, regarding the expressive and the receptive developmental stage, the latter recording a higher level. Moreover, even though the two participants had a similar age, the rhythm of their acquisitions was different, which indicates the existence of potential discrepancies between children with PDD-NOS resulting in the need to adapt the intervention according to the child's potential, developmental level, learning rhythm and knowledge transfer from one context to another.

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EVALUATION IN THE STEP BY STEP EDUCATIONAL ALTERNATIVE - ACTION- RESEARCH-

HORAȚIU CATALANO*, MIRELA BOCA**

ABSTRACT. This study aims at valorising the theoretical and practical premises of evaluation in general and of the Step by Step educational alternative in particular.

The hypothesis from which we departed focuses on the idea according to which the evaluative strategies specific to the Step by Step educational alternative constitute motivating and mobilising factors for learning.

By means of our study we aimed at detecting the strengths, the weaknesses, the evaluative strategies specific to the Step by Step alternative and the determination of the emotional impact of the various evaluative strategies at the level of the pupils.

Key words: *Step by Step educational alternative, evaluation, alternative evaluation methods*

INHALT. Dieses Studium hat als Zweck die Valorisierung der theoretischen und praktischen Voraussetzungen, im Allgemeinen und in der alternativen Erziehung Step by Step. Die Hypothese von der man ausgeht, beruht auf die Idee gemäß dem, die Bewertungen und Strategien die man anwendet spezifisch der alternativen Erziehung Step by Step sind, sie bilden motivations Faktoren und mobilisieren das Lernen.

Durch den Einfluss unseres Studiums haben wir uns vorgenommen, die starken und schwachen Punkte heraus zu finden, die Strategien für die spezifische Bewertung in der Alternative Step by Step, so wie auch die Determination auf den affektiven Impact der verschiedenen Strategien der Bewertung von Schülern.

Schlüsselwörter: *Alternative Erziehung Step by Step, Bewertung, alternative Methoden zur Bewertung*

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Foreword

Evaluation is an essential component of the instruction and education activity, as it provides information about the pupils' school progress, the faculty member's performance quality and the efficiency of the instructive-educative process. The most important addressee of the educational actions is of course the pupil, to whom evaluation / reevaluation provides the opportunity of knowing the level of performance obtained as compared to the one expected by him, by school and by the family.

In order to guarantee the success of the Step by Step alternative it is very important to use authentic, interactive and interdisciplinary evaluation methods, as a warranty of the fact that teaching and evaluation are complementary and that the acquired skills provide a good adaptation of the pupil to the current requirements.

An authentic evaluation must :

- ✓ highlight each pupil's successes rather than failures ;
- ✓ have an adjusting role, in order to know what, how and how much to teach ;
- ✓ be multidimensional, focussing on the social, emotional and cognitive course ;
- ✓ include an active, cooperating reflection between teachers and parents, teachers and pupils ;
- ✓ underline the importance of studying ;
- ✓ further success and optimal study for all pupils ;
- ✓ be clearly understood by all pupils.

Evaluation characteristics in the step by step alternative

Without neglecting the importance of the traditional evaluation methods, the Step by Step programme pays greater attention to the alternative/ complementary evaluation methods. In order to obtain a verisimilar, clear and representative image of each pupil, of his/her progresses and capabilities, evaluation must be continuous, comprehensive and carried out during all the classroom activities.

Irrespective of the method of evaluation used, it has to be stimulating. It must not inhibit the pupils, demotivate them ; on the contrary, it should encourage them and stimulate them to get trained more and better. In order to meet these requirements, evaluation must be designed and presented to the pupils as a joint interest, necessary and natural preoccupation.

This important component of the instructive-educative process must be understood as a manner of improving teaching and learning, of eliminating failure and of making constant progresses in the pupil's training.

The modern orientations in evaluation stress the necessity of discovering what knowledge, habits and skills the pupils possess during and at the end of the instruction rather than of detecting what they do not know. It is very important to help the pupils overcome their fears. In this respect, we need to provide an environment of trust and safety, departing from what the pupil can do better, from the premise that he has the right to make errors as well and also to be encouraged and helped by the schoolmaster.

The pupil must be listened to patiently, let express himself/herself, reveal himself/herself, utter his/her opinion, act. He must be accepted as is, helped to be himself/herself, let manifest his/her personality and own value, find his/her own way while developing his/her inclinations, preoccupations and interests.

In order to be able to make decisions for the children's education, the exact evaluation of what the pupils learns is crucial. In order to obtain an exact, correct and representative image of the capabilities and progress of a pupil, the evaluation process has to be continuous, solid and carried out during all the classroom activities.

The Step by Step programme for the elementary grades furthers a manner of evaluation that combines a variety of techniques and enables the teachers to share the pupils' progress with the parents.

Study aim and methodology

We started from the hypothesis according to which ***the evaluative strategies specific to the Step by Step alternative constitute motivating and mobilising factors in the activity of the pupils who attend the alternative-specific programme.***

One of the priorities of our investigating approach was the detection of the strengths, the weaknesses, the evaluative strategies specific to the Step by Step alternative and the determination of the emotional impact of the various evaluative strategies at the level of the pupils.

Theoretically speaking, we wish to grasp the implications that the alternative strategies of evaluation have upon the personality under shaping of the child that spends most of his/her time in the educational framework, where both learning, as a process, and the assessment of the school yield are utterly important. From the applicative point of view, we set examples of alternative methods of evaluation that favour the learning process and the individualisation of the school performances.

In the practice of educational research, a frequently seen method is the utilisation of the collective samples – group of pupils, group of faculty members. The investigations carried out in the educational context by groups of pupils, are deemed to provide the representativeness of the work groups, thanks to which the conclusions of the investigations made can be generalised.

The former sample - 18 subjects (pupils) includes the pupils of the 3rd B Step by Step form within the Bistrița ‘Ștefan cel Mare’ Elementary & Primary School. The group is balanced (9 girls and 9 boys).

The later sample - 10 subjects (faculty members) includes the schoolmistresses that manage the activity of the Step by Step grades within the Bistrița ‘Ștefan cel Mare’ Elementary & Primary School.

Within the practical-applicative research concerning the specificity of evaluation in the Step by Step educational alternative we used the questionnaire-based inquiry method.

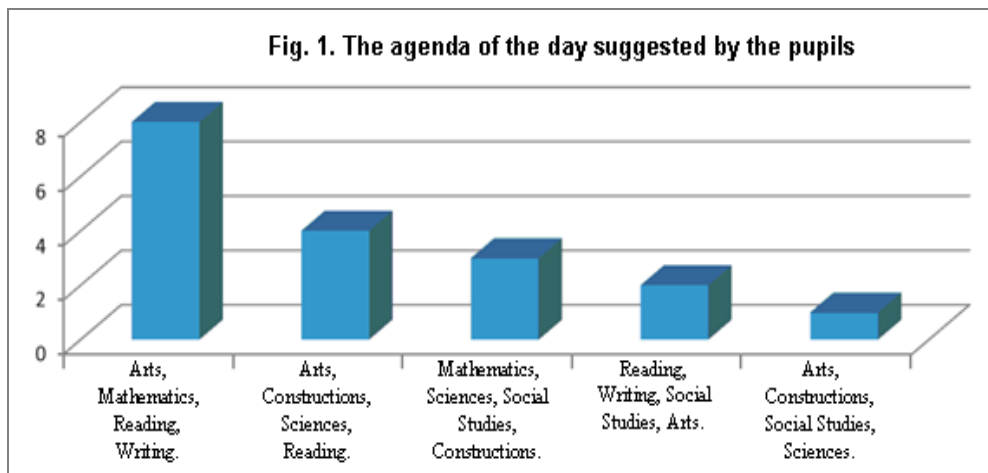
Results obtained

a. The results obtained at the questionnaire applied to the pupils

1. *If you were to draw up the agenda of the day yourself, what would the four centres that you'd choose be ?*

At this question, the four centres chosen by the pupils are set out in Fig. 1:

- Arts, Mathematics, Reading, Writing → 8 pupils
- Arts, Constructions, Sciences, Reading → 4 pupils
- Mathematics, Sciences, Social Studies, Constructions → 3 pupils
- Reading, Writing, Social Studies, Arts → 2 pupils
- Arts, Constructions, Social Studies, Sciences → 1 pupil.

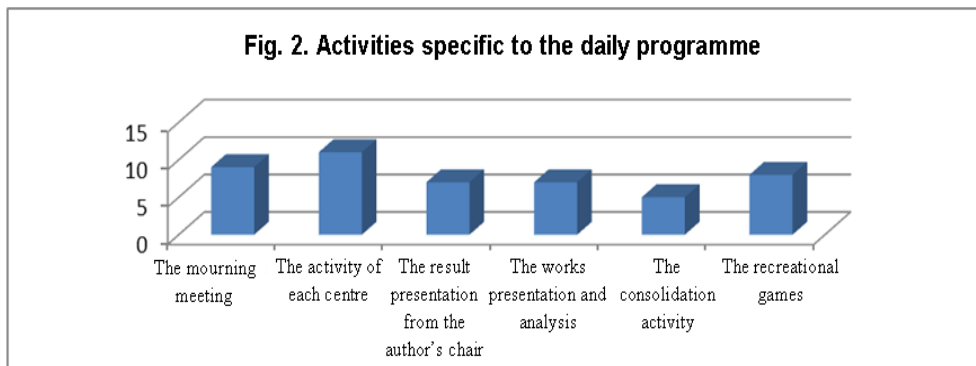


2. Which one of the activities specific to our daily programme do you like best ? Please number them up in the preferences order by using the numbers from 1 to 6.

- The morning meeting
- The activity of each centre
- The result presentation at the author's chair
- The works presentation and analysis
- The complementary activities
- The recreational games

The activity chosen by the most pupils as top priority was according to Fig. 2, namely *The activity of each centre* (11 pupils), followed by *The morning meeting* (9 pupils).

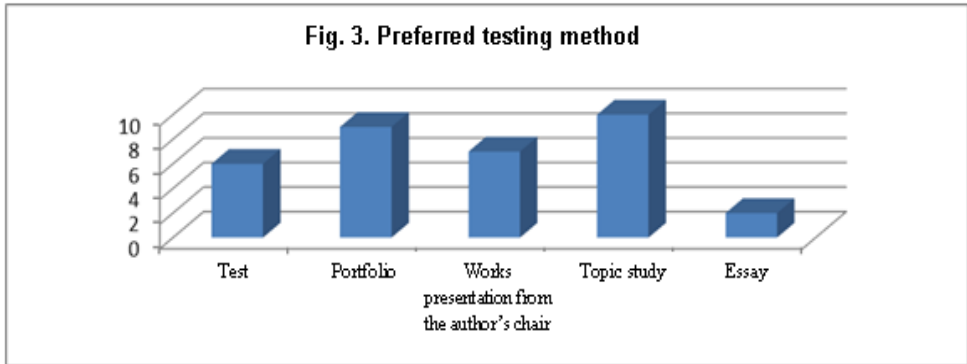
The following activities, in the order of the pupils' preferences, were : *The recreational games* (8 pupils), *The works presentation and analysis* (7 pupils), *The works presentation from the author's chair* (7 pupils) and *The complementary activities* (5 pupils).



3. What knowledge testing methods do you prefer ? Please number them up in the preferences order by using the numbers from 1 to 5.

- Test
- Portfolio
- Works presentation from the author's chair
- Topic study
- Essay

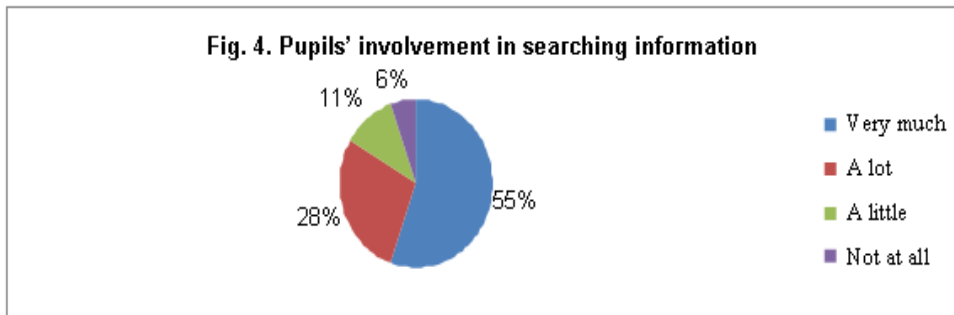
At item 3, the testing method preferred by the most pupils was the *Topic study* (10 pupils), and *portfolio* ranked second (9 pupils). The next testing methods, according to the pupils' preferences order, were : *the works presentation at the author's chair* (7 pupils), *test* (6 pupils) and *essay* (2 pupils).



4. How much do you get involved in searching information for performing a topic study ?

- very much
- a lot
- a little
- not at all

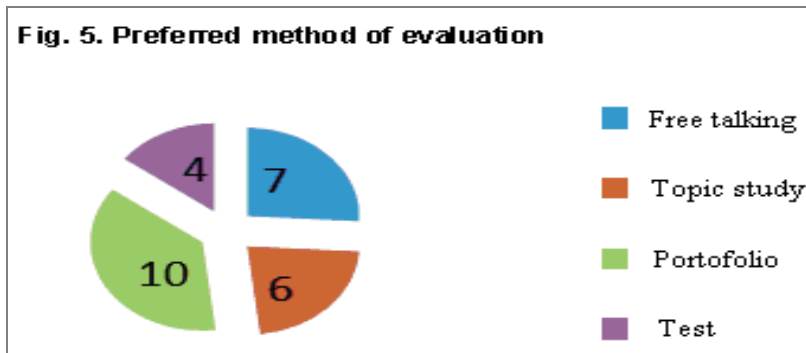
At this question, 10 pupils said that they got involved very much in searching information for performing a topic study, 5 pupils got involved a lot, 2 pupils got involved a little bit and 1 pupil admitted not getting involved at all (Fig. 4).



5. If you were a schoolmaster / schoolmistress, how would you prefer to check up your pupils' knowledge ? Why ?

At this question, 7 pupils answered that if they had been schoolmasters, they would have preferred to check up their pupils' knowledge by discussions about the works made at the activity centres, because they could remedy their mistakes on the spot. 6 pupils chose the Topic Study as a knowledge checking

method, because they like to search for information and to make drawings. 10 pupils would prefer to check up the pupils' portfolios, because they say many things about what a pupil knows and can and how tidy and gifted for drawing he/she is. Only 4 pupils chose the test, because it is looked through quickly and shows what the pupil knows.



After analysing the data obtained by the questionnaire application one may say that pupils prefer the inter-disciplinary approach of learning, that they have initiatives and that they prefer interactive activities or those based on creativity and investigation.

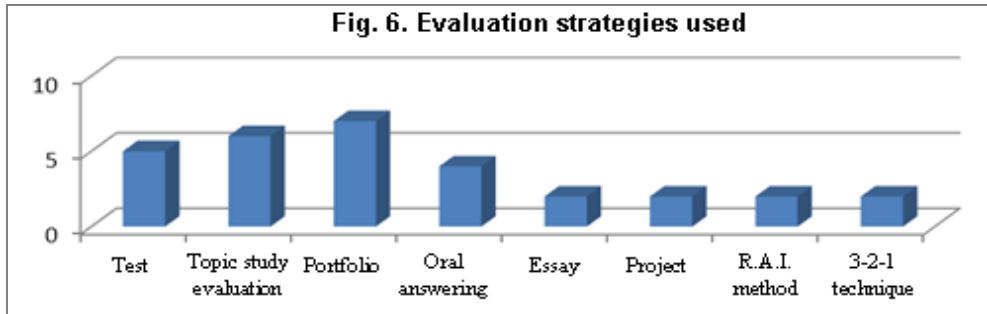
In conclusion, for the pupils from the Step by Step alternative, evaluation does not represent an inhibiting factor, but a means of asserting the acquired knowledge, of correcting the mistakes and an occasion to be appreciated by the faculty members and the other mates.

b. The results obtained at the questionnaire applied to the primary school teachers

1. *What methods, techniques and strategies of evaluation do you use in the didactic activity? Please number them up in the preferences order by using the numbers from 1 to 6.*

- Test
- Topic study evaluation
- Portfolio
- Oral answering
- Essay
- Project
- R.A.I. method
- 3-2-1 technique

At item 1, most faculty members chose *portfolio* (7 faculty members), then the *topic study* (6 faculty members), *test* (5 faculty members), *project* (5 faculty members), *oral answering* (4 faculty members), *essay* (2 faculty members), *the R.A.I. method* (2 faculty members) and *the 3-2-1 technique* (2 faculty members).



Test Topic study Portfolio Oral answering Essay Project R.A.I. method 3-2-1 technique

2. Which one of the following aspects do you stress in elaborating the evaluative strategies? Please number them up in the preferences order by using the numbers from 1 to 4.

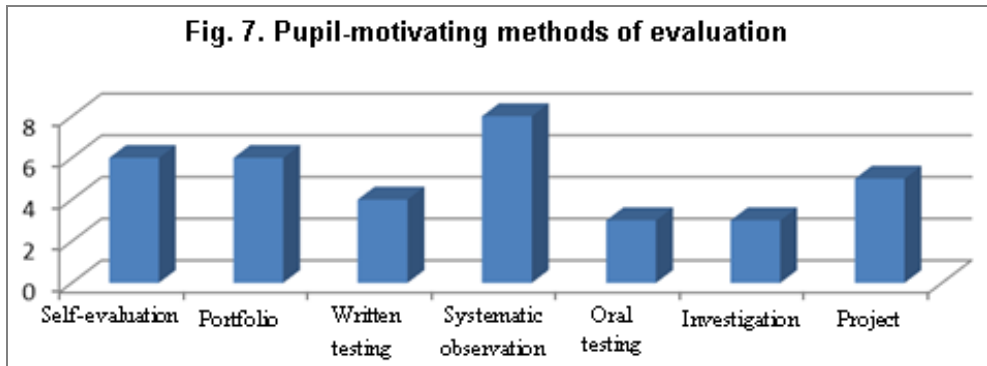
- knowledge accumulation
- skill shaping
- the creative utilisation of the information for solving problems
- causing links detection

The aspect considered to be the most important in elaborating the evaluative strategies, which 8 faculty members out of 10 chose, is skill shaping. The creative utilisation of the information for solving problems is the next important aspect chosen by 6 faculty members, then the causing links detection (4 faculty members) and knowledge accumulation (2 faculty members).

