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## Education - diversity and specificity

Elena Liliana DANCIU\*

The quick change rate in society, the information bloom, the innovation rate and the changing structure of communities and jobs ask imperatively for a new educational approach in which students can self-determine learning and everything that is related to learning approaches. Changes are so quick that some traditional training and education methods have become completely inappropriate: the old way of knowing, of learning can no longer prepare students for life in modern communities or for jobs abroad. In a world where information is increasingly accessible and modern organisational structures use flexible learning practices, it is not surprising that they look for approaches that supply quick, effective solutions for teaching flaws and andragogical methods.

The youngsters nowadays need a cognitive, affective but mostly sensorial and special stimulation that would raise their interest, their enthusiasm and that enables them to find efficient solutions for any problem. They, the ones almost dependent on the internet, social networks, pleasure and thrills are long drawn from under the blackboard and marker domination which used to keep their interest high, channelled them towards performance and kept their epistemic curiosity awake<sup>1</sup>.

As an answer to the problems faced by the education system: financial restrictions, inequality of chances and the devaluation of school diplomas as well as to the ideals and aspirations of the population, we place our hope in the wide arms of the innovations of the educational field.

Maybe the proper time has arrived to change the education paradigm<sup>6</sup> and to make a distinction between what is good and what must be changed.

What the school needs is to be more involved, to offer new services based on the needs of the community- financial education, health education, entrepreneurship education, help for the young people in order to get them used to the labor market. Because the education will remain the engine that pushes society ahead, lifelong learning has become the specific education of the 21st century because we learn<sup>9</sup> to live together, to gather knowledge, to act, we learn for our whole life.

Educational issues is so wide that it is very difficult to determine which subjects are more important than others and deserve more special

The diversity of the topics tackled by the authors is the reason why the topic of this issue of our journal has a general character and covers themes such as emergent learning model, teacher – student interaction, information technologies and history, family, school and community, education of children with special needs and a book review.

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The first three approach topics related to the importance of heutagogy as offspring of the theory of complexity (the emergent learning model; the digital agenda within the English experience), the consequences of the teacher – student interaction on social networks and the impact of information technologies in the teaching – learning – evaluation of the students majoring in chemistry.

The following five articles tackle aspects of family situation and of schooling level in families, the capacity of adapting and the transforming learning experiences of the family, the ways of developing communication and language in children, interdisciplinarity and transdisciplinarity in teaching, education about nutrition, schools and local communities.

The last two articles approach the issue of educating children with special needs of education – inclusion and counselling behavioural disturbances. As usual, the journal also includes a book review – Social Media in Higher Education: Teaching in Web 2.0, 2013, authored by Monica and Bogdan Pătruț.

*The Emergent Learning Model: using the informal processes of learning to address the Digital Agenda for Europe* discusses the re-thinking of the way in which one could design and support web learning, the contexts of learning in the 21<sup>st</sup> century when education can be extended due to the potential of new technological platforms and technological tools.

After WEB 2.0 valorised the informal aspect of learning within educational processes and the formal aspect of institutional organisation with its ethical, cultural and social issues, they felt the need (post Bologna) to integrate informal, non-formal and formal learning in a model favourable to social inclusion.

Called the Emergent Learning Model (ELM), it relies on the Open Context Model and can be considered a learning design tool called a “development framework” for the post-Web 2.0 Digital Agenda. The author presents the origins of the model, its development framework and the way in which they managed to develop other learning projects such as Ambient Learning City & WikiQuals.

*Consequences of the Teacher-Student Interaction on Facebook* brings forth the issue of the teacher-student interaction on Facebook and the consequences (that can be rather long-lasting) of the role played by the teacher in class management and in the development of interpersonal relationships with the students, on the level of discretion or information censorship in relation to the teacher’s status of teaching staff, on traditional hierarchy that is diluted or ranked at the same level as the students.

The authors emphasise aspects that sometimes hinder the good intentions of both partners – the too familiar language that annuls the formal distance involving respect and recognition, the sometimes too alarming decrease of the level of inhibition, the renunciation to the formal aspect of writing and the acceptance of ignoring some of the rules of corresponding (use of nicknames in communication or e-mail addresses, improper abbreviations, lack of punctuation marks, etc.). the author warns on the fact that when the teaching staff wish to keep up with the youth and turn “cool”, they risk to become part of others’ lives and confess on the liking or disliking certain things, attitudes, behaviours and images representing them and that they would like to remain anonymous.

*Using informational technologies in teaching history of printing to chemical engineering students* seizes the way in which information and communication technologies can be applied efficiently in the process of teaching – learning – evaluating students and the changes that the former can generate in time in the features of educational systems. The author(s) illustrate the adaptation of the educational field to the new trends of globalisation, the diversity of the technological environment (distance learning, access to virtual libraries, development of individual abilities in using information) involving interactivity, specificity, responsibility and attractiveness, cooperation and dialogue and particularly a shift in emphasis from teaching to learning – evaluating with a view to develop students' personality.

*Poverty of a family from provincial Poland and attractiveness of a school child among peers* captures the reader's attention through the research results of a survey on a sample of 192 students from primary schools aged 11-13, from six rural schools and four urban schools from the suburbs of the ex-voivodeship of Częstochowa, Poland. The goal of the investigations was to establish a child's position in a classroom, the recognition of social relationships in a group based on mutual empathy and on rejection, the existence or lack of popularity, the relationships of friendship or of inter-individual and group conflicts, the group leadership issues, the level of school anxiety and the low feeling of social competence.

The paper thus answers three main questions regarding the influence of the factors analysed on a child's positive and negative choices, the significance of the socio-metric position of a child among his/her colleagues, and the factors that point to the link between variables differentiating significantly the acceptance of a child by his/her colleagues in a class.

*Relationship between cognitive flexibility, family resilience and parents' transformative learning experiences* presents an analysis of family resilience, of cognitive flexibility and of transformative learning and their importance as mental health predictors, the correlation between them and the influence of the social context on parental behaviour. Research results show that an individual's change is facilitated by the support from the group (for instance, a support group for parents of teenagers, a support group for unemployed people, etc.) that act as both a catalyst in learning and as a source of learning.

The article points out the correlation between the three variables (cognitive flexibility, family resilience and parents' transformative learning experiences), analyses the way in which parents manage to overcome stress (dilemmatic) situations in their relationship with their children by adopting adaptive strategies and by assuming change.

*Intra-disciplinarity or interdisciplinarity in teaching mathematics in primary school?* brings arguments regarding the fact that there is no compatibility or exclusion between intradisciplinarity (which does not exclude the perspective of integrated approach) and transdisciplinarity not even when it is about teaching mathematics in primary school. at the same time, it is pointed out that the most efficient solution is based on the balance between extremes because each of them has both advantages and disadvantages and are conditioned by such factors as inner

coherence of the discipline to be studied, horizontal transfer of knowledge, paradox of specialised encyclopaedist, human relationships between the actors of the educational process, training of teachers, and attitude of teachers towards integrating trends.

The motivations of the integrated approach of mathematics, the presentation of learning contents and of the competences expected are other key points of the analysis.

*Nutritional Education in Kindergarten – An Analysis of the Romanian Preschool Curriculum* presents a qualitative research of the specificity of nutrition education in pre-schooling that takes into account educational and behavioural objectives in the Romanian curricula and the educational content of Feeding in kindergartens. From the critique of biological factors influencing food preferences in children to food neophobia or visual familiarity, to solutions for proper nutrition to avoid obesity or dystrophy or to healthy nutrition habits that are essential in children's growth and development, the author presents elements of success in nutrition education programming in school and efficient strategies that change nutrition behaviours in children.

*Schools and Local Communities* presents the results of a questionnaire-based survey on a sample of non-institutionalised people in the rural and urban environment; the survey aimed at investigating the degree of belonging to a community, the citizen – institutions – public organisms relationship and the existence of a real cooperation between school and the corresponding community, the degree of belonging to the community, the contribution of the school to the moulding of the youth, the materialisation of the rural and urban mentality in school and church, the loss of trust in school of an increasing number of people and its causes, the consequences of the lack of a partnership between school and community for the population.

*How to use the HANEN approach in developing communication and language in children* presents the results of a research carried out by implementing Hanen center that gives parents or caregivers of the child as linguistic facilitators and programs are designed so children with developmental problems and those with delays in language development and autistic syndrome (fragile X Asperger).

Research demonstrates Even if it is hard to believe that teach parents to observe their children, to listen, to wait for things to happen and let them take over communication and support her is more important child development than trying to learn to speak

*Inclusion of students with disabilities in Romanian higher education system* presents the results of educational interventions within a project for students with disabilities, a project that aimed at the insertion of the youth on the labour market, at the increase of the occupancy rates and of competence-based activities, at improving education and the labour market. approaching the promotion goals of sustainable development of the citizens able to act responsibly for generations, the author points out the obstacles that hinder the access of people with disabilities to higher education and the final results of the project that includes educational mentorship programmes (for a period of two years of higher education for 100 students with disabilities; the training in ICTs of 100 teachers, 300

undergraduates and 150 pupils with disabilities (supported financially), of 300 pupils with disabilities trained due to the involvement of educational mentors and volunteers for a period of two years of college.

*Possibilities and Challenges in Teaching Students with Visual Impairments* is summarizing a study of 55 children with vision problems to see if there are differences between making a metacognitive reading for students with visual impairments and blind students. The paper presents the methodology used (read strategy, global strategy in reading, problem solving and strategies for supporting Reading)

*Children counselling with behavioural disorders* presents examples of good practices in counselling activities with behavioural disorders (innate or caused by neglect or abuse) and milestones related to causes and intervention factors (motivating the children, issues to solve), teacher's behaviour during the counselling session, acknowledgement and social isolation, impulsive behaviour and rule ignoring, issues in children with ADHD and hyperkinetic, case studies.

The review of the book *Social Media in Higher Education: Teaching in Web 2.0* supplies a framework for the exploration of the ways of using the social media in education, in general, with emphasis on academic environments, and from the perspective of both actors and education institutions. The content of the 19 chapters of the book aims at distinct aspects of perception and superior use of social media (Facebook, Twitter, YouTube or tools for the sharing of documents as teaching and learning aids, for professional research and development) in relation with the students' needs for learning, skills and competencies.

The authors supply answers regarding the use of social media as a main channel in the auditorium and as an instrument for the teachers, the development of software systems, the social media in business contexts, in parental education, the social mobile mass media (as a problematic issue) and Web mobile 2.0 (as a fundamental omnipresent technological universe), and e-learning models of the Universitatea 2.0 type.

***The diversity of the topics ad approaches, the examples of good practices, the solutions supplied for problem-situations, the opening to new aspects of contemporary education that tend to bring major changes in all the sectors of social life and in human personality development are good reasons to read these articles.***

***The editors hope the readers will enrich mentally and sentimentally while finding answers to their quests in this volume.***

# The Emergent Learning Model; using the informal processes of learning to address the Digital Agenda for Europe

Fred GARNETT, Nigel ECCLESFIELD \*

**Abstract:** Since the advent of Web 2.0, which established the participatory web as a platform, we have been involved in rethinking how we might design and support learning to match the potential of this possible new web-based world of education. In our Open Context Model of Learning (Luckin et al 2010) we captured what we had learnt from theory and web-based learning projects, arguing for a model of “informal e-learning”, and for fresh thinking about pedagogy in terms of both andragogy (collaboration) and heutagogy (creativity). We thought this provided an opportunity to rethink the contexts in which learning might take place in the 21st century, as education could be released by the potential of new technology platforms and tools. For us Web 2.0 highlighted the informal social processes of learning over the institutional, formal processes of organising the institutions of education, which raises ethical, cultural and social issues concerning how we might design new contexts of learning. When the EU identified that, post-Bologna, we should look to integrate informal, non-formal and formal learning, we found this inspiring and wrote the Emergent Learning Model (ELM), to both capture what we knew from our own work with informal, non-formal and formal learning and also to be socially inclusive. ELM builds on the Open Context Model and is an attempt to be a learning design tool, what we call a "development framework" for the Digital Agenda Post-Web2.0. We will discuss its origins, the "development framework" we created and how we have used it in designing new learning projects Ambient Learning City & WikiQuals

**Keywords:** informal learning; Bologna Process; Emergent Learning; Web 2.0; andragogy; heutagogy

## I. CHAPTER I

The Emergent Learning model is an attempt to take what we, and others, have learnt in using the participatory tools of Web 2.0 and applying them to learning. The Learner-Generated Contexts Research Group gathered some of these ideas together in the Open Context Model of Learning (Luckin, 2010). A key dimension of this work was that we were interested in learning as a self-determined (heutagogy) and self-managed process, rather than something that occurred after students were presented with a formally-mapped out and pre-determined syllabus

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designed to prepare for a precise, and limited model of formal accreditation. We wanted to open up education systems to the serendipities of self-directed learning in various contexts both within and beyond the classroom.

Bernie Dodge (1995), in developing WebQuests in 1995, had started by asking the question “is surfing (the web), learning?” As a consequence of answering this question his WebQuests marry a formally structured question and assessment process (the rubric) but allow for the emergent properties of surfing, that is browsing the web, to be a part of the learning process. Once Web 2.0 (O'Reilly, 2005) came along a decade later, with its more participatory ethic, its inbuilt interactivity, content creation tools, and massive cloud-based capacity for hosting resources, then the emergent aspect of learning allowed and designed for in WebQuests could be Web 2.0 can be seen as what Steven Johnson (2010) calls an “adjacent platform” for innovation. This self-directed learning and the serendipity and opportunities it reveals hasn't been allowed in formal Education, for many reasons. It was why we wrote the earlier Open Context Model of Learning, to offer a range of new pedagogical possibilities for a world of potentially “open” education.

However we realised that for innovation in education to take advantage of the potentials of emergence, interactivity and resource abundance that are on offer in a Web 2.0 world of learning, then we needed to create what we called a “development framework” to help the design of education innovations.

## **1. Development Frameworks**

In towards an organisational Architecture of Participation (Ecclesfield and Garnett, 2008) reviewed the process of working on developing the “e-mature” organisation. This was based on a national UK project to make colleges more e-learning ready called E-Maturity For Further Education (EMFFE). This involved moving colleges from a known organisational structure, into an unknown one, based on the use of unfamiliar, but widely available, network technologies. Our view was that the traditional method of quality improvement, benchmarking against existing best practice, didn't work when you were promoting new, and innovative, practice. Consequently we created an approach based on a “development framework” which models sequences of both existing practice and future potentials within networked organisations, using this a partial framework to scaffold a range of organisational possibilities. The degree of network connectedness of education colleges was seen as providing the “adjacent platform” for developing innovative, or new, e-learning practice in an educational context.

The point of the “development framework” created for EMFFE was to show educational institutions a range of potential practice, which they could decide to act on, or not, in line with their own existing strategic policy and organisational practice. Ideally they would incorporate elements of the development framework into their long-term strategic plans as part of the future design of their educational institution.

## **2. Emergent Learning Model as a 'development framework'**

A key distinction of learning since the web altered the availability of learning resources is that we are now in an age of learning resource abundance. Unfortunately both existing educational practice and institutions themselves were designed in eras of resource scarcity. When lectures began at the University of Oxford in 1096 they only had 30 hand-written books, each of which was locked away in a central depository, the original university library. A lecture was then, and still remains, an exercise in the mass copying down of the, once exceptionally scarce, resources of a text book, which heavy tome was rested upon a lecturn so it could be read from, aloud. Learning was, originally, merely remembering what was in the very rare text book. Modern librarians, however, began as experts in information retrieval, once printed books had begun to proliferate after the invention of the printing press. Now, in the 21st century, thanks to the online availability of learning resources since the advent, in the UK, of the NGfL (1997) and FERL (2000) and, in the USA, OCW (2002), as well as various newer open resource initiatives, such as Wikipedia, (2001) and Khan Academy (2006), we have an abundance of easily accessible learning resources online. However we lack both new educational practices and new participatory organisations with which to deploy these new resources in this era of resource abundance. So we have the curious anomaly of the newly available abundance of learning resources being deployed in educational institutions with practices designed to solve the problem of resource scarcity. However the problem of resource abundance, triggered by the same affordances of the Web that lead to the development of WebQuests in 1994, is compounded by the affordances of Web2.0 which further offered both content creation tools, like blogs (and collaborative wikis) and, perhaps more importantly educationally, content curation, such as Pinterest but, in our opinion, best captured in pedagogically sound resource platforms like xlearn (2011) and Biblio (2014).

The thought behind the Emergent Learning Model as a development framework was how to solve this problem; how to design *new* educational practices appropriate for a world of *resource abundance*. We thought we could do it by creating a development framework to help with designing new educational practices, in both new and traditional learning contexts. As with WebQuests we thought we could consciously design learning processes to reflect the emergent practices of learners, rather than designing for institutional needs, and that a development framework for learning could be created that reflected a learner-centric approach (Luckin, 2008).

### **1.3 Emergent Learning Model and the Bologna Process**

However a key factor in creating a development framework for post Web 2.0 emergent learning was the proposals from the EU to follow the Bologna Process, which was concerned with harmonising formal University degrees across the EU, with a plan to further integrate all aspects of formal, non-formal and informal learning into that harmonisation. We found this proposal particularly interesting because earlier work, such as the Open Context Model of Learning, suggested that informal learning was being transformed by the Internet and the Web in such a

way to suggest that it could also transform formal education. We believed that post-Web 2.0 well-designed informal learning processes could now drive formal education outcomes. However it was clear that the EU took the opposite position, namely that all education structures across the EU could be harmonised by integrating informal and non-formal learning into existing formal education structures. In other words the EU had completely missed how learning had been transformed by the shift to resource abundance during the time that the Bologna Process itself was being implemented across Europe (1999-2005).

## **II. CHAPTER II**

The critical element in creating a development framework for the emergent learning we were seeing post Web 2.0, and which could also be linked to a post Bologna Process concerned with integrating informal, non-formal and informal learning, would be to redefine what we understood by informal, non-formal and informal learning in light of what we had learnt post-Web 2.0

### **1. Elements of the Emergent Learning Model**

Our belief was that educational institutions in a period of resource scarcity, design for the institution first, and then deploy resources on an institution-centric basis; courses, staff and resources, then students. We had seen from emerging learning practice (Luckin, 2010) that we could design for learner-centric learning and support the practice of emergent learning (Hase). Consequently we could flip the traditional organisational sequence in educational practice of Institution / Resources / Learner and design for a Learner / Resource / Institution sequence. This gave us an approach that would allow us to integrate, or link, learning across informal, non-formal and formal sectors of learning, whilst still referencing how formal education worked. Consequently we will examine how we might most usefully think about learning, by trying to tease out how we might best describe its informal, non-formal and formal characteristics.

*Informal Learning* has often been seen as learning we do in our free time outside of institutions. What we choose to learn informally usually comes from our own interests. Historically this has often found to have been located in libraries, sometimes described as 'street-corner Universities' because of the ready availability of reference books for fact-checking, of text-books, for subject-based understanding, of non-fiction books, for a broader understanding of the world, and of novels, for descriptions of the lives of others. But it has also been seen as a key part of community or adult learning, that is as long as managerial targets related to formal assessment processes aren't added to that traditional process (in the UK) of learning in the community.

For the purposes of the Emergent Learning Model we wanted to focus more on the aspect of the interests of individuals and also to foreground the social process of learning. Sugata Mitra's recent 'Hole in the Wall' (Mitra, 2012)

work is so successful with learners because he cleverly foregrounds the social process of learning by using access to learning resources as a framing device (*resources are how we scaffold learners* as it is described in the ELM table). Mitra designs for social processes to emerge as a pre-condition of his work, which is the essence of informal learning. It has been said that you can't design for informal learning, but we actually do design for informal learning for much of the time in educational institutions, because the *social* processes of informal learning are in many ways the pre-condition for *formal* learning outcomes to emerge.

So for the Emergent Learning Model we will define informal learning as;

*Informal Learning is the **social** processes that support self-organised learning in any context*

*Non-formal learning*; when working on the Metadata for Community Content project which, in part, was looking at how we might create socially inclusive (or 'digital divide') **content** for informal, or 'community' e-learning, we concluded that we were working on a project concerning non-formal learning, which we defined as '*structured learning opportunities without formal learning outcomes*'. (Cook, 2002) Arguably this was because we were working in the context of what is now named as Adult & Community Learning (ACL) in the UK and we were concerned to identify learning content that would better engage disaffected learners; to structure their learning interest. Based on an adaptive model of resource creation that we termed the *model of informal e-learning*, which was a dynamic co-creation model of learning, we identified a process of resource creation that responded to learner's interests whilst removing the institutional power relationships of educators from the learning process.

We developed a learning model (Garnett, 2006) in which content creation toolkits would be the primary tool needed by teachers, for which the learning resource website *aclearn.net* was originally built to support, and such learning content, supported by a range of resources such as people, was capable of brokering learning processes. Consequently we have come to see the structuring of learning opportunities through resources, something that OERs do not support, as the key process in non-formal learning. (The co-creation dimension of this process suggests that learner-generated *content* can have as much value as educator-generated *content*, for certain aspects of learning - as suggested by the Russian concept of *obuchenie*)

So for the Emergent Learning Model we will define non-formal learning as;

*Non-formal learning is structured learning resources without formal learning outcomes.*

*Formal Learning* means, for us, education as a system, rather than learning as a process, whether it be academic or vocational, and which is concerned with the institutionalisation of processes surrounding learning. This may be a process that prepares people for University, those secular storehouses of knowledge;

- Primary school prepares us to be learners as defined by formal education,
- Secondary school assesses if we have become good enough learners to become students,
- University is where fully accredited learning finally takes place.

People who 'fail' this academic sifting process are offered vocational education so they can acquire a socially useful set of skills,

People who also 'fail' vocationally are expected to be sufficiently 'literate' to converse with the system that failed them.