3. Evaluation can be mostly released from tensions and from the emotionally negative tonus, becoming motivating and not stressing for the pupil by using the methods below. Please number them up in the preferences order by using the numbers from 1 to 7.

- Self-evaluation
- Portfolio
- Written testing
- Systematic observation
- Oral testing
- Investigation
- Project

At item 3, the method deemed to be the most motivating for the pupil is *the systematic observation* (8 faculty members), followed by *self-evaluation* (6 faculty members), *portfolio* (6 faculty members), *project* (5 faculty members), *written testing* (4 faculty members), *investigation* (3 faculty members) and *oral testing* (3 faculty members).



4. What are the advantages of using portfolio as a method of evaluation ?

In the faculty members' opinion, the advantages of using portfolio were the following :

- to include in the evaluation act certain products of the pupil's activity which normally are not envisaged ;
- to respect each pupil's own working rhythm, while stimulating his active involvement in the work tasks ;
- to develop the self-evaluation capacity ;
- to release the pupils from the tensions and the emotionally negative tonus that accompany the traditional forms of evaluation.

5. When they make mistakes, your pupils see in that :

- an occasion of asking for help
- a failure
- a positive experience for learning
- a reason to be sanctioned

The offered answers envisaged two variants, namely : the pupils see in that *an occasion of asking for help* – it is the variant chosen by 5 faculty members ; and the fact that the mistakes are for the pupils *positive experiences for learning* – 5 faculty members.

Please note that no faculty member thinks that the pupils see mistakes as failures or reasons to be sanctioned.

6. Does systematic observation represent an evaluation method by means of which relevant information as to the pupils' performances can be gathered? Why?

The faculty members agreed on that and supported the idea that systematic observation was a method of evaluation by means of which relevant information about the pupils' performances can be gathered, because :

- it provides data on the pupils' performances from the viewpoint of their capacity of acting and relating, of their competence and skills ;

- it is carried out in familiar contexts, where the pupils have several opportunities of proving their knowledge and skills than within the pencil-paper kind of tests ;

- it does not stress only the pupil's ability of communicating with the faculty member (the latter one being the one who records and interprets the pupil's typical behaviour or other performances).

After analysing the data obtained by applying the questionnaire to the 10 faculty members that work in the Step by Step alternative one may say that they regard evaluation as a manner of improving teaching and learning, of eliminating failure and of making constant progress in the pupil's training and that upon selecting the evaluative strategies they take their inspiration from a variety of situations, they involve the pupil in the process and use open, cumulative, continuous forms.

Conclusions

After applying and interpreting the questionnaires of the two samples and as a result of the discussions had with the faculty members working at the grades that guide themselves to the specific Step by Step methodology, we can draw the following conclusions :

- In the didactic process one should always take into account everything that the pupil has and needs in order to manifest and develop himself/herself as harmoniously as possible. This idea must become a real education principle, which any faculty member must assimilate and observe.
- No measuring instrument can either be deemed to be universally valid for all goals and contents or can provide a comprehensive account of the pupils' changes and results.
- The faculty members use a variety of continuous evaluation strategies, avoiding prejudices and labelling, encouraging the pupils to become capable of judging their own work and their mates'.
- The specific didactic approach analyses the information gathered, individually or in a team, in order to assess and plan the next steps of the child's individual progress.

- The information linked to the pupils' progress is systematically notified to the parents and, jointly with the faculty members, it generates solutions for the existing preoccupations and creates individual goals on the short and long run.
- Unlike traditional school education, where the race for obtaining good honours is fed by the way in which the schoolmaster reserves the grades or the honours of the pupils who do better than others or learn faster than others, the Step by Step alternative constantly monitors the pupils' personal progress and awareness, while acknowledging the mistakes and endowing them with specific self-correction techniques.
- *The evaluation strategies specific to the Step by Step alternative infer intrinsic positive motivations for learning*, seeing that teaching is individualised and the pupil relates to his/her own evolution. These elements estrange pupils from real learning and focus them on the results in themselves, ignoring the importance of what has been learnt and their role in life.
- The selection and the application of the strategies appropriate to each pupil and to each learning experience result in solving with pleasure work tasks adequate to his/her own level, in integration and inter-relating.
- The integrated approach of learning and the utilisation of the alternative methods of evaluation stimulate the creation of a relationship of collaboration, trust and mutual respect between the schoolmaster and the pupils, on the one hand, and among pupils, on the other.
- The utilisation of the complementary methods of evaluation encourage the creation of a pleasant, relaxing learning climate, the pupils being evaluated in their ordinary learning environment, by contextualised tasks (project and portfolio elaboration), which at the same time are training tasks and evaluation tests.
- Evaluation is oriented toward what pupils know and can do rather than toward what they do not know or cannot do. Nowadays one may hardly assert that a pupil is good and another one is bad. Each pupil has certain capabilities that another one does not, he/she has a certain type of dominant intelligence, which, once acknowledged by the faculty member, has only beneficial effects on the pupil's activity.

The main limit of the study is linked to the utilisation of a reduced sample and instrument set, which cannot be deemed as representative for the Step by Step alternative in Romania. The results are valid for the educational facility where the study was carried out.

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EFFECTIVE STRATEGIES FOR TEACHING AND LEARNING IN UNIVERSITY SEMINAR

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ABSTRACT. In the present study we intend to identify the manner in which seminars in higher education are performed, and also the methods of teaching used during these seminars. For this purpose, we have applied a semi-structured interview to students of the Faculty of Psychology and Sciences of Education, the department for Primary and Early Years Education, numbering a total of 75 subjects. The interview comprised six questions regarding the methods of teaching used in university. For illustration, we present and analyse the answers received for four of the questions in the interview. The analysis of the answers offered by the students reveals the fact that, at the subject focused upon, interactive and applicative seminars are organised most often.

Keywords: *teaching, learning, strategies of teaching and learning, academic seminar.*

ZUSAMMENFASSUNG. In dieser vorliegenden Studie wollen wir die Methoden der Bereitstellung und die Lehrmethoden in den Seminaren der Hochschulbildung vorstellen und identifizieren. Dafür haben wir einen semi-strukturierten Interview den Studenten der Psychologie und Erziehungswissenschaft, Institut für Pädagogik der Primär -und Vorschulbildung, in insgesamt 75 Fächern verwendet. Das Interview umfasste sechs Fragen im Bezug auf die verwendeten Lehrmethoden in den Hochschulen. Zur Illustration präsentieren wir die Antworten auf vier der gestellten Fragen im Interview. Die Analyse der Umfrage zeigt, dass die Studenten oft der Disziplin unterliegen, Praktika gemacht haben und an interaktive Seminare teilgenommen haben.

Stichwort: *Lehre, Lernen, Lehr-Lernstrategien, akademischer Seminar*

Theoretical background of the study

Teaching presupposes the organisation of learning experiences which should trigger desirable changes in the behavior of pupils and students. From a pragmatic perspective, teaching means projecting the desired changes, stating

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the nature of these changes (by formulating the objectives that should be followed), determining the content of these changes, organising, leading, and monitoring the changes, evaluating the level at which the changes are realised (Ionescu, M., 2003, p. 90).

The main stages of the efficient teaching process are: recounting an example, a material concretely and/ or verbally: data, information, events; organising and managing activities that make the most of the concrete and verbal material offered; offering support to pupils and students for observing, analysing, comparing, applying, synthesizing; extracting the essential (together with the pupils and the students) and fixing it in notions, concepts, judgments, reasoning; operationalizing the knowledge of pupils and students by devising and solving applicative exercises and problems, theoretical and practical instruction tasks, by organising activities of individual work etc. (Bocoş, D., Jucan, D., 2007).

With regard to the manner in which the student approaches learning during seminars, this can refer to the superficial or the in-depth processing of the content. If the assistant professor can do very much for encouraging the choice of an in-depth processing (through the content, and the style of teaching), the student is the one who must eventually assume a personal strategy/approach towards studying and learning, which will result in a deeper involvement in the content and a monitoring of the progress. Stimulating an in-depth approach, especially during seminars, can also be accomplished through different learning activities to which the student is exposed. The assistant professor stimulates the student so that, within the field of content, the student should acquire learning skills, as well as knowledge of the subject of study. Encouraging him/her to think of what has been taught might coincide with encouraging him/her to think of how to study; thinking can be stimulated through the approach that the student assumes with regard to the newly-built knowledge, and monitored within his/her own cognitive schema. For the organisation of seminars with students where moments of individual study, debates, reflections etc. should prevail, the assistant professor carefully suggests strategies of teaching and learning, and techniques for stimulating the intellectual activity.

Hypotheses of the research

The present research performs an analysis of the situation existent at the level of educational reality, regarding the frequency of the use of teaching methods, employed during seminars in higher levels of education.

Participants and instruments

The research was conducted by applying a semi-structured interview to students of the Faculty of Psychology and Sciences of Education, the department for Primary and Early Years Education, numbering a total of 75 subjects.

Procedure

The interview comprised six questions regarding the teaching methods used in university.

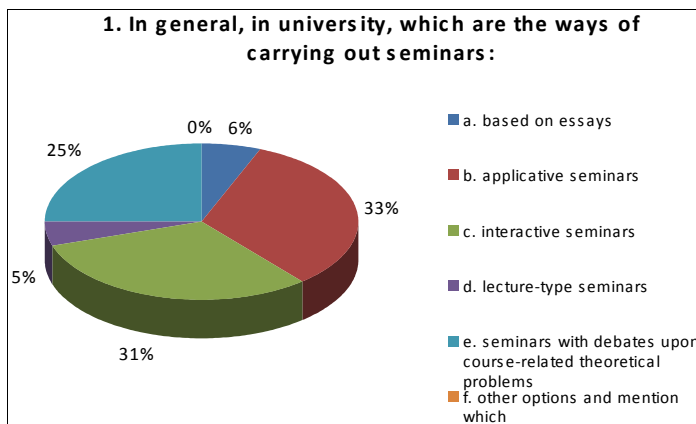
Aims of the research

In what concerns the informational content followed by the investigation conducted at the level of the students, we mention the fact that it had as main objective revealing the following aspects:

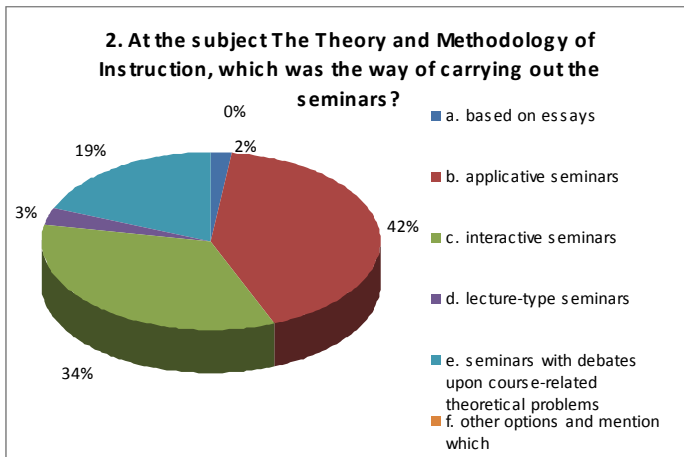
- the frequency of the use of various methods of carrying out seminars;
- the extent to which certain ways of carrying out academic seminars are used at the subject The Theory and Methodology of Instruction;
- the degree of utility, as perceived by the students, of the ways of carrying out the seminar at the subject The Theory and Methodology of Instruction;
- the frequency of the use of different didactic methods in the seminar of The Theory and Methodology of Instruction.

Results of the research

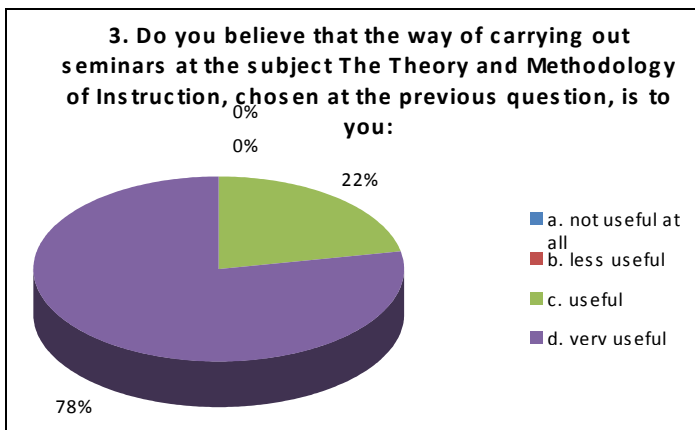
For illustration, we present and analyse the answers received at four of the questions of the interview. It is observed that the most often used seminars in university are the applicative ones, with 33% of the answers, and the interactive seminars, 31% of the answers. Moreover, the option when theoretical problems from the course are debated during the seminar is quite frequently used, with 25% of the answers. We discover that seminars based on essays, an lecture-type seminars, are still used in university (11% of the answers).



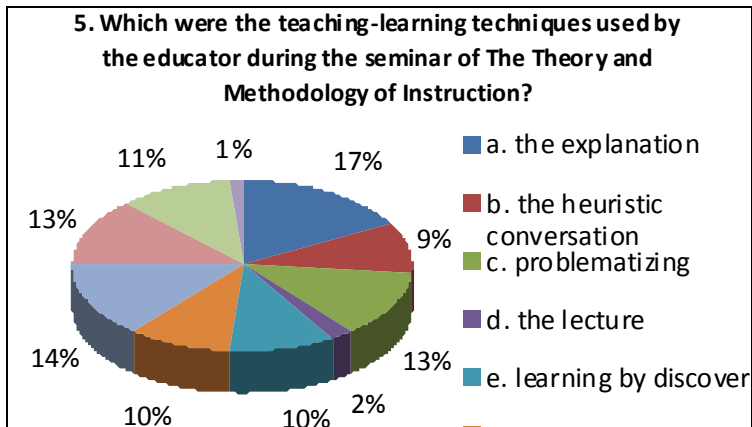
For the subject The Theory and Methodology of Instruction, applicative seminars have been used, 42% of the answers, and interactive seminars, 34% of the answers. Moreover, during the seminars of this subject, 19% of the answers show that debates about course-related theoretical problems have been preferred. An interesting aspect is the fact that the seminar based on essays and the lecture-type seminar were only used sporadically, as shown by 5% of the answers.



We are delighted to discover that the ways of carrying out seminars used at the subject The Theory and Methodology of Instruction, previously valorised (applicative seminars and interactive seminars) are considered by students to be very useful, 78% of the answers, and useful, 22% of the answers.



During the seminar of the subject The Theory and Methodology of Instruction, the methods of teaching-learning were: explanation 17% of the answers, learning by discovery, problematizing 13%, heuristic conversation.



Discussions

Further on, we will try to present a few strategies or methods which, in our opinion, have led to more efficient teaching and learning activities of students at the subject The Theory and Methodology of Instruction, and implicitly to improving their school performance. These strategies have also led students to offer the answers given above. Such a strategy was structured by starting from:

a. The analysis of the teaching-learning task by the educator, together with the student. The tasks are comprised of:

- The criterion of success, the student representing to himself the object and the result of learning,
- The structural criterion, the intellectual undertaking for the realisation of the task,
- The procedural criterion, various ways of carrying out the learning task,

b. Establishing the succession of the operations necessary for the realisation of the learning task,

c. The independent performance of the learning tasks by making use of personal cognitive strategies,

d. The permanent monitoring of the performance and of the correctness of the task by the educator and the student,

e. The evaluation, but especially the auto-evaluation of each stage, but also the final evaluation.

Such a division into stages, like the one presented above, represents only an initial approximation. The stages identified, and their manner of articulation within the structure of the process of teaching-learning, are aspects which differ according to the specific of each teaching activity, to the content which is learned, to the particularities of each student etc.

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THE EFFICIENT MANAGEMENT OF ACADEMIC LEARNING

ADRIANA DENISA MANEA*

ABSTRACT. In contemporary society, lack of time has become a major problem for all of us, so that the pressure of time determines engaging in efficient actions . Hence the need to increase the efficiency of learning activities through proper management of time, the execution of the learning plan, hygiene and ergonomics of the learning space, applying the law of stimulating variety through intellectual compartmentalization. The present study meets the needs of finding optimal solutions in order to obtain an efficient academic learning. By definition, the learning plan is a complex process that generates an objective and thorough knowledge of the surrounding world, social life, knowledge that subsumes both the processes and products of human thought, experience and collective creations.

Keywords: *effective learning, academic learning, learning management, learning conditions, factors of learning*

ZUSAMMENFASSUNG. In der heutigen Gesellschaft ist der Mangel an Zeit ein großen Problem für uns alle geworden, so dass Zeitdruck führt zu Durchführung von festen und wirksamen Aktionen. Daraus ergibt sich die Notwendigkeit, die Wirksamkeit des Lernens zu erhöhen durch folgende Maßnahmen: ordnungsgemäße Verwaltung der Zeit, Durchführung des Lernplans, Hygiene und Ergonomie des Lernraums, Durchsetzung von Gesetzen in Bezug auf vielfältige Stimulierung den Intellekt. Diese Studie erfüllt die Bedürfnisse der Suche nach optimalen Lösungen, um eine effektive akademischen Lernens zu erreichen. Wir meinen, das Lernen einer komplexen Prozess, der objektive und gründliche Kenntnisse der umgebenden Welt, soziales Leben und Wissen erzeugt, die sowohl die Prozesse und Produkte des menschlichen Denkens, als auch der Erfahrung und kollektiven Kreationen subsumiert.

Schlüsselwörter: *effektives Lernen, akademisches Lernen, Lernmanagement, Lernbedingungen, Faktoren des Lernens.*

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Introduction

Learning to learn is an objective necessity of the contemporary world, especially since, according to I. Neacșu, learning is an attitude towards knowledge, towards life; acquiring and practicing new methods, new skills and values necessary to live in an ever changing world; the process of preparing to face new situations (I. Neacșu, 2006). Cognitive strategies mediate the relationship between the motivation for learning and academic performance. Regarding the relationship between motivation, self-regulated learning and academic performance, Zimmerman and Martinez-Pons (1988) showed that motivation and self-regulated learning are closely correlated. (Zimmerman, M. - Ponce, 1988). In the studies included in the doctoral thesis “Self-regulated learning strategies in an academic context” of author A. Boiler, the results show that self-regulated learning strategies efficiently predict academic performances and that this prediction is more efficient if it intervenes on metacognitive strategies, in the direction of optimization of their use by students. (A. Cazan, 2012). By challenging the role of metacognition in learning, W. Peirce also addresses the relationship between metacognition and motivation. The author believes that metacognition influences motivation, because it firstly influences self-efficacy and attribution. When the pupils / students obtain some results in a situation assessment (a simple exam) – and especially when these results are weak and unexpected - pupils / students try to find an explanation for this situation and then perform a mental inquiry (W. Peirce, 2003). Annie Murphy Paul, author of “Brilliant: The New Science of Smart”, details how to use the testing method for efficient learning, as the research shows that the simple act of calling upon the information from memory helps strengthen knowledge and subsequent recollection. According to the four-stage experiential learning model of Kolb, the pupil / student must be willing to play an active role in the experience, to be able to reflect on the experience; to have and to use analytical skills for conceptualizing the experience; and to have decision-making and problem solving skills, so that they can use the new ideas derived from the experience (Kolb, 1984). That is why, once again, we are concerned with identifying the constellation of factors of cognitive and / or metacognitive order that favorably influence learning and practical-actional mechanisms likely to lead to quality learning.

Research coordinates

The purpose of the research: Determining factors of cognitive and /or metacognitive order that favorably influence learning and identifying actional-motivational leverages in order to determine the production of efficient learning.

The research methodology: The method used was the questionnaire based survey. The questionnaire comprised 10 closed questions with items of choice and 4-5 possible answers.

The target group: The questionnaire was applied to a total of 95 students included in the form of full-time education, at the Faculty of Psychology and Educational Sciences, Babes-Bolyai University, Cluj-Napoca.

The presentation and analysis of results

Analysis of the results refers to a number of 91 respondents, 4 of the questionnaires being eliminated because of errors in completion (missing responses to an item or marking two correct answers to an item).

Thus, to identify the self-appreciation mode by each of our respondents, under item 1 we have the following results: three of the students consider themselves to be very good while the vast majority consider themselves good, 80.2% respectively; 15 students claim to be average, representing 16.5% in our sample. Surprisingly it seems that no students consider themselves weak, which indicates a high self-esteem of the entire group surveyed. The results recorded are presented in Table 1.

Table 1.

Student type

Answer options	N	%
Very good student	3	3,3%
Good student	73	80,2%
Average student	15	16,5%
Weak student	0	0%

Item 2 completes item 1 in the sense of assessing the degree of sincerity and honesty in the self-evaluation expressed in the previous item. The results, summarized through Table 2, indicates an equitable assessment of very good students, in the sense that they indeed have average grades between the values of 9 and 10 in the previous year or semester. The data analysis shows that, in general, the students' performances are good and very good, most with average grades of 8 to 10, representing 65 of the students surveyed, while poor performances between 6-6.99 are registered among 2.2% of respondents.

Table 2.

Final marks

Answer options	N	%
9-10	30	33%
8-8.99	35	38,5%
7-7.99	24	26,4%
6-6.99	2	2,2%
under 6	0	0%

Through the third item we wanted to highlight the perception of students in relation to their own participation in lecture and seminar activities. From the results presented in Table 3 we can notice, as an encouraging fact, that three quarters of the sample polled consider their participation in lecture and seminar activities as very active (12.1%) and active (64.8%). The fact that a large number of students, 23.1%, consider that they are only slightly active in lecture and seminar activities constitutes a warning to the trainers to reorganize these activities and to generate actions to determine the active participation of the students.

Table 3.

Participation in courses/seminars

Answer options	N	%
Very active	11	12,1%
Active	59	64,8%
Slightly active	21	23,1%
Passive	0	0%

The analysis of responses to item 4 allows us to highlight the students' preferred way of taking notes. Thus, as can be seen in Table 4, half of the students (56.0%) prefer to write down only the essential data. Writing down as much as possible of the lectures delivered by the teacher is carried out by 25.3% of respondents while 15.4% prefer to selectively record only what is relevant to them. Commendable is the fact that a very small number of students, 3.3%, are concerned with copying the presented slides. We appreciate that as a correct behavior, which supports effective academic learning, taking notes in a conscious and responsible manner by 81.3% of the questioned students. This enables us to appreciate that the students' expectations regarding the content transmitted during the courses are high, fact that implicitly increases also the responsibility of the academic teaching staff regarding the selection and transmission of information.

Table 4.

Taking notes

Answer options	N	%
Essential data	51	56,0%
As much as possible	23	25,3%
Copying the presented slides	3	3,3%
Selectively noting what is of personal interest	14	15,4%
No noting at all	0	0%

In order to obtain a performance in academic learning, importance is given to the learning course used in preparing for the exam. Through item 5 we intend to identify the preferred tools accessed by the students in achieving their training. From the responses received and presented in Table 5 we can observe that the course materials represent in 58% of the cases, the basic element used by the students in preparation for the exam. At the same time, using handwritten notes is preferred by a large number of students, 36.3%. Unfortunately, only 5.5% of the students mainly use mandatory reference sources in preparing for the exam, which entitles us to state that students are not willing to search for information, but prefer to acquire information from the course materials and the handwritten notes from lectures and seminars. Equally disturbing for the formation of competencies of identifying and selecting information from the sphere of a certain subject area is the fact that none of the respondents prefer other sources in order to prepare for the exams.

Table 5.

Preparation materials for the exam

Answer options	N	%
Handwritten notes	33	36,3%
Course materials	53	58,2%
Mandatory reference sources	5	5,5%
Other sources	0	0%

In efficient learning, certain conditions must be met, which is why item 6 covers some of the conditions that it entails. As we can tell from the data presented through table 6, half of the respondents (50.5%) are of the opinion that the basic condition of efficient learning is “systematic learning throughout the

semester.” This gives us the right to assert that assuming the role of a student the constantly participation and involvement in sustaining the learning activities is perceived by a significant number of students as being a success in obtaining academic performance. In the hierarchy of importance of efficient learning conditions, we can notice, in second place, “drawing schemes to facilitate a better understanding of the subject” (19.8%). “The optimal dosage of time for learning” is situated to a short distance, of just a percentage, namely 18, 7%. The fact that a percentage of 11.3% of respondents consider “effort invested in learning” as an essential condition of learning allows us to say that the determination; the personal motivation level may constitute an important factor in achieving performance. Surprising is the fact that „giving up on any pastime activities” is an auxiliary condition in producing an efficient academic learning as long as specialty studies confirm the fact that alternating the cycles of intense learning with relaxation moments through activities that involve other nerve centers than the ones involved in learning is beneficial to the overall performance.

Table 6.

The condition for efficient learning

Answer options	N	%
Systematic learning during the semester	46	50,5%
The effort invested in learning	10	11,3%
Optimal learning periods	17	18,7%
Drawing schemes to facilitate understanding a subject	18	19,8%
Giving up on any pastime activities	0	0%

As far as the preferred learning period, through the next item, „When do you prefer to learn?”, the results obtained are summarised in Table 7. The analysis of the results allows us to notice that morning is the preferred learning period by most of the students polled, 40,7%. 30,8% of respondents prefer to learn all day long, which we believe to be natural, considering the general schedule of courses and seminars. Although a smaller number of students prefer to learn in the evening, respectively 17.6% and even lower at night, 11.0%, we believe that a more careful management of the time allotted for study and rest is required, in order to obtain and maintain a high level of academic performance in the medium and long term.

Table 7.

Learning period

Answer options	N	%
Morning	37	40,7%
All day	28	30,8%
Evening	16	17,6%
Night	10	11,0%

Motivation for learning is constituted in an inexhaustible resort regarding recording performances. Therefore, through item 8, we want to find out the students' assessments regarding noncognitive factors that influence efficient learning. Thus, as we can see in Table 8, 54.9% of respondents said that their learning is efficient in courses that they consider to be fundamental in preparation for the desired profession, 25.3% believe that they are most effective in learning courses where they appreciate the teaching style of the teacher, 18.9% think that efficient learning occurs in subjects they like. Only one student states that learning is effective in subjects he considers difficult, we believe that it is so because his mobilization is at a maximum and the investment of effort is substantial.

Table 8.

Learning is more efficient regarding

Answer options	N	%
Subjects I like	17	18,7%
The courses that I consider fundamental for the job I would like	50	54,9%
The courses where I like the teaching style of the teacher	23	25,3%
Subjects that I consider more difficult	1	1,1%

From the data presented above we notice the importance of the teacher's teaching style in determining the efficient learning of the student. At the same time, the high percentage of students (54.9%) who consider that their learning is efficient in courses considered as basic in the initial training undertaken entitles us to assert that awareness has occurred regarding the fact that only a good theoretical preparation can lead to obtain further professional performances.

Conclusions

Following our investigations, we can draw a number of conclusions that we present below:

- the practice of effective time management for study and rest is imposed, in order to obtain and maintain a high level of academic performances in the medium and long term, especially since according to the study of the researchers at the University of Wisconsin, the vital role of sleep in efficient learning is confirmed, in the sense that the stimulation is more intense as the development of synapse is more intense and the need for sleep is greater. (Simionescu, R., 2013)

- systematic learning throughout the semester, followed by the development of schemes in order to achieve a better systematization of the subject and the optimal dosage of the time allotted for learning constitutes actional leverages in efficient learning. This conclusion of our study is in line with the psycho-hygienic and ergonomic requirements of efficient learning.

- The optimal time for learning meant to ensure the effectiveness of learning is the morning. Our results on the optimum time for the production of efficient learning are consistent with the specialty studies which indicate a peak of learning between 8-13 o'clock in the morning while in the evening; the period of 17 to 21 is preferable for the rehearsal of the learnt materials.

- the vast majority of students prefer to prepare for the exams by using the course materials, 58.2%, as well as handwritten notes taken in class, 36.3%. Therefore, we believe that a pronounced mobilization of the students in using as many sources of learning and eliminating their dependence on the course materials.

- learning is efficient in subjects considered by the students as having an increased importance in order to ensure a proper preparation for their chosen profession, in the opinion of 54.9% of respondents, requiring decision makers in curriculum development to assume the responsibility in joining the efforts to ensure an appropriate initial training. At the same time, the fact that 25.3% of the students consider their learning as being efficient in courses where they enjoy the teacher's teaching style compels teachers to introspect and reflect on their own teaching style.

Recognizing the fact that each human or social agent represents a single, independent entity in the learning process, we believe that efficient academic learning requires self-determination and commitment, and its mode of production varies from case to case, depending on the particular and experiential circumstances recorded.

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ROLES OF THE SCHOOL MANAGER FROM THE LEADERSHIP PERSPECTIVE

CARMEN-VALERIA CHERVASE*

ABSTRACT. School management analysis has emphasized a series of characteristics both similar to and different from other organizations. It has been proved that the specific of school management comes from the particularities of the school activity especially from the existence of two main activity fields – educational and administrative – which have led to other school particularities such as the unique relationship between certain personnel members (teacher and pupils), the variety of school cultures and subcultures, the school climate based on an environment totally dedicated to education etc.

Starting from the analysis of some management models, we emphasize the acute need of implementing several changes in school management. They are required both by the latest advances in theoretical analysis of the school organization and everyday management practice which has highlighted a number of specific solutions to real problems identified in education.

Keywords: *management, "facilitator" and "transformational" leaders, principal/headteacher, formal and informal leader*

ZUSAMMENFASSUNG. Die Analyse der Schulführung hat eine Serie von Eigenschaften nachgewiesen, die sowohl ähnlich als auch verschieden von jenen anderer Unternehmen sind. Man hat bewiesen, dass das Spezifikum des Schulmanagements in den Partikularitäten der Schulentätigkeit besteht, besonders hinsichtlich der zwei Haupttätigkeitsbereiche - erzieherisch und verwaltend - und diese haben zu anderen spezifischen Eigenschaften geführt, wie z.B. die einzige Beziehung zwischen dem Lehrer und den Schülern, die Vielfältigkeit der Kultur und Unterkultur der Schule, das Ausbildungsumfeld etc.

Von der Analyse einiger Managementsmodelle abgehend, kann man die Notwendigkeit einiger Veränderungen im Schulmanagement bemerken. Die Forschung in der Organisationstheorie als auch das praktische Management verlangen eine Reihe von Lösungen für die wirklichen Probleme des Erziehungswesens.

Stichwort: *Management, "Vermittler" und "transformierende" Leiter, Schuldirektor/Schulleiter, formelle und informelle Leiter*

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Classical Organizations and Managers

There are various challenges and risks an organization may face in order to become competitive. There are many aspects which make the difference between organizations, in terms of success or failure. Some of them refer to the manager's view on focusing the human potential or the particular abilities of the employees in order to reach the organization's goals, despite the power policy or private interests – phenomena which appear in every organizational environment. Research in the management field has revealed the idea that an organisation can be successful if based on mutual agreement and commitment of several persons who wilfully accept to be led by one person. From this perspective, it is interesting to study the organization-individual relationship that gives us answers regarding loyalty, trust, feelings like "being part of a group".

Literature on management has identified two classic types of managers developed within the North American organizations and taken over by the Japanese ones in the second half of the last century.¹ The first type was practiced in the American companies and successfully copied by the Japanese until 1990.

These organizations recruit people after their graduation, invest in the employees' training and manage to transform them into their own specialists. The disadvantage is that they become an economic value only for the company they work in, and not for the others on the economic market. In this case, the staff is not known outside their own organization, it is appreciated only within the company. The great risk is that, at a possible collapse of the firm, the employees would not immediately find a place to work on the labor market, as they are too specialized only for their mother-organization. This happens because the organization does its best for its own personnel: invests in training programs to improve the knowledge of employees; remuneration is established according to the scope and position in the hierarchy etc. Therefore in time the employees become bonded through commitment and loyalty to the firm. A reliable relationship between the company and the employees is developed in this particular case: the company makes use of its employees' skills, knowledge, professional experience, which represent a competitive advantage when dealing with other companies; in turn, the employees are sure they could stay for a long time in that company.

Gradually, the great North American businesses have abandoned this model as another type of managers has emerged: it consists in recruiting specialist managers, with great experience in the management field, who have worked in other companies and have proved a real potential in leadership, managers who have had successful performances in other previous workplaces.

¹ In Allaire Y., Fîrşirotu M. (1998), *Management strategic*, Editura economică, Bucureşti

They are targeted by other organizations which want them in turn of huge wages, as they are seen as professionals who can perform in any organization irrespective of its activity field.

The development of this new kind of social contract makes the employees understand that the company no longer offers a high degree of stability, therefore, as "*good managers of their own careers*" [Putnam & Pacanowski (1983), *Communication and Organizations: an Interpretative Approach*, Newbury Park, California], they try to make themselves known both inside and outside the organization, through short term initiatives and spectacular results.

This approach of the relationship between the individual and organization generates the inception of two management concepts. The first one was influenced by those leadership theories which explain how the leadership is born, and if the leaders have genetical leading features or the circumstances make them become leaders. To this regard, the management of an enterprise is based on exceptional people-managers, innovators and entrepreneurs - heroes by birth, motivated by a strong need of success. Still they are not the product of an organizational culture. The disadvantage of this system is that it deepens the management gap between leaders and performers. The value of the hero-manager consists of "*good results in passing from one firm to another, but they have a lasting effect, because an organization is considered to be successful when it succeeds in making ordinary people do their best*" [Allaire Y., Fîrșirotu M. (1998), *Management strategic*, Editura economică, București] for the company, in other words, no matter how good the managers are, they can't lead the organization alone. It is necessary to concentrate all human energies and nurture an organizational culture in order to bring all the members of the organization together and work for the benefit of the company and themselves.

The second concept assumes management as a profession². This means that managers, as any other people with a profession for which they have been trained like doctors, lawyers etc. make a profession from leading the others regardless of the activity field and act in accordance with their professional ethics.

This manager offers his services to various companies, as the doctor cares for the sick and he gradually feels bound by the profession rather than the organisation. The disadvantage of this type of relationship is derived from the erroneous idea that the organization is a tool that serves to the manager's personal practices. To become truly professional in practicing his managerial abilities, the manager must undergo specialized training courses, develop the ability to make judgements and take decisions, based on a great managerial experience. This managerial training system must provide the qualification for a profession and a certificate to be recognized in this profession as a result of a specialized university or post-university training in management.

² In Allaire Y., Fîrșirotu M. (1998), *Management strategic*, Editura economică, București

We shouldn't forget the fact that "to lead" means to build organizations and the manager, in addition to his administrative role arising from the formal aspects of the activities, must exert influence on the scope of the informal level of the organization, becoming its principal architect by exploiting the human resources and relationships between the members of the group. He should be responsible for an open climate which can lead to a healthy organization. Otherwise, he is likely to be a simple servant, devoted to his profession rather than to his organization.

School Management Particularities

From a complex organizational perspective, the school analysis has emphasized a series of school characteristics which have determined its specific type of management. The specific of the school management comes from the particularities of the school activity especially from the existence of the two main activity fields – educational and administrative – which have led to the appearance of three categories of personnel – teachers, administrative staff and pupils. In comparison with other types of organizations which develop only two main categories of personnel (management and executive staff), there is a third category of personnel in schools – pupils – who makes the difference in terms of school specificity referring to mission, objectives, culture, climate etc.