People who *succeed* in this process obtain various forms of accreditation and qualifications to prove they have 'learnt.' In many cases enough learning goes on for this system to be able to replicate itself successfully, even adapting to new social norms that are laid on top of it (academies, free schools, etc). The most significant part of the institutionalised formal education system are the institutions themselves. What formal learning, or education, has really become specialised in is maintaining itself as a set of institutions and buildings. But this is done to enable them to offer accredited qualifications to students, the essence of formal learning, rather than just to maintain their buildings and location.

So for the Emergent Learning Model we will define formal learning as;

*Formal learning is the process of administering and quality assuring the accreditation of learning with associated qualifications*

## **2.2 Emergent Learning Model**

What we aim to do with ELM is to take the current notion of formal learning as being a process of accreditation (even one that has been harmonised by the Bologna Process) that occurs within an institutionally constrained and hierarchical system, and replace it with a series of processes that better matches how people actually learn, follow their interests, collaborating freely and finding resources that meet those interests, or learning needs. It is far less about serving the institutional needs of academia and more about meeting the needs and interests of individual human beings.

ELM also tries to take account of, and respond to, much of the new thinking about learning and much else, done by many in the last twenty years; emergent properties, network effects, systems design, etc., in response to the permanent beta which is everyday life, what happens whilst you are making plans as John Lennon once put it. Which is not to deny that the requirements of studying different subjects vary and that people have different capabilities, which present a range of issues that need to be addressed within an education system. Nor that a Ph.D isn't much harder than a school leaving qualification, or that devising modes of assessment and accreditation that reflect the quality of learning undertaken isn't tricky and requires experience, sense and tact. But we have learnt a lot about the practical concerns of recognising learning and we now have the opportunity to reflect on what we have learnt, and perhaps even devise new systems of learning; which is what we are trying to do here.

So the underpinning idea of the Emergent Learning Model is that we should start with the social processes of everyday life, and design a system that enables learning to emerge naturally, rather than to respond to the hierarchical structures of large academic organizations. We should equally value the professionalism of the teacher

and the desire of the learner, and create resources that enable those interests to merge. Because people can be the resource with which we scaffold institutions.

EMERGENT LEARNING MODEL					
INFORMAL	INFORMAL	NON-FORMAL	NON-FORMAL	FORMAL	FORMAL
PEOPLE as	PEOPLE as	RESOURCES	RESOURCES	INSTITUTIONS	INSTITUTIONS
Individuals	Social Groups	Created	Provided	Adaptive	Accredited
Groups	Audiences	Learning Sequences	Learning Resources	Home	Classes
Aggregations	Groups	Web 2.0 Tools	Set texts	Library	Units
Individuals	Channels	Media Templates	TV Programmes	Community	Qualifications
«ADMIN	ACCESS»			«SCAFFOLDING	ADMIN»
LEARNING	>			<	EDUCATION
	<b>Learners</b> learning skills; a) organising people collaboratively b) accessing resources		<b>Teachers</b> teaching skills; a) structuring resources b) brokering accreditation		
	Supported by; Trusted Intermediaries		Supported by; Tools & Skills		
People are how we scaffold organisation		Resources are how we scaffold learners		Institutions are how we scaffold accreditation	

Table 1. Emergent Learning Model

### 2.3 Reading the Emergent Learning Model

The Emergent Learning Model (Table 1.) is designed as a heuristic, an aide memoire, to capture as much of learning and education within a single table in order to facilitate reflection and discussion on how we might design, support and implement models of learning rather than simply reproducing the traditional structures of institutionalised education; which do have excellent qualities in administering paper-based record-keeping systems. To show that

formal education and informal learning are intimately connected you read the table from *right* to left to understand the formal education system, and from *left* to right to understand informal learning processes.

a) *education*; is a process organized by institutions who offer qualifications based on set texts to be used by learning groups in classes to meet accreditation criteria. Teachers provide resources and broker these educational processes to students at those institutions.

b) *learning*; is a process of problem-solving carried out by people individually or collaboratively by finding resources and discussing the issues that emerge with people who are trusted intermediaries.

An underpinning value of education and learning is the contrasting views of the learner, in an *education* system the processes are designed with the belief that learners don't want to learn and need extrinsic motivations; what might be called a social capital model of education. A *learning* system is designed around the belief that learners are interested in their learning and only need intrinsic motivations. Extrinsic motivations may be needed to create an engagement in learning that isn't initially interesting, and which trusted intermediaries, or friends, are capable of addressing.

### **III. Conclusions**

We believe that ELM is a development framework of interest to the EU and a heuristic design tool for learner-centred design. Whilst we believe it can be used for designing learning in traditional institutions, we have only used it for designing informal learning ecosystems for the Ambient Learning City project, MOSI-ALONG, in Manchester (2011) and in the WikiQuals self-accreditation project (2012), which was first developed at the University Project (2011), and is ongoing.

1. Because learning is emergent, that is it reveals non-linear dynamic processes, the Emergent Learning Model has been developed to allow for the comparison and integration of informal and formal approaches to learning, and is really useful in designing informal dynamic learning ecosystems.

2. In the large-scale and dynamic Ambient Learning City project, it was found that whilst ELM was extremely useful in the planning stage of learning, unanticipated problems emerge in the implementation phase which need the further development of original techniques and processes, such as new metaphors, and a social media model Aggregate then Curate (Whitworth 2012).

3. In the WikiQuals project it was found that ELM was helpful in the design stage but that furthers issues arose during implementation. As this was a small-scale learner-centric project it was also important to establish the "set of social practices" (Serbu, 2013) that it was organised around.

4. Because the Emergent Learning Model is a tool for the design of learning which allows for emergent properties to be revealed there must always be a secondary design process to solve the new problems which emerge in developing non-institutionalised learning systems.

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# Consequences of the Teacher-Student Interaction on Facebook

Andreea PELE\*

**Abstract:** Facebook has become a prevalent means of interaction between university students and their teachers. In this paper, the author argues that this informal connection, although seemingly unavoidable in today's technological context, may have lasting repercussions on the teachers' role in the classroom and the way their relationship with the students develops.

**Key word:** Facebook, teacher-student interaction, higher education

## 1. Introduction

According to the most recent statistics (Noyes, 2015), Facebook is the most widely used social network on the planet, with well over 1 billion active users. The official service of monitoring Facebook in Romania (facebrands.ro) released aprox. eight million users (see Figure 1). Almost 25% of them fall into the 18-24 age group, the average period in which the country's youth go to university.

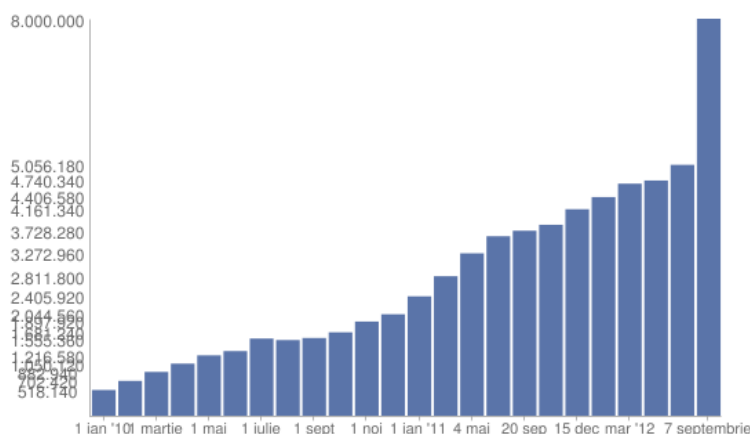


Figure 1 Facebook Romania users' evolution, source: <http://www.facebrands.ro/demografice.html>

As Malita (2011) observed in the Romanian educational area, Facebook has a great potential, both for teaching and for learning. Moreover, a study conducted by Grosseck, Bran and Țîru (2012) reveals that students are by now "virtual natives," at ease with using Facebook for social but also academic purposes.

This paper deals with the communication between university teachers and their students as it unfolds on

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Facebook and its tangential applications, as well as with the repercussions this interaction may have on the teachers' role in the classroom and the way their relationship with the students develops.

## **2. Communicating on Facebook. Motivations, challenges and consequences**

The advent of social technology has transformed the way these two parties communicate and especially how they relate to each other. The author contends that this changes both the teachers' status amongst their students, as well as their role.

More and more students and teachers use Facebook to connect and keep in touch, mostly for didactical purposes. On the one hand, such an association via a social network seems common sense, as many teachers and students already have Facebook accounts at the moment their paths intersect in the classroom. Through its groups and messenger services, Facebook has become an instantly accessible means of communication, in a manner emails, for instance, were not. The spread of smartphones means that most students and teachers who have these applications on their mobiles are constantly logged on, thus theoretically they seem readily available. In fact, as Craig Condella (2010:116) posits, Facebook has become more popular than telephones, cell phones and email as a more natural way of communication.

Moreover, both the groups feature and the messenger let the sender know that their post or their message has been "seen", reassuring him/her that their message has not only reached its destination but it has also been read by its receiver(s). When, or if, the latter chooses to respond is a different discussion.

Communication with one's students can also take place on one's profile, or wall, although this happens rather rarely from my own observation, with both teachers and students preferring to post on Facebook in closed or secret groups when it comes to administrative issues, exams, materials, attendance, re-sits, etc. This may simply stem from the fact that students and teachers represent only one of the publics in one's Friends' list, if we are to follow danah boyd's (2011:40) line of thinking that Facebook encompasses many publics not just one. Usually, a message posted on someone's profile is visible to the entire list, including uninterested, uninvolved parties. Thus, the reason why communication between teachers and students in Facebook groups is so widespread is that such a social network feature links a number of people in one virtual place, gathering them around one focal point, making one-to-many communication easier and more organized.

However, this instant connection, this constant availability, as well as the lack of hierarchies in a Friends' list have certain consequences on the teacher-student relationship, both inside and outside the classroom. The author has witnessed an increasing degree of friendliness between students and teachers, which is understandable considering that they are "Friends", but also a marked degree of student-insertion in the teachers' out-of-classroom life.

This is due to several reasons.

The first is connected to the way Facebook is built, relying on four main features as identified by danah boyd (2011:43): a user's profile, his/her Friends' list, public commenting tools and streambased updates. Everybody

benefits from the same standardized tools. Everybody seems equal. What is of interest here is the Friends' list, the term itself but also the implications it has for how relationships develop in this virtual social network.

For the rare noninitiate in all things Facebook, the Friends' list represents those users, those real-life people, that one can connect to on Facebook. The Friends are in fact the great attraction of Facebook. Of course, this list does not consist only of one's closest friends. Because of Facebook, the term of Friends has come to mean both less and more. It means more because Friends may include family, co-workers, bosses, mere acquaintances, teachers, students and some times even total strangers. Tamara Wandel and Anthony Beavers (2010:93) go as far as arguing that Facebook users can sometimes end up being Friends with their enemies.

The reason they are all called Friends is to avoid potentially controversial and socially awkward moments, such as being asked to visibly label or categorize the people around us as having a strong or weak connection to us. This may be why the creators of Facebook settled on the more generic and generous term of Friends, when in reality most of the names on the list are more likely to be simply temporary acquaintances. Blogger and author, Kate Dailey is convinced in fact that Facebook does not make users better friends, but rather better acquaintances (quoted in Hamington 2010:142).