The role of the school manager is difficult as he permanently has to ensure and maintain a perfect balance between the two levels of activity and at the same time to build the school organizational and cultural structure by placing the pupil in the centre of the whole activity. This also means that the school manager should become a very good communicator in order to involve all the educational and administrative school resources in pupils' training.

In one of his books, Emil Păun³ focuses on the particularities of the school management due to the existence of the two "logics" – pedagogical and organizational – suggesting that the school manager should become that person able to effectively manage both educational and administrative school aspects. This mixture of the principal's tasks is carried out in accordance with the "organizational logic" that aims at the organizational structures which standardized the teaching activity. These rules act within a "formal" frame which cannot be applied to the teaching activity which involves a higher level of freedom of thinking, initiative and openness to informal aspects. The class activity has its own norms coming from the nature of the teaching process itself which refers to the teaching methodology while the administrative level refers only to setting up the institutional framework for accomplishing the teaching tasks.

³ Păun, Emil (1999), *Școala, o abordare sociopedagogică*, Editura Polirom, Iași

A very interesting question arises from this situation: In order to effectively fulfill the school tasks, should the school manager have a previous training in the education field or not?

From a historical perspective, we can say that the Romanian education system is not ready for the promotion of the type of school managers others than teachers. The tradition of our country has always promoted the example of a principal who is also a teacher, considering his psychological and pedagogical training as absolutely necessary to solve educational issues. The teaching training may also help the him to properly interact with other members of the school staff. It may be the starting point in considering the school director as being "one of them" in the joint effort to create the regulatory school framework and an appropriate learning climate.

In supporting the idea of the teaching-director, one can also start from the very essence of the leadership act, seen as an act of teaching, which makes him take the advantage of the pedagogical training. This is reflected in those school contexts that require teacher's abilities, for instance, pupils's assessment or teaching staff evaluation, staff motivation, stimulation to achieve academic and professional performance for improving the quality of the educational process and school organization climate.

Another characteristic of the school management refers to the variety of staff categories led by the school director. The most representative of those mentioned above are the teachers and pupils who are practically involved in the educational process. But if we also think of the auxiliary, administrative and managerial staff as well as the pupils' parents, we may display the complete picture of the different school members.

The variety of staff within the school determines a specific set of formal relations, which are not the common type of leader-subordinate relations existing in any other organization outside the education system. In schools, this type of interactions is reflected mainly by the relations between the principal and the administrative staff. Towards teachers, he develops a set of collaborative relations based on the same teaching values and concerns. The principal's role as a manager reflects particularly on the school administrative level and organizational aspects, such as organizing the educational process, dividing students into classes, schedule development, financial and accounting issues etc. In relation with the teachers, pupils, parents he must develop relationships based on his previous training as a teacher.

In order to create an appropriate school climate, the principal, like any manager in other field of activity, should be a very good communicator in order to inspire trust and make the others actively participate in the school organization's life. A good communication between the manager and subordinates, a relaxed working atmosphere, accuracy in the evaluation of the school personnel by

appreciating and rewarding the good results contribute to the development of the manager's profile. Personal example, the manager's personality, his professional experience, together with managerial acts such as setting clear goals, justifying own actions, taking decisions in collaboration with the managerial team make the difference between a good and a bad school director.

Roles of School Managers

Within the organizational structure of the school, the principal holds the position of the formal leader in relation with other categories of staff. But, as we all know, not always the same person is also the real leader of the organization, the person who is really wanted by the others to lead and represent them in relation with the authority. It is therefore important that the headteacher should distinguish between the leader and manager's abilities and identify ways of action in accordance with both qualities.

Since the 80's, the American literature has promoted the new concept of "instructional leader" to define the personality of the principal in terms of new roles. It does not necessarily refer to the fact that the he has to spend several hours in the classroom, but the student's learning should be at the heart of the manager activity.

Between 1983 and 1986, Richard Andrews investigated the relationship of an organization's clear and focused mission and the role of the principal as a strong instructional leader to the academic achievement of students. This leading role is characterized by a set of "*interactions or behaviors that can be divided into four areas: resource provider, identifying educational resources, effective communication and visibility in school*" [In McNamara, P., (1993), *What can educators learn from school climate*, Department of Education, Stockholm University].

It is difficult to determine the role of the principal as an educational leader, but in short, according to this role, he must act in order to optimize the educational process. It is the pedagogical training which helps the director to understand the essence of education and its impact on students and teachers' professional development. My personal belief is that the principal's model in our country is that one with a previous pedagogical training in order to better understand and respond to the educational matters in his school. Of course, we can also take into account the alternative of the professional manager, without pedagogical training and teaching expertise. But despite his very good managerial skills, it is possible he may not understand the dynamics of the educational process and find the best solutions to the educational problems.

Copeland⁴ believes that the headteacher is a pedagogical leader who promotes success among students by building and supporting the school culture, teachers' professional development, educational programmes in accordance with the students performance. Being aware of this role he has to act in such a way as to understand the students' needs, put learning theories into practice and motivating students accordingly, implement an advanced curriculum, assess the teaching strategies used in the educational process, promote various educational programmes, provide models and facilitate access to training programmes for the staff.

The leading abilities of the headteacher may also be highlighted when dealing with change management within the school organization which should refer to constantly adapting strategies to the curriculum changes that may occur, the dynamics of the school population flow, the teachers and students efficiency, the school climate or budget sizing. Sooner or later, all the school aspects can be affected in a positive or negative way by the change implementation. But change doesn't mean only meeting new requirements, there is also another form of change, an innovative one, that can be created and promoted in certain situations to facilitate the accomplishment of the organisation's goals. As the educational environment undergoes a continuous state of changes, the manager must turn himself in a real change agent who is responsible for the change implementation in his school.

It is known that the school manager can't reach success if acting alone. Without the support of the staff it is not possible to be successful. In order to make the other school members to be of his side he must prove a set of skills such as: efficiency, open communication, staff motivation, focus on strategic human resources, determination in making the others take part in running the organization, coherence and expertise.

Studies in this area have highlighted two types of leadership that have to be proved useful in the change management: *facilitator* and *transformational* leadership.⁵

To promote the optimal process of change, the principal needs to build communication skills at personal, interpersonal, and professional level and create an environment based on cooperation, participation, commitment. The solution is to adopt a facilitator leadership which requires mainly the following abilities: team building skills - not necessarily with people of the same specialty, but who can work well together, conflict management, interpersonal communication, cooperation policies etc. All these characteristics and abilities makes the

⁴ Copeland, D., (2003), *Instructional leadership characteristics of Secondary Ribbon School principals*, Seton Hall University

⁵ Katz, Melvin, B., (2004), *A Descriptive study of the skills and attributes of principles who have become effective change agents in their schools*, Selton Hall University

facilitator leader know how to deal with conflicts and tensions, to guide the team towards common goals, to show flexibility, consistency, ability to see opportunities for change.

In contrast, the transformational leader motivates those who do more than they think they can, by raising standards, requirements and tasks, encouraging them to overcome their own interests and be concerned with the interests of the team, organization or community. He is naturally inclined towards action and change, and owns the necessary knowledge and skills to involve the staff in running the organization. He shows also creativity, openness, flexibility, teamwork orientation, sensitivity to the needs of the others, responsibility and recognition, appreciation of the people performance. But we can not refer to this concept and analyze it without placing it in the change context as the transformational leader is a real change agent.

Regardless of the two roles the principal might develop in his school nowadays, he should be the change agent for the entire educational environment by: establishing a wide range of expectations for yourself and for others, defining standards of performance, setting a good program of change implementation, identifying priorities and communicating them to the others, placing long-term goals beyond immediate interests, directing change to an effective innovation process, monitoring the implementation of change, identifying personnel with sufficient knowledge and skills to advise others, placing the learner at the center of all activities undertaken.

Therefore, the principal's role should be directed to that of the transformational leader; he is highly motivated and develops a strategic vision for his organization. These qualities are what he needs in order to promote a stimulative educational climate and a high level of motivation and morality.

School Managers' Specific Training

At the moment, in our country the managerial training of the teachers who want to become principals consists of educational management programs/courses accredited at national level by the Ministry of Education through the National Center of Teacher Training in Pre-university Education. These courses can be delivered by universities (through their Teaching Departments), Teacher's Houses, NGOs which have educational aims etc. There are certain compulsory modules within these courses such as Educational management, Curriculum and Communication & IT.

This form of managerial training is coordinated by the National Center mentioned above based on clear criteria and methodologies. One of the main requirements refers to the compliance with the National Standards of the teaching or managerial positions.

The periodical training of the teaching and managerial staff in pre-university education is compulsory and stipulated in the Education Legislation.

In order to sustain some of the ideas mentioned in the theoretical chapters of this paper, a survey was initiated in 2008 between September 1st and December 15th.⁶

The main goal of the study was to investigate the principals/ teacher's opinions on the current status of the headteacher, especially when referring to principal's mandate limited to 4 years, the 2- year consecutive limitation of the act of school management, the obligation to perform both school management and teaching activities simultaneously.

The study aimed at the analysis of the principal's status at national level, being investigated 570 headteachers and teachers from four geographical areas in our country (Moldavia, Oltenia, Ardeal and Bucharest) in order to identify possible disfunctions and, on the other hand, to notice their response to a potential status change.

In this regard, we established the following objectives:

- identifying the principals/teachers opinions on the present headteacher's status
- identifying the level of satisfaction/content given by the actual status
- identifying the reasons for the above mentioned feelings
- identifying the principals'/teachers's reaction to a potential change of the headteacher's status.

Being asked about what elements are more important for their training in order to become good school managers, the following answers were given:

<i>Components</i>	<i>Percentage</i>
<i>Managerial training</i>	20%
<i>Experience as a principal</i>	20%
<i>Experience as a teacher</i>	18%
Personality features	15%
Life experience	15%
Other components (politics, environment, life standard etc.)	12 %
<i>TOTAL</i>	<i>100 %</i>

Managerial training and experience as a school director

The highest percentage is represented by two components which are closely related to the managerial domain: the managerial training and experience as a principal, each of them with 20%. This proves that the principals' perception on the importance of their training in the management field is very high. Owing

⁶ Carmen Chervase (2010), „Schimbări în managementul școlii în contextul profesionalizării pentru funcția managerială”, teza de doctorat, Editura Sitech, Craiova

not only management knowledge but also skills (after years of experience in this school leading position) is of utmost importance for their career as headteachers. The two components reflect the real need of managerial training by them.

Experience as a teacher

Representing 18%, the teaching experience is one of the most important three training components which help headteachers take quick decisions especially in the following school activities:

- class organization
- activity planning
- relationship with the pupils, parents etc.
- decorating the school
- administrative tasks etc.

We are glad to see how much the principals appreciate their previous training as teachers. This means they have the advantage of knowing very well the school particularities due to their teaching experience and at the moment of taking over the school principal's position they will not waste time to do this. The answers to this question of the survey once again emphasize the idea that principals's activity is helped by their previous experience as teachers in covering the educational and administrative school issues.

To this point, the most important result of the survey shows that the headteachers appreciate the managerial components as very important for their training and put them on the first place. That means they are in need of this type of preparation besides their previous training as teachers.

Being asked if they have participated in management training courses, their answers were the following:

<i>Have you participated in management training courses accredited by the Ministry of Education?</i>	<i>Percentage</i>
- once	23%
- twice	22%
- several times	31%
- no	24%
<i>TOTAL</i>	<i>100%</i>

The information in the table shows that 76% of the school directors have participated in management training courses accredited by the Ministry of Education one, twice or several times. This means they need a managerial training in case they are appointed in this leading position because their previous training as teachers is not enough for running a school and consider this managerial position as a different job which requires specific training. It also shows that they

are informed about the teacher/principal training system by means of accredited courses introduced in 2001, which brings new strategies regarding an unique vision upon this type of training and organization at national level, standardization of their activity and training, a wider range of training providers and transferable credits introduced at this level following the example of the university education.

We were then interested in how much the trainees appreciate the training aquisitions and if the management training provided is appropriately proportioned between theoretical and practical aspects:

<i>Do these courses provide you with proper theoretical and practical training?</i>	<i>Percentage</i>
- largely	65%
- little	31%
- no	2%
- don't know	2%
<i>TOTAL</i>	<i>100%</i>

The highest percentage (65%) is represented by those who consider they have benefited from a high level of theoretical and practical knowledge during the management training courses. These results make us sure that a great part of the surveyed school directors have attended this type of preparation and know very well the training system for school directors in our country.

The next question of the questionnaire is about the most benefical period of the managerial training delivered:

<i>When do you need more the managerial training?</i>	<i>Percentage</i>
- before the appointment	55%
- after the appointment	45%
<i>TOTAL</i>	<i>100%</i>

55% of the total persons investigated consider they need managerial training before being appointed in the school director position in order to be well prepared at the moment when becoming the head of the school and to solve all the issues that may arise in accordance with the management theory and knowledge.

There are also persons who agree with both options, underlying the idea of a lifelong learning in the managerial field.

Irrespective of the moment when the training is attended, it is obvious that the school directors admit they are in need of a proper training in the managerial field in order to deal not only with the issues specific to this managerial position but also with the new aspects of the education arising from the latest changes in society.

Conclusions

Nowadays school directors face new work situations due to the profound changes of the Romanian society, experiencing a constant transition and overtaken by the recent global economic crisis. Accelerated transformations of any kind are reflected in behavioral styles and mentality of individuals, many of them no longer having values that guide them so far. The lack of permanent and wilful attention of the politicians towards education in the last twenty years has led to a deterioration of the main components of the school life: the education process, communication and relationships established between members of the education system, school discipline, the students and parents' attitude towards the education process etc.

Besides the traditional roles of an educator and leader, the director should be a very flexible person, able to develop new components of his personality, for example that of a keen psychologist in relation with all the school beneficiaries and stakeholders, especially parents and students, and also emphasize his role of a mediator, as conflicts in schools are more numerous and complex than ever. If unable to assume these new roles, it is his duty to complete the school management team with a good psychologist (counselor) and develop a closer relationship with the local law enforcement authorities. It is a fact that should we assume, that the school, viewed from the perspective of many representatives of the civil society, is no longer a safe place for children, due to the increase of the number of risks and threats that require quick solutions from school directors. The present teaching process means no longer only providing information to students but also educating students and making them return to traditional school values, create a proper learning environment in school and rediscover the benefits of a good school-parents collaboration.

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CONSTRUCTIVISM FACING A CHALLENGE: CHILDREN WITH LEARNING DIFFICULTIES

FLORENTIN-REMUS MOGONEA*, ALEXANDRINA-MIHAELA POPESCU**

ABSTRACT. The problematic of learning difficulties is not new, but it is always discussed again in order to try to find new efficient ways for its diminution or elimination. The present study aims at establishing how efficient some ways of constructivist teaching are in diminishing the learning difficulties of pupils who do not have intellectual deficiencies. The findings of the research carried out on a group of 205 high school pupils have validated the efficiency of some of the suggested variables (i.e. learning models and methods based on cooperation and collaboration) and less of those regarding the ways of structuring and graphically organizing knowledge. We can conclude that through this category of children with learning difficulties not all models and instruments of work that are specific to the constructivist teaching are efficient and on the contrary, sometimes, behavioral practices turn out to have better results.

Keywords: *constructivism, behaviorism, learning difficulties, disabilities, learning handicap*

ZUSAMMENFASSUNG. Die Ausgabe von Lernschwierigkeiten ist nicht neu, aber es wird wieder wiederholt, in einem Versuch, um effiziente Wege zur Verringerung oder Beseitigung zu finden. Diese Studie zielt darauf ab, um die Maßnahmen von Effizienz der konstruktivistischen Unterrichtsmethoden zur Verringerung von Lernschwierigkeiten der Schüler festzusetzen, Schüler die keine geistiger Mangel haben. Die Forschungsergebnisse einer Stichprobe von 250 Lyzeumschüler validierten die Eeffizienz einer von vorgeschlagenen Variablen (Modele, Unterrichtsmethoden aufgrund des Mitarbeit, Mitarbeit) und weniger die Effizienz von Variablen von Strukturierungsmodalitäten, graphische Organisation der Kenntnisse. Wir schließen daraus, dass alle Modelle und

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Arbeitswerkzeuge der konstruktivistischen Unterrichtsmethoden für diese Kinder mit Lernschwierigkeiten haben nicht eine Effizienz, manchmal haben die Behaviorismuspraktiken bessere Ergebnisse.

Schlüsselwörter: *Konstruktivismus, Behaviorismus, Lernschwierigkeiten, Behinderungen, Lernbehinderung.*

Introduction

Most of the time, learning difficulties are brought up for discussion with respect to the case of children with special educational needs, as they are associated with and considered a consequence of deficiency and disability. But they can also be an ordinary reality of both normal classes and children with no intellectual deficit (Winebrenner, 2006). We will focus on this category of children who are apparently “normal”, but who for various reasons cannot cope with the school demands and exigencies.

Learning difficulties can be classified depending on the etiology, their intensity or gravity, or their area of expansion. Sometimes, they are linked only with a certain field, certain subject (for instance: difficulties in assimilating oral or written language, in learning mathematics) (Jordan, Kaplan., Hanich, 2002; Westwood, 2003a, b; Westwood, 2004; Wang, Du, Liu, 2009; Delahaie, 2009; Çiltaş, Tatar, 2011; Mundia, 2012), affecting the process of acquiring certain skills and competences specific to the particular subject, other times they are generalized, the involved competences being transversal (difficulties in acquiring several habits, such as those of study, attention, memory, self-control, self-esteem) (Steel, 2005).