Friends have come to mean less because, evidently, the more specific meaning of the word has been diluted, stretched to include so many other categories of social ties. We would also add that this dilution and inclusion of weaker ties within the more intimate umbrella of the term "Friends" has also resulted in increased approachability.

In the case of the teacher-student relationship that we're analyzing in this paper, we contend that the Facebook-Friend teachers are undergoing a transformation of their position in relation to their students, which could chip away at the traditional stance of authority but also at the workable distance necessary for a teacher to objectively do their job. The closeness is understandable, as teachers, too, are animated by the desire to be liked. Teachers who are close to their students, keeping up with the times may be seen as the "cool". But on the other hand, it is difficult to be the teacher to your Friends, as being a teacher implies more than just being a Friend.

The reason this happens is that Facebook, as many other virtual environments, collapses contexts within others (boyd 2011:50), students and teachers become partially, at least, part of one another's lives, viewing pictures, reading posts, witnessing likes and dislikes, rants and private moments. Even though, Facebook now offers users the possibility of restricting the audience that has access to their content, Facebook also collapses physical distance, as all of one's Friends are there, visible on the right side of the computer screen, although they might be abroad, unavailable, or they might not wish to be disturbed. Facebook also collapses time barriers as there is no night and day in the virtual environment. A user might contact another at all hours, even if, or especially if, the recipient is not online, confident that the latter will eventually see the message. Facebook users live in what Fredric Jameson (quoted in Storey 2006:138) calls perpetual present, all messages and posts are constantly there stored among the bits and bytes, searchable. Craig Condella (2010:116) argues that Facebook allows you to communicate with Friends in a way that does not intrude on their time and space, allowing them to discover your message for themselves at

their leisure.

At the same time, researchers studying online campaigning have come to the conclusion that, on Facebook, top-down strategies in political campaigning has been replaced by what Johnson et al call (2011:185) grassroots-style dynamics. What this might tell us about the teacher-student relation in this social network is that traditional hierarchies break down in the equality soup that is Facebook, inhibitions are diluted, shed. In this environment where all barriers are lifted (Meyrowitz 1986:43), it is conceivable that social barriers are also felled. Users are on a more even keel, although perhaps not at the same level. The tone used in discussions is more informal, sometimes quite friendly.

In a previous study on exactly this topic, one about the perceived friendliness between students and teachers, we approached the topic of my students' emails to us and the overly familiar language that they used in our communication. We argued then that the facelessness of email communication, as well as the distance and the closeness of the viral world, made our students treat their teacher as one of them, lowering their inhibitions, drastically so in some cases. As a result, the emails themselves did not respect any letter-writing rules, which we still consider to be a sign of a certain formal distance that needs to exist between teacher and students. These emails lacked any introductory part, which was even more confusing in those cases where students preferred nicknames instead of their actual names in their email addresses. Some used abbreviations, or little, or no punctuation at all. Not to mention that these emails came at all hours of the day and night, brimming with urgency.

That discussion, we realized, is still relevant to our communication with our students on Facebook; the perceived approachability is still there, so is the informality and what we have called the student-insertion in the teacher's out-of-classroom life. The previous theoretical part of the paper may provide some answers as to why this happens. The theory is compounded by the fact that most students have had quite a long history of using Facebook to communicate with teachers, so to them the barriers we mentioned may not even be a factor. They certainly are no impediment.

Email-based communication seems to follow John Suler's (2004, online) description of what he calls "the online disinhibition effect": it is anonymous, the communicators are invisible, the communication is out of synch, it is in some ways not real, while status and authority are minimized. However, as Mimi Marinucci (2010:67) points out, on Facebook, all these factors mentioned by Suler are, if not absent then at least diluted: users are not anonymous, teachers and students are represented by their icons, thus they are virtually at least, visible, communication can be quite synchronous when both parties are present on Messenger.

Yet, because this communication is mediated, rather than face to face, repeated interaction can still lead to a mitigation of authority and status in the teachers' situation. This type of interaction is slowly but surely beginning to alter the traditional teacher-student relationship, and the teachers status, their authority in class, if you will. After all, along with other social networking platforms, Facebook diffuses power from center to the margins (Doyle and Fraser 2010: 216).

On the one hand, it is hard not to resort to Facebook when communication with a large number of students is made so easy. On the other hand, the more open the teachers are, the more students tend to disregard any barriers and insert themselves not only in their teachers' social network but also in their free time.

Teachers also tend to attract a great number of connections. In the "Introduction" to *A Networked Self*, Albert-László Barabási (2011:14) explains the underlying architecture of social networks in general and Facebook in particular. In the network, individuals are considered nodes, while the relationships between them are links. A social network, Barabási (2011:9) says, is not built randomly; the network, the drive to create one exists from the very beginning, from the very first connections. Moreover, some nodes possess certain qualities, a degree of fitness that simply attracts more links, as new nodes prefer to highly connected nodes (Barabási 2011:8). Such robust, highly-connected nodes tend to become quite large, turning into hubs, transforming into pivotal points for the entire social network. Teachers display such fitness on Facebook, as generations of new students link with them. Going back to Barabási (2011:10), the more links a node has, the more it tends to attract, the number of links almost serving as a guarantee.

Nevertheless, once they open their Friends' list to a few students, a few members of a group that they interact with more often, teachers may see themselves obliged to add even more links to their network as a way of perhaps avoiding social awkwardness.

### **3. Final considerations**

So there it is, one way or another, students become part of a teacher's personal life, in a way they could not before the advent of social networks. Some consequences are straightforward: students are witnesses to what the teachers post and the teachers' posts create an image for the students of what the teachers are like in their out-of-school life. Other consequences for the teacher are more subtle and problematic, deriving from the one above and influenced by this new audience: as a teacher, you either post whatever you want even if it might not be suitable for one's students, you may censor yourself, or you might limit your public's access to what you post. Myself and a colleague opted for something more radical, namely we created different Facebook identities for interaction with our students in an attempt to avoid some of the problems we have mentioned in this paper.

Another reason why teachers open their profiles to their students has to do with the new age of student recruitment, by any means digital. The current involvement of information technologies in people's daily lives and the abundance of choices available to potential students result in the universities and teachers having to employ some savvy marketing to attract clients, a type of marketing called narrowcasting, the opposite of broadcasting, which means targeting a specific audience. The strategy is that connecting with a new node, may expose a certain education institution, or teacher, to that particular node's social network.

So we have seen the reasons and visited some of the consequences of the teacher-student relationship on Facebook, which bring us back to our initial hunch that the insertion of students in the teachers' out-of-classroom life has lessened the teachers' traditional hold of the classroom, bringing them off their pedestal, making them just

“one of us.” Some of the teachers' authority has eroded, and their role of educator has expanded to include more than just teaching and mentoring. We have become guides, psychologists, big sisters, babysitters.

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# Using informational technologies in teaching history of printing to chemical engineering students

Simona POPA\*

**Abstract:** The traditional teaching methods cannot handle the huge amount of information that exists in present days. Although the personal influence of the teacher remains determinant in class, the using of modern technologies represents a necessity in educational process. The paper covers some aspects regarding the development a seminar of History of printing to chemical engineering students, using modern informational technologies in teaching.

**Keywords:** informational technologies, teaching, learning, history of printing

## Introduction

In the context of contemporary society based on knowledge and taking into account that human capital plays a key role in it, the education is to be reconsidered by raising investment in educational and instruction areas. The access to information and knowledge is not the only aspect that matter in the informational society, but also the generation of new knowledge counts. Education becomes a process in which students learn how to learn, how to access new information, how to analyze and exploit it and, in the end, how to transform it into a new knowledge. All the opportunities provided by the new informational technologies, especially those based on the internet, must be exploited because they play a significant part in students education. Promoting the access to information is a strong step to develop knowledge, to facilitate learning, to enrich the quality of the educational process.

## Theoretical and practical knowledge

According to **Agnes Erich** (2012) information is considered to be a very important resource in every activity domain. The changes in the educational process occur in order to counterbalance the rapid rise of informational necessities. The educational domain has to be adapted to the new trends of globalization and diversity of the technological environment: learning at distance, access to virtual libraries, development of individual abilities in using information. The new educational technologies are a direct consequence of the psycho pedagogical methods evolution in education as well as the new IT technologies. The didactic methods suffered transformation in time: from the printed

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books, to the video learning, or to the interactive multimedia information. Actual educational systems differ from the classic ones by some characteristics: active and participative methods, promoting individual work and creativity, stimulating cooperation and dialogue, moving the accent from teaching to learning and developing personalities of the students.

The instruction by using computers has a unique characteristics that differ from other teaching methods: interactivity, precision of the operation, capacity of presenting multiple and dynamic presentations, and can interact differently with each student. (**Burlacu Catalina** - 2006). The teaching process has to be modified, teachers have to think differently regarding the cognitive psychology. The didactic communication is mainly about understanding, the teacher having the role to organize and personalize the information.

The diversity and the high quantity and quality of documentation may affect the process of searching the information (**Porumbeanu Octavia-Luciana** - 2002), so the consequence is to educate the users, the teachers' role becoming more complex and more important.

The access to new information is not the only aspect that matter in the informational society, but the generation of new knowledge and its transfer also is important. Education suffer essential changes, becoming a process in which students learn how to learn, how to access, how to analyze, how to use information and how to transform it into new knowledge. All opportunities brought by new technologies must be exploited, especially those of the internet, because they play a significant role in educational process. (**Porumbeanu Octavia-Luciana** - 2004)

According to **Marcu Vasile** and **Marinescu Mariana** the education for the new technology and progress is to be regarded as a metamorphose of the traditional education. The computer became the indispensable support for modernizing education. The restructuring of education includes: the introduction of new types of education; the existence of an equilibrium between the accumulating learning and the innovative one; the progressive impose of new educational paradigms principles; the extension of the learning act to the entire life of the individual; an optimum balance among formal education, nonformal education and informal education; and the equivalence between working and learning processes. As a method of using the new technologies is the creation of specific educational modules, of special chapters respectively, in the traditional disciplines.

"The changes in educational field seem to pass through the change of teachers' perceptions. The teachers' training and their active participation in the procedures of introducing innovations combined with the encouragement for rethinking in their teaching reality seem to constitute important tools for the change in their perception. Teachers are in need of continuous training to increase their knowledge and understanding to be able to deal with the new demands. Their initial education and training is not adequate for them to confront successfully the changing social and technological changes and also the change in knowledge, analytical programmes and in teaching-pedagogic

approaches. Today teachers' training and lifelong learning are considered as some of the most important parameters for school effectiveness as well as for the renewing and reforming of the teaching systems." (Panagiotis Giavrimis - 2011)

### **Problematic issues and method**

The integration of informational and communicational technologies in the teaching-learning-evaluating process facilitates the presentation process of information, its processing by the students, and the construction of knowledge. The new techniques may be: images, sounds, animation, and of course hypermedia technologies that facilitate *navigation* among different types of data.

The use of the computer leads to a more flexible teaching system. The integration of informational and communicational technologies into the teaching-learning-evaluating process is not only about exclusive usage for information purpose, but the teacher helps students to work alone, he stimulates their thinking capacity. One must learn attitudes and behaviors of educators for explaining the importance of informatics technology.