The semantic sphere of the concept of learning difficulties is quite large, consisting of quasi-synonymous syntagmas such as: *learning disabilities, learning disorders, school difficulties, learning difficulties, inabilities, school debility, school deficit, school maladjustment* (Mogonea, 2010a). The semantic proximity of these syntagmas doesn't cancel their specificity. The notional indeterminations are marked also in figure 1 (Ungureanu, 1998, apud Mogonea, 2010a, 58):

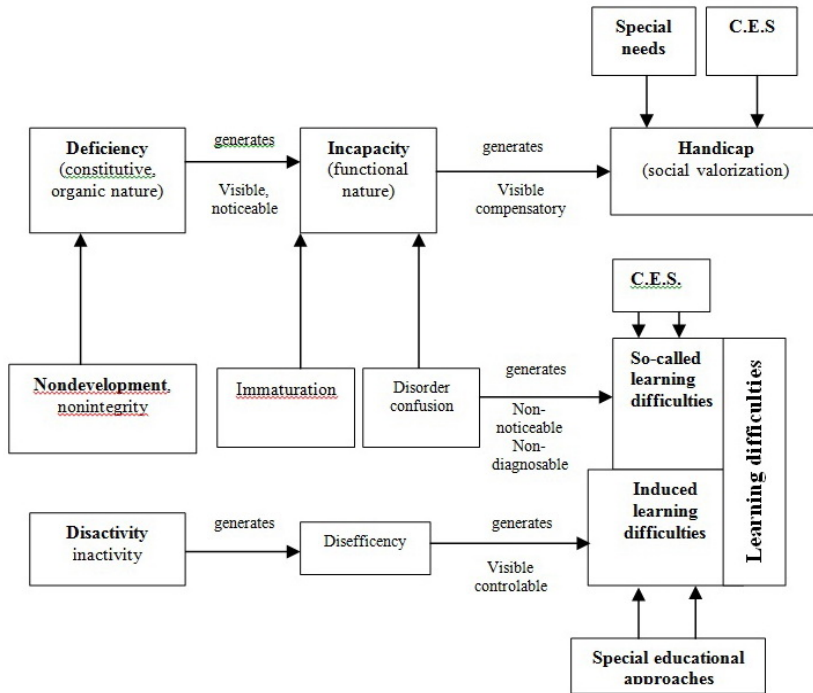


Figure 1. Logical hierarchical notional indetermination (Ungureanu, 1998, apud Mogonea, 2010a, 58)

Some authors distinguish between learning disorders and learning difficulties (see table 1) (Dubois, Roberge, 2010):

Table 1.

Comparative analysis between handicap and learning difficulty (Dubois, Roberge, 2010)

Learning disorders	Learning difficulties
<ul style="list-style-type: none"> - They are permanent - They have an early emergence in the learning process - They have a unique, neurological cause - In case of a dyslexia or dysorthography they engender: major integration difficulties of the basic processes to ensure understanding; incapacity to relate automatically letters to sounds or read, starting from the visual forms of the words, as well as recover the pronunciation associated to words; -they can be diagnosed by a speech therapist or by a neuropsychologist with the help of standardized tests that can assess the necessary time for reading a given text as well as the number and type of errors 	<ul style="list-style-type: none"> - They are temporary and in most of the cases they can be corrected - They may appear in different stages of the learning process - The causes are multiple and non-neurological: gaps in learning to read and write; allophone; sloppy working style; psycho-affective disorders, lack of motivation and interest; difficult socio-economic situation

Not always do pupils become aware or accept the idea of having learning difficulties. Most of the times, the helplessness of responding adequately to requirements, level of exigency or standards imposed, is ascribed to external causes, appealing to a “defensive attribution” (for instance: mathematics are boring, the materials presented are not sufficiently good, teachers don’t teach well, etc.) (Wang, Du, Liu, 2009).

Learning difficulties can be temporary, determined by a certain socio-educational. Some authors (Perraudau, 2005) state even that the difficulty is a normal stage within the act of learning (it’s about the cognitive conflict that appears as a result of the pupil’s confrontation with a new work task), considering that it must be made a distinction between this type of difficulties (called by them “ordinary”) and others in the sphere of disturbances, disorders. The etiology of difficulties is hence a multi-factorial and multi-determined one. We present a possible list of the causes that can determine learning difficulties (see figure 2):

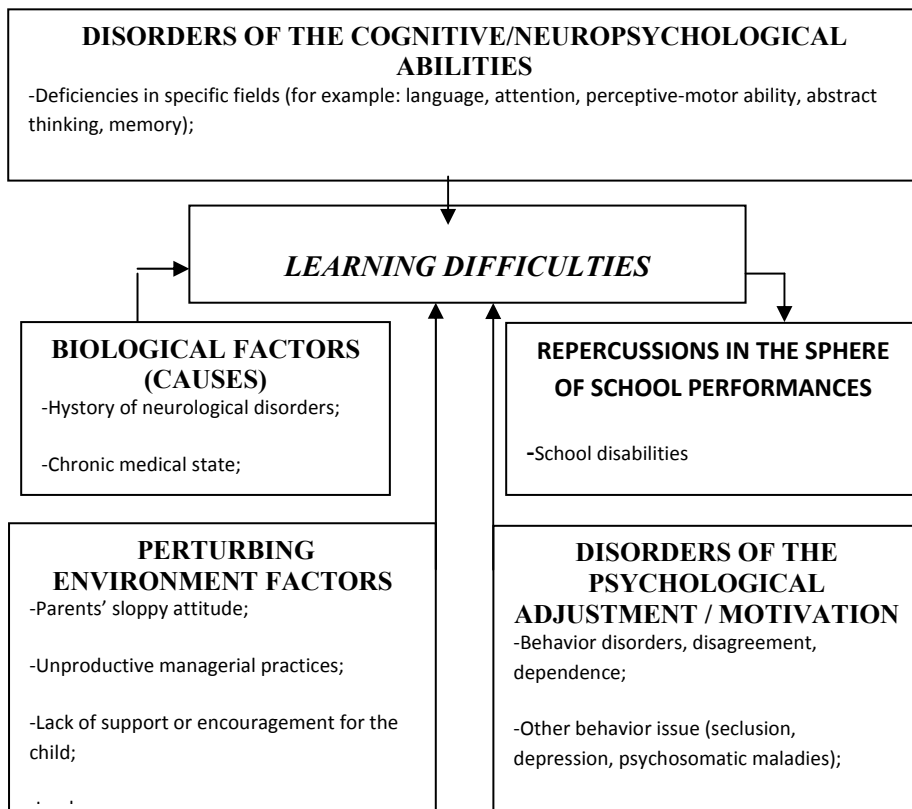


Figure 2. Learning difficulties etiology (from Mogonea, 2010a, 67)

Although most of the studies approach the problem of learning difficulties in correspondence with the school-age periods, there is also a great interest for the analysis of their specifics at the adult age, especially regarding the adjustment ways and why not, the social and professional achievements (Dee, Devecchi, Florian, Cochrane, 2006; Blow, 2008).

Knowing the etiology of learning difficulties, the way and the intensity of their manifestation, allows for action and intervention ways in order to diminish or even eliminate them.

In this context, numerous studies analyze the problem of the efficiency of some teaching models and paradigms used with children with learning difficulties. Thus, although lately the behaviorist approach has been criticized, it is considered to be efficient in the case of this category of children who need a more careful guidance and a clearer specification of certain instructions as they find it difficult to orient themselves in a complex task or when they deal with a more ample material (Lerner, 2003). On the other hand, the constructivist paradigm proposes a few teaching methods that can be efficient in the case of children with difficulties: placing pupils in real life, concrete situations; using the role play; using group projects (Steele, 2005). The mentioned author recommends also other practical ideas for teachers, of both constructivist and behaviorist nature:

- Specifically constructivist: the capitalization at the beginning of the lessons on examples that are familiar to pupils, starting from own experiences; focusing on a few key concepts in each lesson; projecting activities in which each pupil must be actively involved in the lesson; integrating the superior skills of thinking and last but not least, offering relevant explanations and guidelines to clarify problems;
- Specifically behaviorist: dividing the tasks into small segments; demonstrating and explaining each stage of a new task that pupils must solve as well as offering a model; including additional exercises as long as necessary to master an ability or habit; imposing a routine in lessons, a predictable approach; using monitoring and feedback throughout and not necessarily at the end.

In the educational practice, the two paradigms coexist (Weegar, 2012).

The principles and models proposed by constructivism are not new; they can be found at theoreticians like Dewey, Ausubel, Piaget, Vygotski Dewey, Ausubel, Piaget, Vygotski. They have been lately capitalized on so that the labels that apply to these paradigm with respect to teaching and learning are the following: "anchored teaching", "situational learning", "learning by discovering", „task-based learning", "the construction, scaffolding of learning" (Rowe, 2006; Cooperstein, Kocevar-Weidinger, 2004). More recently, the importance of problem-based learning has become more and more accentuated (Westwood, 2006). Phillips (1995, in Perkins, 1999) synthesizes the characteristics of the constructivist learning with regard to three aspects: active, social and creative learning.

The problem of learning is studied by some authors also from a neurological perspective. In this context, we recall the 12 principles of the brain that the process of learning is based on, and which are also the fundamentals on which the constructivist paradigm has built teaching and learning models, such as the experimental learning based on problems or based on cooperation (Caine Learning Institute, in Gülpinar, 2005, 303).

1. All learning engages the entire physiology (The learning process trains the entire body) 2. The brain/ mind is social. (Learning is socially determined) 3. The search for meaning is innate. (The epistemic curiosity is innate) 4. The search for meaning occurs through patterning (Knowledge involves training the cognitive patterns) 5. Emotions are critical to patterning (Emotions are involved in the knowledge process) 6. The brain/mind processes parts and wholes simultaneously. (The cognitive processes are carried out both sequentially and as a whole) 7. Learning involves both focused attention and peripheral perception. (Learning also implies other mental processes, like attention and perception) 8. Learning is both conscious and unconscious (Learning is accomplished consciously, planned and also unconsciously, spontaneously). 9. There are at least two approaches to memory (rote learning system, spatial/contextual/dynamic memory system) (Both types of memory are involved: rote and logical) 10. Learning is developmental. (There is a dependency relationship between learning and development). 11. Complex learning is enhanced by challenge and inhibited by threat associated with helplessness and fatigue (Learning efficiency is influenced by health or fatigue) 12. Each brain is uniquely organized (The uniqueness of human comes from the uniqueness of the human mind).

Also in support of the idea of diminishing learning difficulties, several acquisitions in the field of psychology are capitalized on, such as the theory of multiple intelligences – theorized by H. Gardner (Gardner, 1996; 2006; Armstrong, 2009; Mogonea, 2010a, b), the theory of emotional intelligence (Goleman) and in general, the role of the non-cognitive factors. Some researches (Doly, 2000; 2002; Mogonea, Mogonea, 2013) point out the role of metacognitive factors in obtaining school success, analyzing at the same time the specificity of metacognition for children with learning difficulties.

Also, recent studies (Fichten, Ferraro, Asuncion, Chwojka, Barile, Nguyen, Klomp & Wolforth, 2009) analyze the possibilities of diminishing learning difficulties via e-learning

Method

The investigative, experimental approach reverts to a series of our previous interests (Mogonea, 2010a; Mogonea, 2010b; Mogonea, 2013) regarding the study of the learning difficulties problematics, from different perspectives of approach, especially ameliorative and optimizing approaches. We approach now the problem concerning the diminution of these difficulties by promoting some methods of work specific to the constructivist paradigm in teaching, in the context of forming basic and at the same time transversal competences in assimilating language (competences in receiving and generating messages directly and perfectly adapted to the particular situation of communication).

Objective and hypotheses

The purpose of this research was to establish the efficiency of several methods of constructivist teaching to diminish pupils' difficulties in assimilating the language.

Our intention was to demonstrate that the promotion of a knowledge based on an individual activity of documentation, understanding, structuring, synthesizing and graphical representation of the materials made available, completed by a social activity in order to challenge the personal points of view regarding knowledge, can assure a better understanding of the problems as well as help correct mistakes and misunderstandings.

The basic hypothesis of the research was the following: Using some models, methods and instruments of constructivist teaching in the activities carried out with pupils regarding the assimilation of the language, will lead to the diminution of these difficulties.

To materialize the general hypothesis and at the same time, outline some research directions, we formulated two **particular hypotheses**:

1. Capitalizing frequently on the techniques and instruments of graphic organization of knowledge, within the activities carried out with children, will ease the process of understanding and improve their school results.
2. The activities based on cooperation in a small group and the interactive learning methods, allow the confrontation of one's own opinion and way of understanding to those of the group and ensure a better understanding of the knowledge and work techniques by the pupils.

Participants

The group of subjects was constituted of 205 pupils in the 10th grade, while the sampling technique used was that of the classroom group. The profile of the classes chosen was either philology or mathematics and sciences. The schools from which these classes were chosen are normal, not special ones. Being an

experimental research, our purpose was to establish the degree of equivalence of the two groups, the experimental group and the control group, the methods used being the initial test (pretest) and the method of the analysis of school documents (the school register, from which we took the averages of the students at the school subject *Romanian Language and Literature*, at the beginning and at the end of the research). The experimental group was constituted of 80 subjects, while the control one – of 125 (see table no. 2).

Table 2.

Structure of the group of subjects

Group of subjects	No. of subjects	Total
Experimental	80	205
Control	125	

Instruments used throughout the research were:

To identify pupils' learning difficulties we used numerous instruments: *a questionnaire to identify the level of reading, observation or assessment grids; assessment grid for the quality of the pupils' reading; assessment grids for a debate, the construction of a dialogue or an argumentation; assessment grids for the subject of the narration, for the interpretation of a dramatic text, summary or the activity of oral expression* (see the annex); *a symptomatological and etiological inventory regarding the learning difficulties for the 10th grade Romanian Language and Literature* (Mogonea, 2010a, 168-169) and last but not least, *the pedagogical test of knowledge*.

Within the experiment, we used models, methods and instruments of constructivist teaching, such as: the collaborative and cooperative learning models (by capitalizing on numerous collaborative learning methods: mutual teaching and learning, the mosaic method, "change pair"); the use of some methods and techniques of graphical organization of information (example: cognitive maps, "the tree of ideas", "the water lily flower", etc.). All these methods were used within the Romanian language activities with children, the purpose being to diminish their difficulties in assimilating the language.

The guidelines of the formative experiment that we conducted were based on the two particular hypotheses, trying to observe the confirmation or refutation of their validity and indirectly and implicitly, the confirmation of the validity of the general hypothesis. The two important directions consisted firstly, in using the graphic organizers in facilitating the understanding and thoroughness of knowledge as well as acquiring competences and secondly, using the cooperation and collaboration of the methods based on the interactive learning of the language.

Results and Discussion

The instruments used have allowed the identification of the types and frequency of learning difficulties in assimilating the language by the high school pupils. We present in table no. 3 these categories of difficulties identified through the applied symptomatological inventory (see table 3).

Table 3.

Symptomatological inventory of learning difficulties (Mogonea, 2010a, 168-169)

Field	Symptomatological criteria / aspects of the learning activities for Romanian language and literature discipline	
A. Oral language (speaking)	Poor, deficient vocabulary	
	Lexical errors	
	Telegraphic language (short clauses)	
	Formulation deficiencies	
	Difficulties in understanding and formulating complex clauses	
	Difficulties in understanding and formulating elliptic, implicit clauses	
	Difficulties in formulating requests and asking questions	
	Difficulties in getting useful information	
	Difficulties in grasping the figurative sense	
	Difficulties in taking and continuing the ideas of others	
	Difficulties in critiquing the ideas of the others	
	Morphological difficulties	Deformations of words
		Substitutions of words
		Inversions of words
		"Matching" of words
	Syntactical difficulties	Topic inversions
Discords		
Semantic difficulties	Deformations of meanings	
	Wrong semantizations	
B. Writing (Method of writing)	Omissions of letters or syllables	
	Inversions of letters or syllables	
	Confusions of letters or syllables	
	Substitutions of letters or syllables	
	Cut or thickened words	
	Adding of letters or syllables	
	Too large or too small letters	
	Poor orientation / inclination of letters	
	Disproportions between letters (either large or small within the same word)	
	Page layout	
	Non-observance of orthography	
	Non-observance of punctuation signs	
	Illegible or hard-to-read writing	
	Substitutions by types in hand writing	

Field	Symptomatological criteria / aspects of the learning activities for Romanian language and literature discipline
C. Reading	Slow, difficult, syncopated reading
	Omissions and substitutions of words
	Distortions of words (poor pronunciation)
	Stumbling and getting blocked in reading
	Misunderstanding of content (even in a fluent reading)
	„Jumping” from one row to another, but which is different than the immediate one
	Reading by following words with one’s finger
	Alert rhythm with negative effect on the accuracy of the reading
	Monotonous reading and without intonation

As we can notice in the inventory presented, the identification of pupils’ learning difficulties with the Romanian language was made by following three important categories: oral language (speaking); writing (method of writing) and reading, on a five level frequency scale, which measured the frequency of learning difficulties: 1 – not at all; 2 – very little; 3-a little; 4- a lot; 5-very much.

The results for the three categories are presented in the table 4.

Table 4.

The results of the symptomatological inventory of pupils’ learning difficulties in the Romanian language

		1	2	3	4	5
A	Oral language (speaking)	6.82	15.45	21,42	30,21	26.1
B	Writing (method of writing)	3.2	8.12	19.45	43.22	26.01
C	Reading	11.32	19.15	17.4	31,19	21.3

The results registered following the use of this inventory were correlated with the ones obtained following the use of the other instruments too in the pretest phase. The initial level of the classrooms encompassed in the experiment was established especially the applied initial test (pretest).

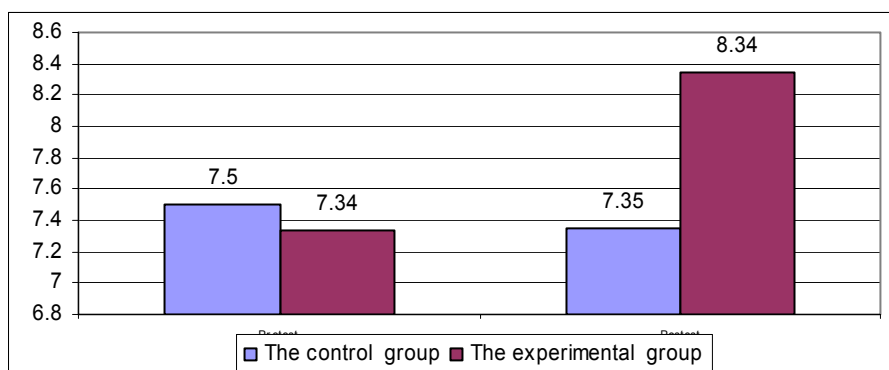
By applying the same instruments both after each sequence of the experiment and at the end (posttest), we could see the effects of the carried out ameliorative actions.