The Web site is a new powerful instrument that facilitate the learning process. It provides access to scientific information included in databases, online libraries, museums, etc. The students may interact with the researchers in the field, may communicate ideas, may exchange information and resources through e-mail, chat, video-conferences, etc. Teachers may organize virtual trips in research centers, museums, that are approachable only through internet.

Informational and communicational technologies that may be frequently used in class are *presentations* - they are descriptive materials, including imagines, diagrams. The application that can be used is **Microsoft PowerPoint**

It used to be that students primarily used textbooks and other non-fiction books to learn their subjects. With informatics technology, they have other avenues for success. You may have a student who decides to do a Power Point presentation on the life of an important person in history rather than an essay.

One of the oldest teaching method is to dictate and students to write the notions, but they are students of certain age, not elementary school pupils. So, in my opinion, the informational and communicational technologies may be efficiently applied in teaching to students. The History of printing is an interesting subject, and if the teaching of it is performed by the old teaching method, it can be very boring. Communicating with students during the class, asking questions by both sides can make the hours more interesting and efficient. Students love not to "sleep" in class, but to debate the subjects in question.

The Microsoft PowerPoint may be used in teaching The history of printing. The slides contain some aspects regarding specific important data that list some memorable facts, such as [7]:

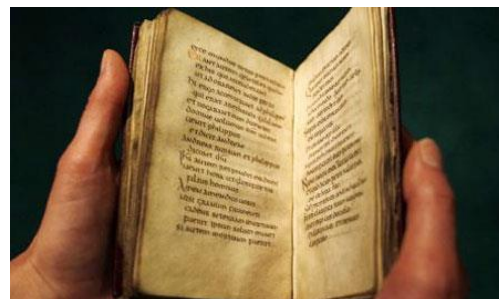
"Modern printing started in the fifteenth century with the invention of the printing press by Gutenberg. Obviously other interesting things happened before that time.

- **3000 BC and earlier** - The Mesopotamians use round cylinder seals for rolling an impress of images onto clay tablets. In other early societies in China and Egypt small stamps are used to print on cloth. These stamps are gradually replaced by larger wooden blocks. In China such woodblocks are used to print on silk. The earliest known examples consist of flowers printed in three colors. They are likely produced during the Han dynasty (before 220 BC).

- **131 BC** - The first **Acta Diurna** (Latin for 'Daily Acts') appear. These are daily official notices in the Roman Empire and can be considered the first 'newspaper'. The notices are carved on stone or metal, they do not get printed. Scribes sometimes do make copies to be sent to the provinces.

- **Second century 105** – A Chinese man named Ts'ai Lun is credited with inventing **paper**. He takes the inner bark of a mulberry tree and bamboo fibers, mixes them with water, and pounds them with a wooden tool. This mixture is poured onto a flat piece of coarsely woven cloth and let the dry, leaving only the fibers on the cloth. From China the knowledge of paper making is passed along to Korea, Samark Baghdad and Damascus.

- **Seventh century - 687** – A small book containing the text of the Gospel of John in Latin is added to the grave of Saint Cuthbert. In 1104 it is recovered from his coffin in Durham Cathedral, Britain. The **Cuthbert Gospel** is currently the oldest European book still in existence. Some photos may also be presented, such as:



- **Eighth century - 751** – During the Battle of Talas, near Samarkand, the secret of paper production is made known to the Islamic world, as some of the Chinese prisoners are paper makers.

- **Ninth century - 868** – A copy of the Chinese version of **The Diamond Sūtra** (or Diamond Cutter of Perfect Wisdom) is the earliest surviving example of a printed book. It is produced using woodcut, a relief printing technique in which text and images are carved into the surface of a block of wood. The printing parts remain level with the surface while the non-printing parts are removed, typically with a knife or chisel. The wood block is then inked and the substrate pressed against the wooden block.



- **Tenth century** - Arabs create a finer sheet of paper by substituting linen fibers for wood and bamboo. During the Shang Dynasty the Chinese invent **screen printing**.

- **1436 - Gutenberg** begins work on a printing press. It takes him 4 years to finish his wooden press which uses movable metal type. The image below shows a press from that era. It uses relief printing: at the bottom left a frame holds the columns of text that get printed. This type consists of individual letters set in lead. After inking the type, a sheet of paper is put on top. Next the frame is shoved to the right underneath the platen. By moving the large handle pressure is applied to make sure the ink is transferred to the paper. Afterwards the bed is moved back to its original position and the paper can be removed.



Gutenberg sets up a printing shop. Among his first publications are the '**Poem of the Last Judgment**' and the '**Calendar for 1448**'. Gutenberg begins printing bibles. The first edition has 40 lines per page. A later 42-line version

comes in two volumes. Ironically enough Gutenberg goes bankrupt in 1455, when his investor **Johann Faust** forecloses on the mortgage used to finance the building of the press. Faust gets hold of the printing equipment as well as the 200 copies of the bible that have already been printed. While trying to sell them in Paris Faust tries to keep the printing process a secret and pretends the bibles are hand copied. It is noticed that the volumes resemble each other and Faust is charged with witchcraft. He has to confess his scheme to to avoid prosecution.



- **1457** - The first known color printing is used in '**Mainz Psalter**', a book containing a collection of psalms. It is printed by Johann Faust and his son-in-law Peter Schoffer. Then **Albrecht Pfister** prints the first illustrated book called '**Edelstein**' which features a number of woodcuts. The '**Biblia Pauperum**' is issued in Bamberg and contains many **handcolored illustrations**."

During the presentation, students may ask questions, may present what they have been reading regarding the specific aspect.

At the end of the presentation the students are encouraged to look for new information on the web sites. In order to be evaluated they have to elaborate a paper regarding this issue and they must present it in front of the class at the end of the semester.

## **Conclusion**

Because the educational domain has to be adapted to the new trends of globalization and diversity of the technological environment, the new educational technologies are a direct consequence of the psycho pedagogical methods evolution in education as well as the new IT technologies. The didactic methods suffered transformation in time: from the printed books, to the video learning, or to the interactive multimedia information.

Interactivity, precision of the operation, capacity of presenting multiple and dynamic presentations are some of the characteristics of the informational and communicational technologies, and they can interact differently with each student.

Using the IT technologies made more of the students interested in the discussed issues. They interacted with each other, and working in groups at seminars determines active involvement in practical activities.

During teaching using IT Technologies it can be observed that the students are more attentive in class. They may ask questions regarding the presented issue; they can come with novelties, found by using these modern facilities.

It may also be observed an active involvement in practical activities of students for activities at school, in class, and preparing the homework for seminars with these modern approaches. They present an increased interest in finding new solutions for learning performance. More of the students received good exam results.

It may also be mentioned that some of the students were not totally involved in these activities; they just waited for their colleagues to work and to obtain results that they may use. So, at some level, the IT instruments are not entirely welcome.

But the use of the computer leads to a more flexible teaching system, more of interested students, capable to learn more in school and at home. That is why in teaching History of printing modern techniques may be used. Students may use the new facilities to have more information, easily to access, and they can realize very interesting papers in order to be evaluated.

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# Poverty of a family from provincial Poland and attractiveness of a school child among peers

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**Abstract:** The aim of the research was to capture the factors which differentiate the socio-metric status of a child in a class. It was expected that the factors connected with a child and a family have an influence on positive as well as negative choices of a child among peers and that they would differentiate the socio-metric status in a group. 192 pupils in the age of 11-13 from 10 schools in provincial Poland were tested. A classical J. Moreno socio-metric test was used. The result showed that economic situation of a family is the most important reason influencing the attractiveness of a child in a group. Children prefer these who are better well-off. Moreover, subjective poverty is remarkably connected with the incomplete family structure and the sex of a child, which additionally differentiates the acceptance of a child by the school class.

**Keywords:** a single-mother family, peer group

## Introduction

In the contemporary time of socio-economic changes in Poland, the researchers show a few indicators which characterize educational environment of child in terms of quality. These indicators include: a financial situation of a family, its structure and size (Kwak, 2008-2009; Lenarczyk, 2004). Among these indicators, material conditions of a family have the strongest influence on a child and they cause changes in the psyche when a child becomes an adult (Bartczak, 2014). What is more, poverty has a negative impact on their upbringing (Białas, 2001).

Szturmski observed that children and teenagers who grow up in the conditions of poverty are less physically developed, are more prone to various illnesses and lack trust in their own abilities (2006). In the families which suffer from poverty, a weak connection between a mother and a child is observed (Miller, Davis, 1997). Furthermore, these observations reveal that financial difficulties which a single-mother experiences can be identified with a less effective functioning of a family, which in turn has negative consequences for a child (Elder, Eccles, Ardelet, Lord, 1995) also in full families. Children in families which are touched by poverty, as a result of lack of means to satisfy material and biological needs, feel worse than their peers (Cudak, Kowolik, Pindera, 1999). Experiencing a worse material situation of a family often leads to a gradual environmental isolation and constricting contacts with friends. Moreover,

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poverty leads to higher emotional stress and worsens satisfaction from a family life (Kotowska, Matysiak, Styrz, 2014; Mazur, Woynarowska, 2004; Napora, Kozerska, Schneider, 2014), it decreases the feeling of one's self-esteem in the eyes of the peers (Napora, Kozerska, Schneider, 2014). By taking into consideration the indicator of a subjective evaluation of family's welfare, the researchers observed a linear increase of the percentage of teenagers who assess the support as a low one, from 5.1 % in rich or rather rich families to 28.6% in poor or rather poor families. This dependency is crucial for both sexes (Mazur, Woynarowska, 2004).

Children from poor families often lack an emotional connection with parents; they are exposed to personality development disorders. The bond between parents and children weakens and the potential threat of a phenomenon of a child's social awkwardness increases. Empirical studies over the social support show that the low level is connected with the rejection of child by a social group, which in turn increases frustration and aggression. As a result, aggressive behaviour transforms into a constant tendency and it becomes connected to a child's lifestyle. People who have no feeling of belonging to a group have problems with interpersonal relations; they reveal stronger depressive symptoms and low self-esteem (Urban, 2005). This worsens and limits peer contacts and causes social isolation (Cudak, Kowolik, Pindera, 1999). A subjective evaluation of prosperity (a poor or rather poor family), sex (masculine) and low material status of the place of living are the independent variables of low achievements in learning among pupils of the middle school (Małkowska-Szkućnik, 2007, p. 158).

In contrast, scientists observed the dependency between the favourable assessment of a financial situation of a family and a higher feeling of security, love and understanding declared by the adolescents. Satisfying relationships with parents are connected with a higher level of education, a better financial situation and higher social position of a father (Kwak, 2008-2009). However, a subjective satisfying evaluation of a material position of a family does not modify the relations of daughters with peers in a school class (Napora, Pękala, 2014a, Napora, Pękala, 2014).