The results registered after the first sequence of the experiment, i.e. the one in which we used the graphic organizers within the activities carried out with the children, were compared with the initial ones. The conclusions drawn following the use of some methods of mathematical and statistical interpretation of data (the Z test, to establish the significance of the difference between two averages) led to the invalidation of the efficiency of these methods and instruments in diminishing the pupils' learning difficulties, that is, the improvement of their school results.

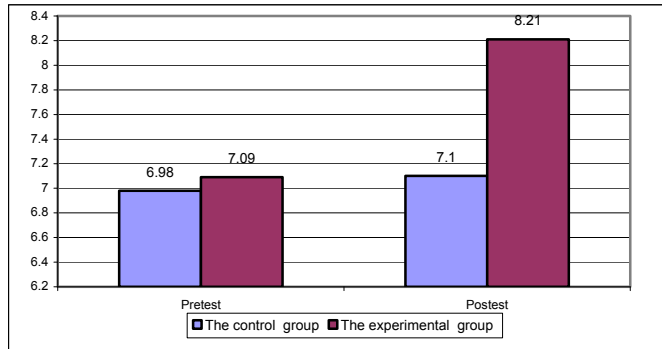
After the second sequence of the experiment, which consisted in introducing the independent variables regarding the promotion of models and methods based on cooperative and collaborative learning, we applied the same set of instruments used both at the beginning of the research and throughout, meaning: the grids, the inventories for identifying learning difficulties and the pedagogical tests of knowledge .

Starting from the premise that the efficiency of the suggested actional-methodological methods would be objectified in the improvement of pupils' school results, we used the same Z test to establish on one hand, the statistical relevance between the grades obtained for the terminal test and those for the initial test (pretest) and on the other hand, the statistical relevance between the averages registered by pupils at the end of the experiment and the averages registered at the beginning of the research.

The averages of the grades obtained by the pupils for the two applied tests (initial and final) are presented in the graphic no. 1, while the comparative averages for the Romanian language (pretest and posttest) can be found in the graphic no.2.

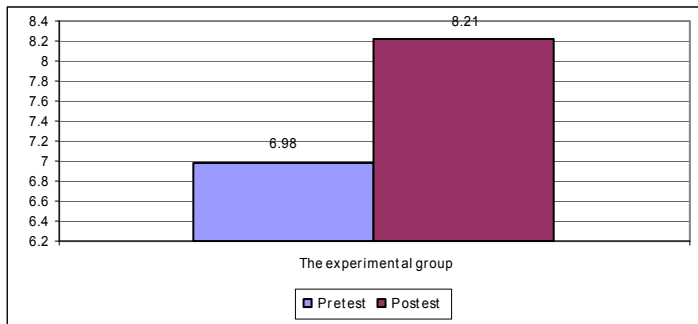


Graphic 1. The comparative results of the two groups of subjects, in pretest and posttest phases

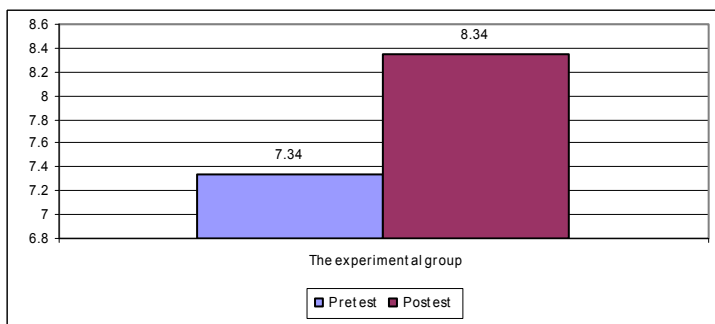


Graphic 2. Averages at school subject Romanian Language, in the pre-test and post-test stage

The comparison of results can be done not only between groups, but also at the level of the experimental group, in relation with the two different temporal moments – the pretest and the posttest (graphics 3 and 4).



Graphic 3. Comparison of the results obtained by the experimental group for the applied tests



Graphic 4. Comparison of the results obtained by the experimental group

To establish the statistical significance of the difference between the averages obtained for the applied tests or of the difference between the averages registered by the subjects for the Romanian language, we used the Z test and the results are presented in tables 5 and 6.

Table 5.

The statistical relevance of the difference between the average of the experimental group and that of the control group in the posttest phase

Group	Average (m)	Deviation (σ^2)	N	Value of Z	Statistical significance (p)
Control	7.1	2.13	125		0.01
Experimental	8.21	2.51	80	5.28	

Table 6.

The statistical relevance of the difference between the average of the experimental group in the posttest and the average in the pretest

Phase	Average (m)	Deviation (σ^2)	N	Value of Z	Statistical significance (p)
Pretest	6.98	2.24	80	5.12	0.01
Posttest	8.21	2.64	80		

Also to establish the efficiency of the proposed experimental ways, we established the statistical relevance of the difference between the averages registered for the Romanian language (tables 7 and 8).

Table 7.

The statistical relevance of the difference between the averages obtained for the Romanian Language by the subjects of the experimental group and the averages obtained by the subjects of the control group, in the posttest phase

Group	Average (m)	Deviation (σ^2)	N	Value of Z	Statistical significance (p)
Control	7.35	2.21	125		0.01
Experimental	8.34	2.42	80	4.58	

Table 8.

The statistical relevance of the difference between the averages obtained for the Romanian Language by the subjects of the experimental group in the posttest phase and those in the pretest phase

Group	Average (m)	Deviation (σ^2)	N	Value of Z	Statistical significance (p)
Control	7.34	2.11	80	4.34	0.01
Experimental	8.34	2.31	80		

In both cases, the value of Z is higher than 2.58, which allows us to state that the difference is significant at a significance threshold of 0.01.

Conclusions

The results allow us to draw some conclusions regarding the efficiency of several models, methods and instruments of constructivist teaching. Although lately, the constructivist paradigm has been considered more and more a necessary teaching alternative, it doesn't always prove to be efficient. In the case of children with learning difficulties (in our case – learning difficulties concerning the Romanian language), some of these methods did not lead to the expected results. Hence, the use of graphical organizers, as methods of structuring, organizing and systematizing information, did not lead to the reduction in the number and frequency of pupils' learning difficulties. Most of the times, these graphic instruments were applied not in a constructivist way, as an organizing modality of one's own knowledge, but in an algorithmic, routine way. The pupils laid more emphasis on the graphic representation itself, losing sight of the essence of the approach, that is, understanding and structuring the proposed knowledge. In this context, the use of these instruments led to the elimination of the constructivist teaching's principles, the orientation being rather a behaviorist one (a fact shown in the way the instruction regarding the realization and monitoring of instruments was conducted).

On the other hand, the models and methods of cooperative and collaborative learning proved their efficiency.

The activity carried out together with the others, as a continuation of the individual-independent activity helps children to correct their mistakes, misunderstandings and preconceptions by relating to the others. We must not forget also the role of the non-cognitive factors, especially motivation, which in the case of the group activity it is strongly stimulated.

We can conclude that for a “special” category of children, such as the one of the children with learning difficulties (without involving here the sphere of the special educational needs), certain instructive and educational practices acquire specific traits, which don't confirm always the valid generalizations for the category of children who do not have these difficulties.

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ANNEX. OBSERVATION OR EVALUATION GRIDS
(Mogonea, 2010a, 277-280)

a) Evaluation grid of pupils' quality of reading

Criteria	Not at all	Very little	A little	A lot	Very much
Correct pronunciation of all words					
Compliance with the punctuation					
The reading pace offers the possibility for understanding					
Compliance with the logical pauses of the text					
Fluent reading, without stumbling					
Other criteria.....					

b) Evaluation grid for a debate

Criteria	Not at all	Very little	A little	A lot	Very much
Watches carefully the interventions of colleagues					
Gets involved in discussions at the right moment					
Brings pertinent arguments					
Respects the others' ideas and opinions					
Argues own ideas					
Other criteria.....					

c) Evaluation grid for building a dialogue

Criteria	Not at all	Very little	A little	A lot	Very much
Uses the same code with the discussion partner					
Questions/answers are in compliance with the dialogue topic					
Uses mimics, gestures and motions in completing the related events					
Prolongs the dialogue using additional questions					

Criteria	Not at all	Very little	A little	A lot	Very much
Leaves time for argumentation to the person dialoguing with					
Other criteria.....					

d) Evaluation grid for an argumentation

Criteria	Not at all	Very little	A little	A lot	Very much
Complies with the argumentative speech (hypothesis, arguments, explanations, conclusions)					
Uses causality, consequence and conclusion connectors (<i>since, that, therefore, etc.</i>)					
Uses correlative elements pointing out cause-effect relations (<i>if...then, the more...the..., etc.</i>)					
Uses pertinent arguments, gradually ordered					
Uses a clear wording/ narration					
Persuasion power over the audience through overall impression					
Other criteria.....					

e) Evaluation grid of the narrator

Criteria	Not at all	Very little	A little	A lot	Very much
Respects the logical chain of events					
Relates important events and gives significant details					
Gives a personal touch to the facts related					
Gets critically involved in narration					
Suggests topics, ideas for reflection and formulates hypotheses					
Other criteria.....					

f) Evaluation grid for the interpretation of a dramatic text (dialogued)

Criteria	Not at all	Very little	A little	A lot	Very much
Clarity of utterance of lines					
Compliance with didascalies (footnotes, scenic explanations between brackets)					
Compliance with the punctuation, fluency of utterance					
Use of intonation, mimics, gestures and motions, tone, volume, rhythm, scenic movement					
Nuanced, original and persuasive interpretation					
Other criteria.....					

g) Evaluation grid of the summarizing

Criteria	Not at all	Very little	A little	A lot	Very much
Identifies the narrated happenings and presents them					
Uses third person in narration					
Neutral narration with no emotional/personal attachment					
Transforms direct speech into indirect speech					
Clear and coherent expression					
Other criteria.....					

h) Evaluation grid of the activity of oral expression

Criteria	Not at all	Very little	A little	A lot	Very much
Speaks and listens with confidence					
Tells anecdotes regarding personal experience					
Uses an appropriate language					
Keeps up the interest for dialogue					
Clarifies and changes ideas					
Expresses feelings					
Can build ideas based on what the					

CONSTRUCTIVISM FACING A CHALLENGE: CHILDREN WITH LEARNING DIFFICULTIES

Criteria	Not at all	Very little	A little	A lot	Very much
previous speakers have said					
Accepts different points of view					
Mediates, ends conflicts					
Looks up for various solutions and suggests new areas of discussion					
Changes and adapts ideas					
Explores and asks questions					
Initiates conversations with the teacher					
Accepts and adopts leading roles of the group					
Adapts to the audience's reactions					
Presents information					
Can be heard and understood					
Narrates and summarizes events, facts and happenings					
Persuades, motivates, compares, defends					
Gives instructions and explanations					
Reads aloud, clear, correct and nuanced					
Transmits states of mind, feelings and ideas					
Understands the role of nonverbal and paraverbal elements within the oral communication and uses them					

THE ROLE OF EDUCATIONAL ONLINE PLATFORMS IN APPROACHING CULTURAL DIVERSITY IN THE EDUCATIONAL SPACE

CORNELIA STAN*, MARIA CLAUDIA CUC**

ABSTRACT. In Romania there is an expansion of the “cultural diversity” concept, as a social and reference value in the process of training and development of the humanistic conception regarding the world. The regional perspective of the cultural diversity concept provides examples and explanations of the mechanisms of particular hypostasis of difference associated with the “ethnicity” dimension, giving it a certain consistency and intensity of demonstrations. This is the approach chosen with the intention to analyze the “cultural diversity” reality from the perspective of students as present or future teachers, who identified a number of factors that determine the variation of events and the meanings of “local” influences in the affirmation of cultural diversity, at the level of educational space. Our study is a plea for the need of integration of demarches to promote cultural diversity through the informational platform among learners. Higher institutions must follow more and more an increase of institutional initiative in the cultural diversity management plan, but also in the training of students for a world of interculturalism, through ways of organizing studies and certification skills in ensuring the training equivalence at a national and international level.

Keywords: *cultural identity; equality of chances; cultural diversity; online educational platform; intercultural communication skills.*

ZUSAMMENFASSUNG. In Rumänien gibt es eine Erweiterung des Konzepts der “kulturellen VIELFALT”, verstanden als soziale und referenzielle Wert in dem Entstehung- und Entwicklungsprozess der humanistischen Vorstellung von der Welt. Die regionale Perspektive des Konzepts der kulturellen Vielfalt bietet Beispiele und Erklärungen von bestimmten Mechanismen der Differenz an, verbunden mit der “Ethnizität” Dimension, die ihm einen Konsistenz und Intensität in den Demonstrationen gibt. Das ist der gewählte Ansatz für die Analyse der Wirklichkeit der “kulturellen Vielfalt” von der Perspektive der Studenten, als aktuelle und zukünftige Lehrer, die eine Reihe von Faktoren identifiziert haben. Diese Faktoren bestimmen die Erscheinungsformen und

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Bedeutungen von den Einflüssen der "lokalen" in die Bestätigung der kulturellen Vielfalt in der Bildungsraum. Unsere Studie ist ein Plädoyer für die Notwendigkeit der Integration der Förderung der kulturellen Vielfalt durch Lernplattformen unter den Lernenden. Höhere Institutionen sollten immer mehr die Erhöhung der institutionellen Initiative im Kontext von kulturellem Vielfaltmanagement verfolgen, aber auch die Ausbildung von Lernenden für eine interkulturelle Welt, durch Organisationsformen für Ausbildung und Zertifizierung von Kompetenzen und die Gleichwertigkeit in nationale und internationale Ausbildung versichern.

Stichwörter: *kulturelle Identität, Chancengleichheit, Kulturelle Vielfalt, Online-Lernplattformen, interkulturelle Kommunikationsfähigkeit.*

I. Problem Statement

In a dynamic world, where we increasingly internalize the changes of socio-cultural and political-economic relations, society is constantly rebuilt and redesigned as a result of the competitiveness and free movement of the human capital, of goods or services. In this movement of economic, political, military or administrative territorial unity, globalization develops, extends and reforms even the mechanism of informational structures and processes. This also causes a tendency to perceive education at the same standards both globally and nationally, forcing school systems "to align to the same parameters or measurements" (Cucoş, C., Popa, N.L., 2009, pag.37). The process of global training of humanity is restructured based on the different socio-cognitive experiences of the existential realities of the cultural/ethnic communities but also on the new structures and forms of management of educational institutions. These must promote a multicultural curriculum based on community resources, on their learning experiences, but also on the promotion of values, attitudes and conduct that support cultural diversity and ethnic pluralism. Another objective of global education is the development of new technologies that have left their mark on educational theory and practice. These help to structure a program for the development of teaching skills, "to build a positive attitude with respect to integrating new technologies into teaching ... that enable teachers to understand the potential that the educational use of ICT has for the overall efficiency of teaching and learning activities" (Glava, C., 2009, pag.17).

In this context, the educational aims of the educational system in Romania include guidelines and tendencies of reformation existing on the axis of unification and globalization, targeting the training needs of the educational beneficiary, that develop into a postmodern socio-cultural reality, concerned with intercultural issues. However, "in a society where cultural diversity is still determined by differences in the social and professional status, where there are remnants of marginalization or exclusion from the social act, where teachers still struggle with their own prejudices" (Cuc, C.M., 2013, pag.220), education for diversity aims to

overcome the state of ethnocentrism. This objective can be achieved by building a common cultural spiritual space that valorizes the moral norms, civic skills, historical experiences of cultural/ ethnic groups, but also by facilitating the positive interactions between the educators and the educated, between the school and the local community. This desideratum finds its correlation in the pedagogical research undertaken, by valorizing online educational platforms where learners operate with existing representations in the virtual reality, in an adaptive electronic learning environment, "self-regulated according to the psycho-intellectual profile of the user" (Dulamă, E.M., 2010, pag. 151), in order to form skills necessary for effective intercultural and interpersonal interactions.

The educational policies in Romania are oriented towards promoting cultural diversity by adapting and innovating actionable strategies to the cultural characteristics that define the particularities of learning and training in the school community.

The motivation for proposing this research approach was based on the promotion of intercultural spiritual exchanges that favor a better understanding and cooperation at the level of cultural/ethnic groups, ensuring equal educational opportunities and social integration through educational activities. Therefore, through this study, we wanted to highlight the role of the educational platforms in popularizing the teachers' experience in conducting educational activities with children from different cultures, so that this experience can be capitalized by all teachers that work in multicultural environments.

II. Methods

As research methods we have used:

- direct observation of the conduct of educational activities applied in the various evaluations of teachers in pre-university education;
- questionnaire based survey, with items aiming to highlight the aspects of intercultural approach in the context of educational activities;
- experiencing learning using online platforms to facilitate the exchange of experience regarding the inclusion of intercultural content in the teaching and learning process;
- the focus group, in order to analyze the relevance and efficiency of the intervention via the online platform.

These methods were applied sequentially, according to the stages of the research conducted.

III. Participants

Our research focused on three groups of participants, some of whom were subjects of all three phases of the study: 1) a first batch (included in the research during the observational stage) - composed of 84 students of the Pedagogy of

Primary and Preschool Learning specialization, already working in the field of education, as teachers from preschool and primary education, working in both mainstream and special education. We selected the geographical areas affiliated to them, according to the known presence of certain nationalities and ethnic groups: Northern Bucovina, northern Maramures, the central area of Transylvania. Among the participants, 30 teach in mainstream preschool education, 38 teach in mainstream primary education and 16 teach in special education. In terms of seniority (assessed as the basis for a richer learning experience, including intercultural activities), the group composition was structured in the following way: 6 debuting teachers, with a seniority of less than 3 years, 11 with a seniority between 3 and 5 years, 27 with a seniority of 5-10 years, and 40 teachers with a seniority in education of more than 10 years. The main aspect we were interested in was that of nationality, respectively ethnicity of the children these teachers have worked or are working with, meaning that there is an opportunity to interfere more cultures in the educational context. Therefore, we found that 32 teachers mentioned working with children of Hungarian ethnicity, 24 mentioned children of German ethnicity, 18 - Children of Ukrainian ethnicity, 41 - Roma children. A total of 12 teachers mentioned other nationalities or ethnicities of the children they educate, such as Italian, Spanish or French. Please note that we specified for the questionnaire to also take into account children who were born in Romania but moved abroad with parents and returned to the Romanian educational system after a period of time during which they were included in educational programs in the countries they lived in, as well as children who were born in other countries, and then enrolled into our education system. We followed these aspects because the culture of certain countries where the children had the opportunity to live for a period of at least one year can leave its mark on their formation, 2) a second group of subjects (included in the formative research phase) - consisted of a total of 142 subjects, teachers from preschool and primary education, who took part in educational activities on the educational platform according to their desire for improvement, 3) the third group of participants, totaling 73 subjects, targeted members of three focus groups organized considering the geographical areas mentioned above who took part in all three phases of the study, through which they evaluated the results of the intervention carried out by using the educational platform.

IV. The Research Design

The research initially assumed establishing the purpose, hypothesis and research variables so as to follow a logical approach in obtaining relevant results.

4.1. Purpose, objectives, hypothesis and research variables

The purpose of the conducted research was to facilitate the exchange of experience among teachers regarding intercultural approaches in the context of educational activities.

The research objectives:

- observing the frequency, the type of activity, the way in which intercultural contents are included in the educational process and analyzing of these issues through the educational platform;
- using the online platform in order to inform teachers about the opportunities for implementing intercultural content in educational activities;
- developing the teachers' skills of capitalization in the educational context of cultural differences;
- posting concrete situational examples on the online platform that contribute to reducing discrimination and segregation between members of certain ethnic groups in schools and society;
- formation of the child's attitude to promote a tolerant behavior, acceptance and respect for the customs and traditions of other nations, their cultural and spiritual values, supporting personal development and their integration in society.

The research hypothesis was the following: development of experience exchanges mediated by educational online platforms means can lead strengthening and improving educational activities of training focused on multicultural and intercultural topics, helping to promote the acceptance and valuing of cultural differences within the group.

The independent variable: organizing a program of education and training through online education platforms focused on sharing experiences of teachers regarding the implementation of content specific to interculturality within formal, non-formal or informal activities.

Dependent variables:

- the degree of intensification of educational instruction and training activities focused on multicultural and intercultural topics;
- promoting acceptance and valorization of cultural differences in the school group.

4.2. Procedures

The research involved the delineation of three successive stages: 1) an ascertaining stage, which consisted of applying a questionnaire to 84 subjects whose data helped us establish the hypothesis and the elements of the intervention - conducted over a period of two weeks at the end of September 2013;

2) a second stage was to conduct the formative experiment in accordance with the purpose of research, this being carried out for over three months, until mid-January 2014. This involved requesting the teachers targeted for the study to register on the iTeach educational platform. We considered appropriate the use of this platform because it already possesses attractive training possibilities through the Intel Teach Advanced Online program and through programs developed by the Center for Innovation in Education (TEHNE Romania) or the Institute of

Education Sciences, these institutions being recognized by training programs provided in Romania. The platform integrates various web 2.0 tools and virtual facilities, providing an effective environment for facilitating the exchange of information. The teachers registered on this platform can be helped to develop distance education projects and professionally collaborate to improve the educational process, which helps us in achieving our research purpose. Therefore, teachers who have created an account on this platform at our request (as coordinators of the project) were encouraged to establish a professional group, who use the platform to facilitate the exchange of experience in the area of interculturality.

The coordinators asked on a regular basis for the posting of information materials, such as Power Point or Prezi presentations, photos, audio, video, bibliographic materials, etc. illustrating concrete ways to insert intercultural themed content into curricular or extra-curricular educational activities. The requested materials posted on the platform were divided into several categories, which helped teachers to better target their selection and elaboration of documents: a) information material regarding interculturalism, taken from various literature sources, 2) text or audio-video presentations of elements of culture and tradition specific to minorities in Romania, 3) photographs, films, recordings of intercultural themed lessons or extracurricular activities conducted with children, 4) intercultural educational projects carried out in partnership with various institutions, 5) suggestions, opinions, impressions, etc. relative to the intercultural experiences of the teachers. These materials intended to contribute to the enrichment of the amount of knowledge of the teachers with the main elements of the culture of other groups, the familiarity with the methods and techniques for implementing intercultural content, the formation of attitudes necessary for carrying out activities in the educational profession in terms of working with children belonging to various ethnic groups, but also the opportunity to optimally valorize the cultural values of the educated students.

The coordinators constantly monitored the group activity on the platform during the program implementation, initiating discussions, interventions, observations, etc., so that all the information posted to be helpful to those registered in the group. At the same time, short reviews of interventions on the platform were conducted so as to facilitate the selection and the option for a certain type of information that each teacher may apply into practice, in accordance with the particularities of the facing educational group.

3) a third stage (carried out in late January and early February 2014) involved the analysis and capitalization of the achieved results, as well as establishing new courses of action. This stage aimed at emphasizing, through the focus group, the relevance of interventions on the educational platform. The topics for discussion and analysis were centered on both the basis on which the questionnaire was developed, but also on some new issues related to the effectiveness of the e-learning activities undertaken.

V. Results

The data observed following the administration of the questionnaires showed that 28% of the teachers felt that the main reasons behind the use of educational content addressing intercultural issues relate to the fact that they are mandatory, as stipulated by the school and curricular documents. Thus, we took into account the responses of teachers who specified that they personally develop various disciplines focused on intercultural approaches within the school curriculum, at the school's decision.

A percentage of 53% of respondents admitted that they would rather use intercultural topics in situations created by ordinary contexts of life, saying that they needed to broaden the cultural horizons of children. Also, in this case there were also taken into account the mentions of people interviewed concerning the organization of some extra-curricular educational activities, which are based on various elements of the culture of children but also on activities undertaken with their parents, including the capitalization of their cultural experience.

Approximately 19% of those surveyed admitted they do not address intercultural issues in educational activities.

We have also requested the respondents for a critical analysis of curriculum materials, textbooks or educational auxiliaries used in kindergarten and primary school, regarding the volume of intercultural contents contained in the specific topics. Thus, 26% of the teachers surveyed felt that the curricular material that guides their work contains enough content that can valorize the multicultural and intercultural dimension.

Meanwhile, 32% said that the curricular materials meet intercultural approaches only to a moderate extent and 42% felt that these materials are appropriate only to a small extent to facilitate the introduction of elements of interculturality in educational activities.

Because treating certain topics of multicultural and intercultural content requires certain experience and even expertise of the teaching staff, we wanted to know if there is a need among educators for the implementation of training programs aimed at intercultural component. We identified, based on the responses from the questionnaire, the fact that 29% of teachers believe that intercultural approaches are greatly needed but training courses are not required for this. However, 68% of teachers consider that intercultural approaches are necessary and require training courses for this, while only 3% believe that intercultural topics and activities are needed, but to a lesser extent and do not require training courses. Very important is the fact that more than half of the respondents admitted that they had experienced difficulties over time in educational work with children of different ethnic groups, as they noticed the emphasizing of a certain (mutual) inability to understand and even tolerate some manifestations specific to the other's culture.

One of the questionnaire items involved providing examples of learning situations where teachers have valorized the cultural experience of the ethnic groups that they interacted with in the educational process. It was surprising that the majority of respondents (82%) provided examples from the field of extracurricular activities, less frequent in education, and 4% did not provide any examples.

Another item requested arguments in favor of using intercultural themes in educational activities, and their synthesis has given us the opportunity to register, in the first place, the avoidance of conflicts between students (mentioned by 73% of teachers), in the second place - equipping students with skills, knowledge and attitudes necessary for proper social integration (with 65% mentions), in the third place - familiarization of ethnic groups with the principal elements of the culture of other groups, understanding and respecting them (48% mentions), in the fourth place - avoiding the phenomena of intolerance by accepting cultural differences within the group (36% responses), in the fifth place - outlining certain elements of general culture by knowing the customs and traditions of other peoples, and the cultural and spiritual values of others (23% responses). There were other arguments, but they were highlighted to a lesser extent, and we will not expose them in this context.

In planning and organizing the formative program, represented by elements of information and formation performed through the educational platform, we have taken into account the opinions and attitudes recorded using the questionnaire, trying to approach topics of discussion and elaboration of materials to support the need for intercultural education and to provide practical implementation models.

After the completion of activities on the online platform, through focus groups held with teachers who have participated in the program, we noticed that illustrative posts of sequences of activities that took into account intercultural content, both in the context of formal and non-formal activities, have been especially appreciated (by 75% of participants). At the same time, it emphasized the fact that you can successfully adapt educational interventions for specific minorities in addressing children belonging to other minorities (aspect pointed out by 60% of the respondents). A remarkable appreciation was also noted regarding the transfer of experience of teachers who have worked/are working with Romanian children that have lived and were included in the educational system of other countries for at least 1 year (about 40%).

The table below provides some relevant comparative results, expressed as percentages, between the opinions of teachers surveyed in the initial research stage and in its final stage:

Table 1.

The opinions expressed by the teachers surveyed in the debut of the research stage as well as its final stage

Items	Initial stage	Final stage
Using intercultural themes in addressing mandatory content	28%	45%
Using intercultural themes in optional activities and in situations created by the ordinary contexts of life	53%	80%
Valorisation of the cultural experience of ethnic groups that the teachers have interacted with in formal learning situations	14%	25%
Valorisation of the cultural experience of ethnic groups that the teachers have interacted with in situations of non-formal education	82%	85%
Appreciation of the contents of educational materials and auxiliaries used in order to address intercultural topics	26%	30%
The need for training programs in order to deal with intercultural approach	68%	90%
The presence of difficulties in educational work with children of different ethnicities	64%	45%

Analysis of comparative data between the two stages of the research reveals that there are some differences that highlight the efficiency of the activities carried out on the on-line platform, even if the available time was short. Nevertheless, difficulties remain present in addressing students of different ethnic groups, which would justify a continuation of the intercultural themed training activities.

Discussions with participants in the focus groups have also led to the identification of suggestions determined by the needs of teachers to experience the implementation of intercultural content in the educational practice more thoroughly. Of these, the most frequently mentioned were the following: training courses regarding the multicultural and intercultural component, education partnerships between kindergartens and schools with children of different ethnicities, communication sessions, organization of workshops, debates within the department and pedagogical commissions, experience exchanges, including the continuation of activities initiated on the educational platform.

VI. Conclusions

This study confirms the fact that there are concerns among teachers regarding e-Learning and its formative resources, that meet the educational needs and interests that traditional programs can not face anymore. The use of informational means supported the familiarization of teachers with strategies of

pluralistic treatment of cultural diversity through knowledge and appreciation of the cultural heritage that students bring with them to school. Meanwhile, online educational platforms favored the exchange of teaching expertise, but also the connection of the virtual environment to everyday reality by exceeding the limits of action and interrelation, regardless of their cultural or ethnic origins, since “digital knowledge will innovate much data of traditional knowledge, by placing the sum of values that humanity has advanced over time” (Marinescu, M., 2013, pag. 69).

In this globalization perspective, where the most significant benchmark in building identity is culture, the main objective of institutions of superior education should aim at increasing the institutional initiative in the plane of efficient management of cultural diversity, and the training of young people for a world of intercultural, through ways of organizing studies and certifying competences to ensure the equivalence of training.

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THE INFLUENCE OF A TIMED BROWSER (*TB) INTO WEB-BASED INSTRUCTION ON COMPUTER SCIENCE STUDENTS' MOTIVATION TO LEARN PROGRAMMING LANGUAGES: PRELIMINARY FINDINGS

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ABSTRACT. This article presents the preliminary findings of research which aimed to explore the influence of a Timed Browser (*TB) as an innovative pedagogy on computer science students' motivation to learn programming language. The rapid development of web-based instruction enhances the need of teachers and curricula developers to investigate the individual learner's characteristics and needs, the interaction within teaching systems, and the new role of the instructor, website developer, and the student within the learning process. First, a literature review will provide the theoretical foundation, and then the quantitative methodology used in stage 1 of the research will be presented. Finally, the findings that emerged from the first stage of research on a PhD level will be presented and discussed.

Key words: *web-based instruction, timed browser (*TB), computer science, programming language, motivation to learn.*

ABSTRAKT. Dieser Artikel präsentiert die einleitenden Forschungsergebnisse, die darauf abzielten, den Einfluss eines Timed Browser's (zeitlich festgelegter Browser) (*TB) als ein innovatives pädagogisches Instrument für die Motivation von Computerwissenschaftsstudenten beim Lernen einer Programmiersprache zu untersuchen. Die rasche Entwicklung Web-basierender Anweisungen vergrößert den Bedarf an Lehrern und Lehrplanentwicklern, um die individuellen Charakteristika und Bedürfnisse des Lernenden, die Interaktion mit den Lehrsystemen und die neue Rolle des Ausbilders, Webseitenentwicklers sowie des Studenten im Lernprozess zu erforschen. Zuerst soll eine Literaturrezension die theoretische Grundlage bilden, sodann wird eine quantitative Methodologie

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präsentiert, die in Stufe 1 der Untersuchung verwendet wird. Abschließend werden die aus der ersten Stufe der Untersuchung gewonnenen Erkenntnisse auf Doktorandenniveau präsentiert und diskutiert.

Stichwörter: *Webbasiertem Unterricht, Zeit Browser (*ZB), Computerwissenschaft, Programmiersprache, Lernmotivation.*

I. Introduction

In recent years, we have witnessed a fascinating phenomenon where various universities and colleges all over the world are experiencing a combination of advanced information technologies in academic teaching.

The increasing use of the Internet and the acknowledgment of its inherent pedagogical potential led to the creation of different software that allow web-based learning in education and the academic system (Allen & Seaman, 2004; Bonk & Graham, 2006; Harasim, 2000). Nowadays, quite a few new pedagogical models are based on unique characteristics, and have enhanced capabilities for organizing information, visual presentation, and communication between lecturers and students.

Today, traditional teaching is challenged, and veteran professors often have difficulty catching up with new technology and embracing pedagogical innovation (Guri-Rosenblit, 2005; Papo, 2001; Reeves, 2003).

The rapid development of web-based instruction and its immediate availability increase the need for exploring the learner's characteristics and needs, the media's influence on the teaching process, and the instruction system's interaction capability.

In this article I will address the findings obtained in the first stage of a PhD level mixed methods research. During this stage, quantitative data were collected and the effect of the integration of the TB on the students' motivation for learning was measured, as well as their feeling of self-efficacy. The research questions were:

1. What is the effect of integrating a Timed Browser (TB - presenting academic content by date) on the students' motivation to learn Programming Languages and on their self-efficacy?
2. What is the effect of integrating a Timed Browser (TB - presenting academic content by date) on the students' academic achievements while studying Programming Languages?
3. In what way do computer sciences student perceive the TB as a motivating factor in studying Programming Languages?

The research hypotheses were:

1. Integrating TB within Programming Languages Instruction will enhance students' self-efficacy.
2. Integrating TB within Programming Languages Instruction will enhance motivation to learn Programming Languages.
3. Integrating TB within Programming Languages Instruction will improve academic achievements.

Web-based instruction & TB: The influence of web-based instruction on computer science students' motivation to learn programming languages

Today, after three decades of integrating Internet in academic teaching, patterns can be identified in the way various lecturers use it (Malikowski et al., 2006).

The importance of this research is in understanding the essence of the web-based pedagogy and the process of integrating the internet in teaching academic courses.

In all of the studies conducted thus far, not once was there research using a unique software tool that displays contents according to dates.

Quite a few studies examined the integration of various software and / or the positions of lecturers/students working with certain software belonging to the university itself. Moreover, some studies have described an annual event where technological tools are integrated into the educational institution – however, those share a different view from the view presented in this research.

Ben-Tzvi (1990) calls the teachers "shaping leaders", believing that the shaping leader raises the students' awareness of their achievements. This causes the students to believe in themselves as a product of the teacher's faith in them. Shaping leaders leads the student to total commitment and enhances their sense of confidence. Such a teacher is a father figure to his students: he/she is a model of honesty and fairness, instilling them with a sense of belief in self. The shaping leader creates a warm emotional atmosphere, making sure to provide varied feedback on their performance and raises standards and requirements, all the while demonstrating belief in the students. Hence, the shaping leader demonstrates a prominent component of a Pygmalion-like approach to subordinates.

Brandt (1998) argues there is no limit to human beings' growth and capability of for learning more. In his opinion, educators must not underestimate what students can do, since students learn more effectively when teachers demonstrate their confidence in their abilities and provide "scaffolding" that allows them to perform well in complex tasks. Brandt researched and found that

much of the learning takes place through social interaction. All those who wish to advance learning need to know how to make room for the social context. Students must often work in pairs or in learning teams. The teacher should take a distance from the center and develop "research communities" among the students. This means that there should be a certain degree of interaction between teacher and student, beyond memorizing and providing the correct answer the teacher expects to hear; the activity should become a real discussion where students speculate and respond to their peers' ideas.

Deci, Vallerand et. al. (1991) examined teachers' styles and found that some teachers are oriented towards supporting their students' autonomy, while others are oriented towards controlling their students' behavior. The teacher's orientation affects the overall classroom climate. The results showed that students in the class of a teacher who supports autonomy showed intrinsic motivation, capability, and higher self-esteem than the students of teachers who were more controlling. The former tended to support the students' ideas and respond to all of their students' needs. This research examines the effect of the integration of TB in Computer Language courses on the students' motivation to study this field.

Computer Sciences Programming Languages - Possible Difficulties Why is it difficult to start learning programming?