Early adolescence (Kwak, 2008-2009, p.2) or pre-adolescence (Radziwiłłowicz, 2012) is the time between 10-12 years old up to 15 years old. It is the time of a clear physical maturation and the increase of the need for contacts with others. Relations with peers fulfill a lot of social needs of the adolescents, including the need of belonging, success, acceptance and recognition, role play (Jundził, 1998, p. 66). They are also an occasion to develop social skills such as: communication, cooperation, empathy, showing and receiving support, solving conflicts, negotiations. Adolescents very often identify with a peer group; they spend time and dress in a similar way. Peers influence the style of adolescents' life far more than they influence their choice of values, on which parents have the greatest impact despite numerous conflicts with their growing children (Obuchowska, 2002). Children who cannot equal peers, for example in possessing attractive things, are often not accepted at school and outside it (Matyjas 2003, p. 68).

A school class, as a social group, has the most important impact on their members. Personality development of pupils depends on the structure, social relationship and emotional bond of a school class. A position of a child in a group, to some extent, results from the already developed behaviour, and what is more important, it is the place



where the personality traits develop and solidify. Taking into consideration the time pupils spend in a classroom, it is worth to emphasize the essence of a proper functioning of a school class as the one which has the strength of an educational impact (Zawada, 2013, p. 85). It was indicated that pupils who see school positively, obtain better results in learning and have higher satisfaction from school (Samdal, 2000).

By researching a social position in a group, the type of socio-metric status can be observed by classifying pupils to one of the three categories: (1) popular/ attractive children, (2) rejected children, (3) controversial children/ with average acceptance (Kulawska, 2013). The first group gets a lot of positive choices and few negative ones on the socio-metric research and they are rarely seen as the ones who are not liked. The analysis of behavioral profiles shows that these children are most often physically attractive, they have an optimistic and cheerful nature (Napora, Garbiec, in print), and they are characterized by the willingness to share with others and cooperate and they have a low level of aggression. Additionally, such children are sociable, they have friendly attitude towards others and their behaviour does not activate aggression (Schaffer, 2006). Initially, it was considered that popularity is the quality which growth can be described on a one-dimensional continuum: on the one extreme there are children accepted by the group, and on the other – the rejected ones. With time, it was determined that unpopular children/ with a low acceptance can be described as the ones who belong to two categories: the rejected and the isolated ones (Dodge, Lansford, Burks, Bates, Pettit, Fontaine, Price, 2003).

Rejected children cannot form the relationship with peers because a lot of them reveal destructive behaviour, they are often anti-social and aggressive towards other children. They have a tendency to avoid contacts with others, they rarely emphasize their rights. Other qualities which characterize these children are the frequent depression symptoms, a high level of social anxiety and a low feeling of social competence (Schaffer, 2006). Such children are also described as the shy ones, who do not speak much. Among the rejected ones, in terms of a child's sex, boys were more often described as aggressive and annoying than girls (Napora, Grabiec, 2014).

## **Method**

*The researched people* 192 pupils from primary schools age 11-13 took part. They come from six village schools and from 4 small town schools in the suburbs of the former Częstochowa voivodeship. The tests had been earlier arranged with the headmasters and class teachers. Children were assured of the anonymity of the results and the possibility to withdraw from the research at any time without any consequences. Parents had been asked for the approval for their children to take part in the research. Both children and parents were informed about the purpose of the research, research problems and expected benefits. Data concerning the participants of the research is presented in table 1.

Table1. Characteristics of the researched children

No	Family factors	Descriptive statistics	
		M	
1.	Age of a child	Median	11.9
		SD	12
			0.82
2.	Sex		
2.	M	87	45.3%
	F	105	54.7%
3.	Family structure		
3.	full	162	84.4%
	single-mother family	30	15.6%
4.	Material status		
4.	unsatisfactory	29	15.1%
	sufficient	125	65.1%
5.	very good		
5.	Place of living		
5.	village	110	57.3%
	city	82	42.7%
6.	Number of siblings		
6.	none	36	18.8%
	1-2	126	65.7%
	3 and more	30	15.7%

*Tools* Sociometry is used in order to establish the position of a child in a class and to recognize social relations in a group (Brzeziński, 1980). It allows to define mutual likes and dislikes, popularity or lack of it, and distinguish features and qualities which are about comradeship, attractiveness and leadership in a group. It creates the possibility for the insight into emotional attitude of the researched people. Questions and tasks concerned particular answers in given situations and circumstances, which establish social relations in a group and between its individual members (Apanowicz, 2002, p. 90). A classical socio-metric J.L. Moreno test was used. It consisted of two parts: the first one which formed the respondent's particulars in which the pupils were asked about the age, sex, family structure, material status of the family<sup>2</sup>, the number of siblings and place of living. In the second part, six questions were used taking into account three socio-metric criteria of choice<sup>3</sup>. The task of each pupil was to make positive and negative choices for each criterion among peers from a school class.

<sup>2</sup> The question about material status of a family was limited to one closed (later re-coded) question about the subjective evaluation of a material situation of a family with the selection of one of the three answers.

<sup>3</sup> A class teacher asked to make a holiday news-sheet. (1a) Choose three people from the class who you would ask to help you prepare it. Justify why. (1b) Choose three people from the class who you would ask the least willingly to help you prepare a holiday news-sheet. Justify why. Imagine that you are going on a three-day-trip to Cracow. (2a) Choose three people you would like to sit next to on a coach. Justify why. (2b) Choose three people you would least like to sit next to on a coach. Justify why.

On the basis of the results three types of socio-metric positions of the researched children were differentiated: with high acceptance/ attractive ( $n = 77$ ; 40.1% of pupils were counted to this group with a big amount of positive choices and a low amount of negative ones), with average ( $n = 54$ ; 28.1% of children with more or less the same number of positive and negative choices) and with low acceptance/ unattractive ( $n = 61$ ; 31.8% of children with a big amount of negative choices and low amount of positive ones).

*The aim, problems and research hypothesis* The aim of the research was to observe the factors which differentiate socio-metric status of a child in a school class. It was expected that the factors connected with a child and a family influence on both positive and negative choices of a child by peers and that they would differentiate the types of socio-metric status in a group. The main research problem was formed in a question: do the variables connected with a child (sex, age) and with a family (family structure, a subjective material status, place of living, number of siblings) influence the socio-metric position among peers? It was reduced to three detailed problems: 1. which of the analyzed factors influence on the positive and which on the negative choices of a child among peers and if so do they have crucial impact? 2. which factors significantly differentiate the socio-metric position of a child among peers? and 3. which factors show the connection with the variables that significantly differentiate the acceptance of a child by peers in a school class?

The results can indicate the connection between the conditions of functioning of a child's family and his attractiveness in a peer group. In other words, it was expected that the subjective evaluation of a financial prosperity of a family was an important correlate of a child's behaviour among peers.

## Results

For the statistical analysis Statistica programme 10.0 was used (StatSoft Inc., 2011). The conformity of the analyzed quantity variables with a regular distribution was tested with the use of Shapiro-Wilk test. Taking into account that the distributions substantially diverged from a regular distribution, and additionally the numerical amount of both compared groups was different, non-parametric methods were used to verify the hypothesis. To make the comparisons between two groups U Mann-Whitney (z) test was used, in case of a comparison for more than two groups ANOVA rang Kruskal-Wallis (H) was used, and the relevance of differences was checked by means of z test. Dependency analysis between variables represented on quality scales was done by means of chi-square test. The relevance level  $\alpha=0.05$  was assumed, the results were considered statistically significant when the test probability  $p$  fulfilled the inequality  $p<0.05$ .

### Family and personality characteristics of a child and his attractiveness among peers

The only statistically significant result from the analysis by means of ANOVA rang Kruskal-Wallis ( $H(2, N = 192) = 9.39$ ;  $p = 0.009$ ), concerned the material status and showed its crucial impact on positive choices of a child among peers. A family's material status did not have an important influence on negative choices. It is worth paying

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(3a) Choose three people from the class you would like to live with in one room during your stay in Cracow. Justify why. (3b) Choose three people with whom you would least like to live in one room during your stay in Cracow. Justify why.

attention to the fact that sex, although it was not a factor which significantly differentiated the number of positive choices, yet for these choices, the obtained result was close to the border of statistical significance ( $z = 1.69$ ;  $p = 0.09$ ). The value which explains the positive ( $M = 9.66$ ;  $SD = 7.11$ ) and negative ( $M = 7.83$ ;  $SD = 9.92$ ) choices of girls, indicated the reversed proportion of choices in comparison with the boys' choices (respectively  $M = 7.84$ ;  $SD = 5.85$  and  $M = 9.75$ ;  $SD = 11.68$ ) (table 2).

In order to examine the influence of material status factor on the positive choices of a child by peers, a *post-hoc* test was used. It was aimed to check between which group a crucial difference appears. The results are presented in table 3 and chart 1.

Table 2. Factors influencing positive and negative choices of a child by peers from a school class

Factors	Positive choices				Negative choices			
	M	Me	SD	p.i.	M	Me	SD	p.i.
Sex								
F	9.66	9.0	7.11	.09	7.83	5.0	9.92	.38
M	7.84	8.0	5.85		9.75	5.0	11.86	
Age in years								
11	8.92	8.0	7.17	.85	8.68	5.0	11.3	.26
12	8.74	8.0	6.9		8.86	5.0	12.29	
13	8.77	9.0	5.53		8.63	6.0	8.72	
Family structure								
full	8.95	8.0	6.62	.49	8.09	5.0	10.17	.29
single-mother family	8.1	7.5	6.56		12.13	7.0	13.81	
Material status								
unsatisfactory	7.58	7.0	7.22	.009	13.72	10.0	15.08	.11
sufficient	8.21	8.0	5.89		7.99	5.0	9.99	
very good	11.66	12.0	7.62		7.33	5.0	9.0	
Place of living								
village	8.78	8.0	6.9	.76	8.75	5.0	11.26	.69
city	8.87	8.5	6.23		8.68	5.0	10.41	
Number of siblings								
none	9.5	9.0	6.84	.23	8.5	5.0	10.63	.18
1-2	9.12	8.0	6.9		8.03	5.0	10.37	
3 and more	6.73	6.5	4.47		11.9	6.5	12.91	

Table 3. Statistically significant differences between the researched groups for the positive choices

Material status of a family	Value $p$ for the multiple comparisons (bilateral) by means of Kruskal-Wallis test: $H(2, N=192) = 9.397$ ; $p = 0.009$		
	unsatisfactory (R:81.397)	sufficient (R:92,806)	very good (R:119.47)
unsatisfactory p.i.	x	0.958	0.015
sufficient p.i.	0.958	x	0.026
very good p.i.	0.015	0.026	x

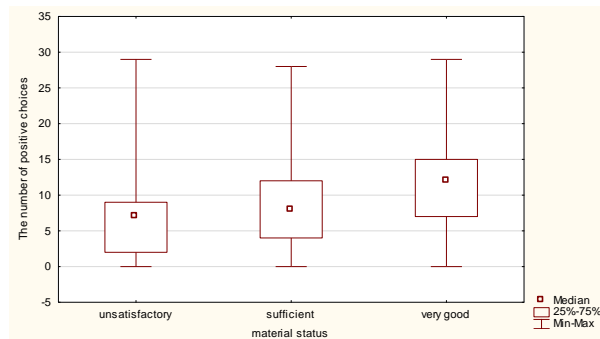


Chart 1. Material status of a family and positive choices of a child among peers

Significant differences appear between the researched groups with sufficient and very good status ( $p = 0.026$ ) as well as the unsatisfactory and very good ones ( $p = 0.015$ ). There are no differences between the researched with positive choices who evaluate the material status as the sufficient one with those who evaluate it as an unsatisfactory one. The value of median (Me) and medium (M) and average rang (R) show the highest values for the researched group with a very good status. A remarkable difference in comparison with the group with sufficient and unsatisfactory status was obtained, while the latter received the lowest values. Other factors proved to be without meaning both for the positive and negative choices of a child by peers.