Studies pertaining to beginners' programming studies refer to three aspects: (1) problems and difficulties observed in beginners that involve programming; (2) error analysis and alternative approaches, method analysis; (3) beginners' approaches to solving problems. Additionally, theories were published in the attempt to explain why learning programming is fraught with difficulties.

The study of programming is a complex task performed on two axes: abstraction, which relates to concepts and principles of computer science and programming, and application, which refers to the programming language and the environment used to implement the principles. The transition between the two axes is alternate. A new concept or idea is first presented in class, and then immediately applied in a laboratory. It is then again discussed at the class level, and so forth. Accordingly, a beginner student must cope with understanding and function on both levels simultaneously. The method based on this principle, known as the "zipper" method, is recommended for teaching the new computer science curriculum in Israel (Gal-Ezer, 1995).

Experience shows that beginner students have difficulty understanding the basic concepts and principles related to programming, where they must simultaneously deal with knowledge of the programming language and the

environment in which they apply the principles that they learned by writing and running computer programs. At times, it is also difficult for them to distinguish between principles that are independent from a single programming language and other technical aspects relating to the work environment.

Armoni and Gal-Ezer (2006) referred to the five difficulty levels of programming beginners:

1. **Orientation:** Beginner students have difficulty understanding what programming is, and "What is it good for?" They find it difficult to control the different approaches to programming, and the various programming languages. In this situation, the distinction blurs between different levels of using ready-made software packages and programming;

2. **Understanding the notional machine:** Beginner students have difficulty understanding how a computer works, how to communicate with a computer, how to make it do what is intended, and so on;

3. **Understanding the meaning and syntax of a programming language** (notation): Beginner students have difficulty understanding the meaning of structures in language and using them correctly in writing the program;

4. **Specialization** (transition from novice to expert): Beginner students have difficulty making the transition to expert level, while acquiring tools and patterns for solving problems, which characterizes the experts;

5. **Performance in the workplace** (pragmatics): Dealing with technical aspects of the work environment, such as an operating system, editing files, compiling, monitoring a program's runtime, adds yet another level of difficulties.

Ginat (2001) also refers to beginners' difficulties, and distinguishes three levels of programming knowledge: (a) knowledge of basic structures used in developing algorithms; (b) development of algorithms for specific tasks; (c) decomposition of a problem to sub-tasks. He argues that mastering each stage requires mastery of the earlier stages, although mastering the earlier stages does not necessarily guarantee mastering the next. His research showed that only few among the beginning students mastered the third level. Furthermore, most of the beginners who showed mastery of the basic structures, found it difficult to apply this knowledge in the development of algorithms for solving problems.

Students' difficulties are also reflected in their reactions and levels of coping with failure in writing programs. For example, Du Boulay (1989) found that beginners react very badly to minor error messages, going so far as deleting the entire program or shutting down and restarting the computer. Similarly, Perkins et. al. (1985) found that a negative experience, failure, or encountering a difficult to solve problem can cause beginner students to give up altogether.

Bjarne (2000) further argues that the difficulties in the development of computer programs, and the difference from the abstract thinking to which students in higher education should aspire, derive from the difference between procedure oriented programming languages and object-oriented programming languages:

**Difference between Procedure Oriented Programming (POP)
and Object Oriented Programming (OOP)**

	Procedure Oriented Programming	Object Oriented Programming
Divided into	In POP program is divided into small parts called functions	In OOP program is divided into small parts called objects
Importance	In POP importance is not given to data but to functions as well as sequence of actions to be done	In POP importance is given to the data rather than procedures or functions, because it works as a real world.
Approach	POP follows Top-Down approach	OOP follows Bottom-Up approach
Access Specifiers	POP does not have any access specifier	OOP has access specifiers named Public, Private, Protected etc.
Data Moving	In POP, Data can move freely from function to function in the system	In OOP, objects can move and communicate with each other through member functions
Expansion	To add new data and function in POP is not easy	OOP provides an easy way to add new data and function
Data Access	In POP, Most function uses Global data for sharing that can be accessed	In OOP, data cannot move easily from function to function, it can be kept public or private, so we cannot control the access data.
Data Hiding	POP does not have any proper for hiding data so it is less secure	OOP provides Data Hiding so provides more security
Overloading	In POP, Overloading is not possible	In OOP, overloading is possible in the form of Function Overloading and Operator Overloading
Examples	Examples of POP are: C, VB, FORTRAN, Pascal	Examples of OOP are: C++, JAVA, VB. NET, C#.NET

The procedure oriented languages only implement functions. The newer object-oriented languages also feature objects behaviors. An object is the objective of the program - it can be a physical thing (table, chair, etc.) but also an abstract (a course, a flight, etc.). Higher motivation and higher self-efficacy are required in order to learn computer languages. However, though it is possible to infer from language to language, there are quite a few differences between them.

Sometimes, in order to perform an identical (or apparently identical) task in 2 different languages, more logical effort and/or more commands / functions are required.

Motivation Theories

The concept of motivation has been researched for many years, mainly in the fields of psychology, education, and sport. Motivation, according to Assor (2005) refers to a desire to invest time and effort in a particular activity, even when doing so is fraught with difficulties, high stakes, and failure.

Naturally, there are different theories and approaches to the concept of motivation, focusing on the different aspects of the phenomenon. The multitude of motivation theories testifies to the complexity of the concept, and the inherent difficulty in assessing it. It is worth mentioning that although motivation theories focus on different aspects, they are all based on three key factors: (a) referring to motivation as a behavior which is unique to each person, even if the conditions of the situation are similar; (b) referring to success and failure in terms of reaching or failure to reach the goal; (c) referring to the level of difficulty required for reaching the goal as a significant factor influencing the value of the achievement for the person - the higher the level of difficulty the greater the value of reaching the goal. It is important to add that there is a common assumption in the study of motivation, whereby there is a distinction between extrinsic and intrinsic motivation. Generally speaking, intrinsic motivation is defined as an investment made out of interest, curiosity, and enjoyment, while extrinsic motivation is defined as behavior intended to avoid punishment or obtain a reward, where an external reward is perceived as the cause of the behavior. The following are a number of central approaches that motivation theories are based on: The Humanistic approach, the Behavioral approach, and the Cognitive-Social approach.

Humanistic Approach

This approach sees the person's needs as a source of motivation, and focuses on general processes of motivation such as self-esteem and feelings of self-fulfillment. Maslow (1954) developed a motivation theory according to which different basic needs motivate the person, either needs of "lack" in the physiological sense, such as hunger or fatigue, or need borne from "growth," which drive a person to develop their intrinsic personal potential (Maslow, 1954).

Self-Determination theory developed by Deci (1991) is based on a humanistic approach and Maslow's (1954) foundation. Three types of innate psychological needs underpin human behavior: autonomy, relatedness and competence (Deci, 1991). The desire for autonomy represents the subjective need for our feeling that our behavior is not coerced, but rather derived from our inner selves and reflects our genuine tendencies and needs. The need for relatedness

refers to the person's need to be loved by and to love others, for a sense of belonging to a wider community and for deeper relationships and honesty. The need for competence connects to the person's need to feel that he is able to reach the set goals.

Self-Determination theory posits that suppressing those needs may weaken the sense of motivation and impair its quality. Conversely, satisfaction of these basic needs will lead the person to qualitative involvement in his/her actions. The theory shows the correlation between the motives and the quality of motivation - the more internal the motives, the higher the quality of motivation. This theory constitutes the theoretical framework for intervention programs aimed at raising the level of motivation among students.

Cognitive-Social Approach

This approach was the result of the inability of the theories based on the behavioral approach to explain different behavioral phenomena. This approach, resulting from the cognitive revolution, was innovative in acknowledging the important and influential role that the person's expectations have on the consequences of behavior in motivational processes. Theories based on this approach focus on socio-cognitive processes related to the person's perception of self and the environment in which he/she lives, whereby these processes derive from interactions with the environment. Different studies discussed the attitudes and beliefs of the learner as a significant factor that might predict how personal knowledge and skills will be used to determine the students' success or failure. To better understand this approach, I will review a number of consequent theories; these theories were selected because they address the way that a conceptual perception can improve performance. Bandura's Self-Efficacy (1997) is the most prominent theory. Bandura (1997) defined self-efficacy as the person's self-perception of being able to successfully perform a task, emphasizing the great significance of person's perceptions' in motivational processes and the quality of performance. Self-Efficacy theory is an example of a social-cognitive approach, since it not relates to a person's processes empowerment and improving performance. Specifically, Self-Efficacy theory focuses on several major factors: The process of the development of self-efficacy, and the effect that self-efficacy has on how the task is performed and the quality of its execution. The term "self-efficacy" refers to the individual's perception and belief in his/her abilities to perform a specific task and achieve a certain level of performance, and derives from a gradual acquisition of different skills and abilities in the cognitive-perceptual, motor, lingual, and social aspects (Bandura, 1997).

Another motivation theory focuses on the goals or achievements, and is called Achievement Motivation. According to Dweck (1961), one can identify two

main goals - learning goals and performance goals. The goal of the learner when it comes to performance goals is to avoid negative judgment and seek positive feedback. Conversely in learning goals the goal of the learner is to understand the contents in depth, to invest effort, and seek involvement in the learning process. Performance goals are characterized by an external source of motivation, such as a good grade or the teacher's appreciation, and learning goals are characterized by an internal source of motivation, such as increasing performance quality and controlling it, interest, and curiosity.

Self-Efficacy

Self-efficacy is a person's judgment of his/her capabilities in organizing and executing a course of action required to attain a specific performance (Schunk, 1991, p. 207). *"Since Bandura's (1977) seminal article on self-efficacy, much research has classified and extended the role of self-efficacy as a mechanism underlying behavioral change, maintenance, and generalization"* (Schunk, 1991, p. 207). Self-efficacy beliefs influence what one wishes to do, and motivate the degree of effort and persistence. Bandura indicated that these same beliefs influence the outcomes of the regulated activity (Schunk & Pajares, 2001). An individual's concept of self-efficacy can cause that individual to perceive his/her level of ability to perform in direct correlation to the perceived thoughts of self-efficacy. Two people with the same skill level can perform differently depending on the level of individual self-efficacy which these persons believe they have (Bandura, 1993, p. 118)

According to **Self-Efficacy** theory, the process of shaping the self-efficacy perception is based on the entirety of the previous experiences with success and failure in the context of educational tasks. The theory emphasizes the social aspect in learning and motivation processes. Results of previous studies shed light on the affinities between the students' sense of self-efficacy and past experience, feedback, encouragement and support; students who feel effective when performing academic tasks will exhibit greater investment in the learning process, longer persistence when coping with challenges, and better achievements (Schunk, 1991). Many studies have shown a direct correlation between positive feedback and increasing intrinsic motivation, and the direct positive correlation between negative feedback and a decrease in intrinsic motivation. Schunk (1991) focused on processes that promote a high self-efficacy perception for tasks and the development of intervention programs designed to enhance the students' self-efficacy. Schunk's conclusions showed the different ways to enhance students' self-efficacy, for example setting specific and short-term goals that reinforcing the student's assessment about the ability to reach these goals. Another way that contributes to self-efficacy is teaching problem-solving strategies.

Another theory, emerging from the Cognitive-Social approach, is the Attribution Theory, which focuses on the influence of the student's expectations, such as the expectation to succeed or fail the different requirements (such as exams, quizzes, assignments, etc.) on the value that the student attributes success of failure in the academic requirement. It is important to note that the value of the achievement is determined individually and is subject to effects from the attitudes of the environment, the level of difficulty required for reaching the goal, and the significance of the achievement and the feelings of success and pride of those who manage to succeed (Schunk, 1991).

According to the Self-Determination theory (Deci et. al., 1991), supporting efficacy will increase the motivation and allow its continuity. Supporting efficiency will be possible through challenges, feedback on performance, peer acceptance, and parental involvement. Research has shown that the more involved the parents and teachers in their children's actions, while supporting autonomy, the greater the children's motivation. Research also points to the importance of the freedom of choice in the process of self-determination. It was found that when students were allowed to choose their tasks they were more intrinsically motivated than those who had their tasks dictated for them (Deci et. al., 1991).

In conclusion, one of the major roles of the education system and the teacher is to create a learning environment with a supportive social climate, which allows the learner to perceive learning as a process that allows the formulation and realization of values and personal goals. The assumption is that every teacher knows the composition of his/her class (the students' programming background), the class's unique difficulties (for example, lack of study time or 'poor' theoretical background), and based on these data, he/she can adapt the software so that the largest common denominator of the class will benefit and gain understanding and professional benefits from using it.

Research Design

This mixed-methods research combines qualitative and quantitative research methods, and at 4 points in time: (1) In the beginning of the fall semester (October, 2013), a questionnaire was administered to the two groups (80 students) seeking to examine their self-efficacy and motivation; (2) Validation of the questionnaire and analysis of the data emerging from the students' results (at this time); (3) In April, 2014, I conducted about 10 semi-structured interviews with students of the experimental group in order to explore the students' attitudes regarding the use of a TB. (4) In the end of the spring semester (June, 2014) and in fact in the end of the academic school year, I will once again administer a questionnaire to the two groups (80 students) with the goal of examining the changes.

At this time I should already have the students' academic grades, and I will be able to analyze them from an annual perspective (with correlation to their initial high school graduation grades).

Research Variables: (1) **Dependent variable:** effect of TB on: motivation, self-efficacy (academic and applicable) and academic achievements, students' perceptions. (2) **Independent variable:** integration of TB, learning environment.

The Research Population consists of students enrolled in professional training programs, prior to their recruitment to the Israeli Defense Force (IDF), aged 17-20. I will use two groups of student in this research, each containing around 40 participants.

The experimental group will undergo the programming language learning process with the use of the TB, whereas the control group will learn programming language in traditional ways without the use of TB.

All the students enrolled in my college (and included in this research) majored in computer science in their high school. They passed their tests successfully, as well as completed a final project on the subject. Without these prerequisites they would not have had approval from the Ministry of Education to enroll at the college.

Main research goal: To develop a model of a Timed Browser (TB - Presenting academic content by date), integration in Programming Languages Instruction within the Computer Sciences.

Secondary research goals: (1) To examine the effect of integrating TB in Programming Languages Instruction within the Computer Sciences, regarding, motivation to learn, self-efficacy, and academic achievements.

Closed-Ended Questionnaire

The questionnaire was constructed by a statistics expert specifically for this research.

It is very important for me to find the differences between those who studied procedure oriented programming language or an object oriented one.

The Importance of This Research

On the theoretical level, this research can contribute to the understanding of how integration of TB within programming languages instruction can affect motivation to learn and promote academic achievements. On the practical level, the research will offer a pedagogical management tool that can benefit teachers and students in managing learning and teaching using IT.

Preliminary Findings

Table 1 presents the results of a t-test for independent samples between the two research groups: students using the browser in their learning and those who do not learn with the browser. Since the current point of measurement is the beginning of the school year, no differences are expected between the two groups regarding the three research variables.

Table 1.

t test for independent samples: Differences according to teaching method

	Without Browser		With Browser		
	N=41		N=40		
t	S.D	M	S.D	M	
-0.84	.49	2.07	.57	1.97	Learning motivation
-1.75	.58	2.29	.66	2.05	Self Efficacy
-2.08*	.63	2.19	.71	1.88	Performance efficacy

* $p < .05$. ** $p < .01$. *** $p < .001$

The finding of the three variables show that the group that did not use the browser is slightly better, but as expected, the difference is not significant. Regarding the "performance efficacy" variable, the difference between the groups is significant, and perhaps it derives from the fact that the measurement took place some 3-4 weeks into the school year, so the students had already experienced the learning method.

Tables 2 and 3 present the analyses of t tests for independent samples between the two research groups based on the participants' background variables: gender and programming language. These analyses were conducted to examine already in the beginning of the research if there are differences among students regarding these variables.

Table 2.

t test for independent samples: Differences According to language

	Procedural		Object Oriented		
	N=17		N=64		
t	S.D	M	S.D	M	
-0.86	.46	2.12	.55	1.99	Learning motivation
-2.96**	.62	2.55	.60	2.07	Self Efficacy
-2.44*	.77	2.39	.64	1.94	Performance efficacy

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

The analysis reveals that indeed these findings distinguish the students already in the initial stage. Regarding gender, it can be seen that there is a systematic difference among variables, so that girls are significantly better than boys. In the programming language variable, we can see that programmers using the procedure-oriented language scored higher than their peers using the object oriented language in all three variables, but with the "learning motivation" variable the difference is not significant. In addition to the analysis of differences via t tests for independent samples, One Way ANOVA was also conducted to identify possible differences based on the type of language. It has to be noted that use of One Way ANOVA rather than t test for independent samples derived from the fact that the analysis included three groups rather than 2 groups in the variable analysis (gender and language).

As can be seen from the results of the measurements conducted, the findings are inconclusive since the data were collected at the beginning of the course. It is the intention interest of this study to collect further data at the end of the learning process in order to determine whether and to what extent the integrated TB can promote motivation and self-efficacy to learn programming languages, and to create a more structured, planned, and systematic approach that has yet to come to full realization in view of the educational innovation in higher education.

The findings show that mapping individual and personal factors may have a potential impact on innovation (2005 - Marieke), and can assist in the process of identifying and targeting earlier efforts, which can be channeled towards maximizing success in the classroom.

There is no single and absolute theory that provides the solution for formulating a general framework for embracing innovation. Additionally, the education system in general and academia in particular may contain a variable number of initiatives originating from individual projects from teachers/lecturers. A structured, planned, and systematic approach that has yet to come to full realization in view of the educational innovation in higher education. In this context, we should address Collis, & van der Wende (2002) research, which aimed to define models for technology and change in higher education.

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Notification

At the request of the authors, the article "Psychological factors in foreign policy decision-making (I): decision making models", has been retreated from the Studia Psychologia-Paedagogia no. 1/2012, because of the way of being interpreted few of the communicated ideas and arguments.

Editorial Board approved this decision and expresses its commitments for promoting academic knowledge, with respect for the academic community.