### Material status of a family and a child's acceptance by peers

In order to observe the factors which differentiate the socio-metric position of a child among peers, an analysis was carried out by the means of chi-square test in the cross-group scheme 3 (material status)  $\times$  3 (type of acceptance). Sub-groups of children were selected in terms of the type of material status of a family (table 4).

Table 4. Statistically significant differences for the interaction between the type of a child's acceptance by peers and the material status of a family

Material status of a family	Type of a child's acceptance in a group						Total
	High acceptance		Average		Low acceptance		
	N	%	N	%	N	%	
unsatisfactory	7	24.14	7	24.14	15	51.72	29
sufficient	47	37.90	39	31.45	38	30.65	124
very good	23	58.97	8	20.51	8	20.51	39
total							192
value $\chi^2$	12,1506						
df	2						
p.i.	.016						

The obtained result by means of chi-square test in a cross-group scheme 3 (peers' acceptance)  $\times$  3 (material status) proved to be statistically significant ( $\chi^2 = 12.1$ ;  $df = 4$ ;  $p = 0.016$ ). The share of children with a high acceptance is definitely the highest among the richest ones and it clearly decreases together with a declining material status of a family (chart 2).

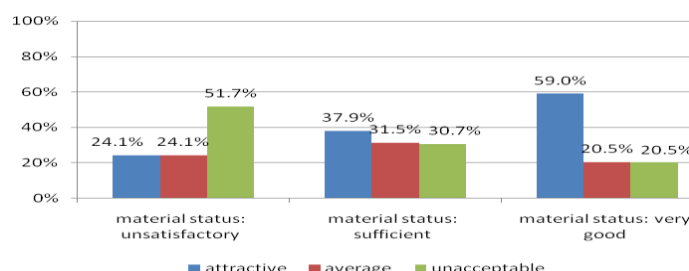


Chart 2. Material status of a family and a type of acceptance of a child by peers in a school class

### The connection of factors with variables which significantly differentiate child's acceptance by a group

In order to check whether material status co-exists with other independent variables which were researched and if they differentiate child's acceptance in a group, model chi-square was used in the analysis in the cross-group scheme 3 (material status)  $\times$  2 (sex) and in the cross-group scheme 3 (material status)  $\times$  2 (family structure).

Table 5. Statistically significant connection for the interaction between a material status of a family and sex of a child as well as family structure

Material status of a family	Sex of a child				Family structure			
	Girls		Boys		Full		Single-mother	
	N	%	N	%	N	%	N	%
unsatisfactory	19	18.45	10	11.24	22	13.58	7	23.33
sufficient	57	55.34	67	75.28	101	62.35	23	76.67
very good	27	26.21	12	13.48	39	24.07	0	0.00
total	103	100	89	100	162	100	30	100
value $\chi^2$	8.392				9.620			
df	2				2			
p.i.	.015				.008			

Among the researched, there were twice more girls than boys with a very good status. It is a statistically significant dependence ( $\chi^2 = 8.392$ ;  $df = 2$ ;  $p = .015$ ) which could influence the fact that girls were more often chosen by peers in a class. The result of chi-square test for the family structure is statistically significant ( $\chi^2 = 9.620$ ;  $df = 2$ ;  $p = .008$ ) and suggests that the variables co-exist.

## Discussion and conclusions

The aim of the research paper was to take a position to three research problems, which refer to the observations, that factors connected with a child and with a family influence both positive and negative choices of the researched among peers and they can differentiate a child's socio-metric position in a class. The first research question – which of the analyzed factors influence on the positive and which on the negative choices of a child by peers and if so, whether they have significant influence – can be answered that factors such as age of a child, structure and place of living as well as the number of siblings are negligible for both positive and negative choices of a child by peers in a group (table 2). Only the material status of a family significantly influences the amount of the positive choices of a child by peers but it does not have a significant influence on negative choices (table 3). Furthermore, it was observed that sex is not a factor which significantly differentiates positive and negative choices. It is worth mentioning, however, that for the positive values the result was close to the border of statistical significance ( $p = 0.09$ ). It indicates a given tendency and what is more, by comparing medians it can be seen that for the girls it has a higher value than for the boys (besides, arithmetic average as well). Maybe it is a derivative of the fact that there are more girls than boys in the research. An additional explanation can be the observation that in this age girls sympathize more with girls and boys with boys.

The result is the basis to claim that the consequences of these unfavourable factors can mean lowering of one's own value in the eyes of the peers. It is again worth emphasizing that experiencing family's material situation as the worse one, can lead to a gradual environmental isolation and reduction of contacts with peers. Children who cannot equal their peers are not accepted at school and outside it (compare Matyjas 2003).

The obtained results for the second research problem – which factors significantly differentiate the socio-metric positions of a child among peers – show a significant share of one factor which is material status of a family (table 4). The share of children with high acceptance is definitely the highest among these who subjectively evaluate the family's material status as a very good one and it clearly decreases together with its declining assessment. An important problem of poor families, which is emphasized by the researchers, is the fact that parents gradually cease to be the role models for their children. Additionally, a child has no place to learn the enthusiasm, satisfaction and happiness because in his family home there is apathy, discouragement and complaint caused by the lack of perspectives (Forma, Wolska-Długosz, 2010). What is constantly noticed by children is their extremely low social status which indicates small attractiveness for other people, the feeling of mental exclusion from a group; it can cause deprivation of important mental needs: affiliation, importance, recognition in the eyes of others, it can strengthen passive or aggressive attitude in interpersonal relations and additionally activate defense mechanisms which encourage to seek alternative social groups (Siwek, 2010, p. 36).

The last stage of the analysis was to determine which of the factors show the connection between variables which significantly differentiate a child's acceptance by peers in a class. The effects show the share of a child's sex and a family structure (table 5). In each case, the dependency is statistically significant. Hence, it can mean that girls

were a bit more liked by peers than boys or it may mean that girls subjectively evaluate the material situation of their families better than boys. What is more, the results suggest that children from single-mother families are in a worse financial situation (there are no children among them with a very good status). The obtained results for the third research problem indicate the earlier observation that the best variable (and the only one in this research) which influences a child's acceptance in a peer group, is the material status of a family.

To sum up, it can be said that some qualities which describe school children who come from small towns and villages significantly determine their type of socio-metric position among peers. Economic situation of a family is the most important reason influencing the attractiveness of a child in a peer group. Children prefer these who are better well-off. Moreover, subjective poverty is significantly connected with incomplete family structure and a child's sex, which additionally differentiate a child's acceptance by a class group.

Generally, the conclusion of the research is the proof of the observation that children prefer these peers who are better financially situated. Furthermore, additional observations from the research include:

- ✓ independently on the subjective evaluation of a material situation, boys obtain negative choices more often than girls,
- ✓ girls from the better-off families are more attractive than boys, no matter what their material situation of a family is.

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# Relationship between cognitive flexibility, family resilience and parents' transformative learning experiences

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**Abstract:** This paper focuses on pinpointing the existence of a relationship between the variables family resilience, cognitive flexibility and parents' transformative learning experiences. Findings (after applying the questionnaire to 100 parents) show a significant correlation between perceived transformative learning and family resilience, but cognitive flexibility does not associate with family resilience (though it does correlate with resilience in general) or with parents' transformative learning in their relationship with the child. Giving a meaning to the problematic experience is a common point between the variables that correlate positively.

**Keywords:** family resilience, cognitive flexibility, meaning-making, transformative learning, Pearson's correlation.

## Introduction

Throughout their lifetime, most people go through stressful situations or through situations that are viewed like as threat. Some of them experience major pain as response to these events that they cannot get over or from which they recover with much difficulty, while others suffer less and they manage to adapt when facing adversity.

The three variables within this paper – family resilience, cognitive flexibility and transformative learning – are analyzed in relation to their importance as mental health predictors. When facing potentially stressful situations, resilient individuals that show high cognitive flexibility can reframe the way they approach the problem, they can find multiple ways of responding to adversity or they do not see the situations as stressful. Resilient individuals are those people who can successfully maintain good mental health when facing challenges and adversities such as economic struggles (Werner & Smith, 1992), terrorist attacks (Fredrickson, Tugade, Waugh & Larkin, 2003, p. 366) and daily life stressors (Ong, Bergeman, Bisconti & Wallana, 2006, p. 731; Bonanno, 2004). However, only few studies investigated the way in which cognitive flexibility is related to the capacity of being resilient. Kashdan and Rottenberg (2010, pp. 866-868) reviewed the studies showing that good mental health and resilience are characterized by psychological flexibility and vice versa, poor mental health is characterized by psychological rigidity.

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### **Parents' transformative learning**

Transformation refers to changing the way in which we perceive experiences and ourselves, to the way in which we prepare for doing things differently, for trying something new, and it represents an opportunity for learning. In other words, transformation refers to "a change in the meaning of the experience" (Novak and Gowin, 1984).

According to transformative learning theory (Mezirow, 1978), change is not imposed from the outside; it needs to be initiated by the individual, it may be mediated by other persons, and its purpose is the individual's growth and development. The power of transformation encompasses a process of reflecting, learning and being involved in actions that bring change. Reconsiderations of transformative learning (Mezirow, 2000, 2004, 2009) brought into discussion the importance of emotional, social, spiritual, physical and cognitive aspects involved in learning, thus exceeding the initial ideas posited by the author of this theory, (Mezirow) who emphasized on the primordial importance of cognition within the learning process. Mezirow himself (1985, p. 23) defined learning as "a process of adjusting and acclimatizing to the world (the means by which people come to perceive, interpret, criticize and transform the world in which they live)".

Transformative does not mean just adjusting, but it also requires the individual's ability of coping with the stressful situation, of changing something and of leaving behind outdated thought and action patterns. Pelling (2011, p. 77) conceptualized adjustment by using three pathways, leading to resilience, transition and transformation, and suggested that sometimes social learning is important for all three pathways.

Concerning the context, an individual's change is facilitated by support from the group (e.g. the support group for parents with teenage children, support group for unemployed people, etc). The group acts as a catalyser for learning, but also as a source of learning, while the feedback of the others is very important. The group brings along different standpoints, perspectives and experiences that enrich learning (Bonanno, 2013, p. 155). By interacting and by sharing their experiences, group members are supported and encouraged to take risks and to make changes.

### **Cognitive/psychological flexibility**

Psychological flexibility refers to the ability to be open, present-focused, and to change or persist in behaviour according to changing internal and external circumstances (Ben-Itzhak, Bluvstein, Maor, 2014, p. 2). It is interpersonal and intrapersonal at the same time and it concerns the ability of adjusting to events that bring changes; research has shown that psychological flexibility associated positively with mental health, well-being and resilience (Galatzer-Levy, Burton, Bonanno, 2012). In other words, individuals perceive change as a positive experience.

The lack of cognitive flexibility is associated with depression, anxiety, concern and the individual's incapacity of setting long-term goals (Kashdan & Rottenberg, 2010, p. 869; Nolen-Hoeksema, Wisco & Lyubomirsky, 2008, p. 400).

Cognitive flexibility is a key element of executive control, which involves the use of internal representations within the elaboration of an individual plan that guides the behaviour and the ability of being in control in case something

unexpected should occur. The ability of thinking positively, of developing alternative explanations, of reframing positively the negative situations and of accepting challenging or stressful events are vital elements for the identification of psychological resilience (Haglund, Nestadt, Cooper, Southwick & Charney, 2007). In addition, Giddens (2009) suggests that “flexibility in most cases is the key to resilience” (p. 167). A family with a set of rules, roles and boundaries, but which also has flexibility is likely to adjust much easier to change (Walsh, 2003, p. 6). The degree of family flexibility must be limited, in the sense that too much flexibility leads to chaos and dysfunction, while too much rigidity leads to dysfunction and an inability to change (Olson & Gorall, 2003, p. 519). Hence, it is necessary to find a balance between rigidity and flexibility inside the family.

### **Resilience, flexibility and meaning making**

Luthar and Cicchetti (2000) showed that resilience is a two-dimensional construct that involves exposure to adversity and the manifestation of positive adjustment outcomes. Giddens's vision (2009, p. 163) on resilience refers to “ability to make the best of adverse circumstances”, “to be able to modify” and to “a transform”, while Pelling (2011, p. 137) refers mainly to resilience as adaptation for the status quo. Resilient individuals may however experience brief functioning difficulties such as loss of sleep but “generally exhibit a stable trajectory of healthy functioning across time as well as the capacity for generative experiences and positive emotions” (Bonanno, Papa & O'Neil, 2001).

Bonanno (2004, p. 20) made a conceptual distinction between resilience and recovery. Resilience indicates the individual's ability to maintain a stable equilibrium of functioning across time, while recovery suggests a gradual return to functioning at the same level as before the events occurred. Furthermore, he analyzed the ways in which individuals may experience resilience. The first is robustness and it contains three dimensions: determination to find a significant purpose in life, the belief that the individual can influence the things surrounding him and the belief that the individual can learn and grow through both positive and negative events. Positive emotions and laughter represent another way of coping with adversity. Positive emotions may reduce the level of pain after an adverse event both through silence and by destroying negative emotion (Fredrickson & Levenson, 1998, p. 192).

Family resilience expresses the way in which families manage to function normally though they have experienced adversity situations. Walsh (2002, p. 130) extended this conceptualization of family resilience to the ability of managing stressful conditions; “this approach recognizes the potential for personal and relational transformation and growth that can be forged out of adversity”. Hawley and DeHann (1996, p. 293) posit that resilient families “positively respond to these conditions in unique ways depending on the context, developmental level, the interactive combination of risk and protective factors and the family's shared outlook”.

The model developed by Walsh identifies and synthesizes key processes that foster resilience within three domains of family functioning: family belief systems, organization patterns and communication processes (Walsh, 1998). Among organisation patterns, the author also mentions flexibility, characterized by openness to change (reorganise, rebound), counterbalanced by stability, flexibly authoritative leadership (protect, nurture) and cooperative parenting.

Walsh's view on flexibility (2002) does not involve only the capacity of coming back to normal after a stressful event, but also "navigating new terrain" such as parental disability, divorce or remarriage, cases in which families must construct a new sense of normality (such as changing parental roles) (Walsh, 2003, p. 10).

A common element of all types of resilience and transformative learning is the construction of experience meaning. Research has shown that some people do not always look for a meaning or do not find a meaning for their experience (Park, 2010, p. 288). Most people who face adverse life events successfully cope with them (Bonanno, Westphal & Mancini, 2011), but they are not eager to go further and give meaning to these experiences (Wesphal & Bonanno, 2007, p. 418).

Park (2010, p. 258) made a distinction between global meaning (beliefs about the self and worldviews) and the meaning-making process, which concerns meaning "in the context of a particular environmental encounter". According to his model, a discrepancy between appraised situation meaning and global meaning will create distress and result in an intense motivation to reduce this discrepancy through meaning-making. If stressful situations do not concern global meaning and beliefs, then the meaning-making process does not occur. It seems that there are situations that simply provide few opportunities for the individual to get involved in meaning-making for experiences; in this sense, Hobfoll et al. (2007, p. 360) suggest that sometimes meaning is not pinpointed in thoughts, but mainly in behaviours that are significant for the individual.

### **The purpose of the study**

The purpose of the present study is to identify a correlation between the three variables: cognitive flexibility, family resilience and parents' transformative learning experiences.

## **Method**

### **Participants**

The study sample comprised parents of at least one child, who filled in the questionnaires voluntarily (N= 100), either during meetings or via Internet (in Google docs). From among them 75 were female and 25 male. Parents were organized on four age categories: 20-30 (35 persons), 31-40 (35 persons), 41-50 (17) and over 50 (13).

### **Instruments**

The *Cognitive Flexibility Inventory* (Dennis & Vander Wal, 2009, p. 252) measures three aspects of cognitive flexibility: the tendency to perceive difficult situations as controllable (7 items), the ability to perceive multiple alternative explanations for life occurrences and human behaviour (13 items on the two subscales). The answers were assessed on a seven-point Likert scale, where 1= "strongly disagree" and 7= "strongly agree". The minimum score is 20 and the maximum is 140. High scores (> than the 70 median) indicate high cognitive flexibility, while low

scores (< than the 70 median) indicate cognitive rigidity. Cronbach's alpha was 0.72, measured after removing the items 2, 7, 9 and 17.

Family resilience was measured using *Family Resilience Survey* developed by Sixbey – short version (2005 in Lum, 2008). It comprises 28 items organized on the following dimensions: family communication (from 1 to 12), social resources (from 13 to 16), system of beliefs/ positive outlook (from 17 to 20), family connectedness (from 21 to 25) and make meaning of adversity (26, 27, 28). Items 21 and 22 are inversely coded. This is a seven-point scale, where 1= “strongly agree” and 7= “strongly disagree”. Low scores indicate high family resilience, while low scores suggest low family resilience. Cronbach's alpha was 0.89, measured after removing the items 7, 10 and 20.

Transformative learning of the parents was measured using a personal questionnaire, comprising 22 items, targeting the following aspects: disorienting dilemma (1, 20), experiencing new roles (3, 14, 15), assuming change (4, 10, 11, 18), reassigning one's beliefs (6, 7, 22), divinity (8, 9), social support (16, 17) and others (2, 12, 13 and 21). After calculating the median, low scores indicate the perceived presence of transformative learning, while high score suggest the absence of parents' involvement in transformative learning. Cronbach's alpha was 0.83.

### Findings and discussions

In order to study the relationships between variables, I calculated Pearson's correlation. The table below – *Correlations* – shows a significant positive correlation between perceived parents' transformative learning and family resilience,  $r(98) = 0.643$ ,  $p < 0.001$ . According to Cohen (1988), by analyzing the R coefficient, we are able to determine whether the relationship between variables is strong. A positive correlation between variables means that the parents who obtain high scores in experiencing transformative learning are likely to score high in the family resilience survey and vice versa. R-squared = 0.41, which means that 41% of the variance of transformative learning variable is explained by the family resilience variable.

**Table 6**

Correlations				
		Transformative learning	Family resilience	Cognitive flexibility
Transformative learning	Pearson correlation	1	.643(**)	.013
	Sig. (2 tailed)		.000	.897
	N	100	100	100
Family resilience	Pearson correlation	.643(**)	1	-.030
	Sig. (2 tailed)	.000		.770
	N	100	100	100
Cognitive flexibility	Pearson correlation	.013	-.030	1
	Sig. (2 tailed)	.897	.770	
	N	100	100	100

\*\* Correlation is significant at the 0.01 level (2-tailed).

The three variables of the study do not correlate significantly with the number of children or with their age. Statistical results indicate that the family resilience variable and the experience of transformative learning by parents are complementary (by associating high scores for the first variable with high scores for the second variable). Both variables analyze the way in which parents manage to overcome stressful (dilemmatic) situations in their relationship with the child by adopting adaptive coping strategies and by assuming change.

The attempt of approaching the problems differently and the need to adapt to new situations are reflected in the answers provided for items 7, 12, 18 (that measure family resilience) and 10, 11, 14 and 18 (that measure parents' transformative learning). Over 75% of parents report that they agree with the need of working as a family for overcoming difficulties (70%), with the need of approaching problems differently (82%), with the need to adapt parenting behaviours continuously (88%). Furthermore, 82% of the respondents posit that they are flexible when it comes to approaching issues within their relationship with the child. In addition, most of the parents (76%) admitted the contribution of the influence of social context in determining their own parenting behaviours.

Over 77% of the participants believe that becoming a parent was a major change in their life, which involved mixed feelings: from fear and anxiety to extreme joy. Over 70% of the parents report that they assumed the change and its consequences without complaining. This also results from the assessment of item 18 ("I believe that it is not me who has to change in the relationship with my child, but the child"), where disagreements exceed 77% of all answers.

Concerning the re-evaluation of old beliefs, 60% of the participants re-evaluated their own beliefs after experiencing tough moments in their relationship with the child, and that their views on life become more flexible and open after the birth of a child (83%). Approximately 72% of the respondents indicated that they reflected on their actions as parents; they believed that, in some moments of their lives, they could have acted in a more constructive manner for the child, but also for the parent-child relationship.

In the case of both transformative learning and family resilience, parents scored low in the role of the divinity or spirituality in assuming the parental role or in solving major life problems (approximately 30% of them gave affirmative answers).

The assessment of social support perceived by parents differs by the persons concerned. 84% of them feel supported by friends (item 16, family resilience) and 53% by relatives and friends (item 17, transformative learning), but the support of the community and of neighbours was reported as low (items 13, 14, 15, family resilience): approximately 20% agreed, around 25% were undecided and 30% disagreed, meaning they perceived no such support.



In terms of research limits, we pinpoint the child's age. In time, the parents may have adjusted their parenting behaviour depending on the situations they overcame; in families with toddlers (where crises may not have arrived yet), parents answered to the questions by taking into account social desirability.

I conclude that there is a complementary relationship between transformative learning model and family resilience, but it is still to determine the factors involved in this relationship. Future studies in the field should investigate both the factors involved and other variables that intervene within this relationship.

## **Conclusions**

The results obtained after applying the three questionnaires show a complementary relation between perceived transformative learning and family resilience, based on the identification of a significant correlation at  $p < 0.001$ . By interpreting the results, we conclude that parents overcome adverse events and make a new meaning for their experiences, by reconsidering their own beliefs and by experiencing new roles and actions favoured by the communication process and by support from the others.

Parents' cognitive flexibility does not correlate with the two variables on a statistically significant level, though scientific literature may indicate the existence of a correlation with resilience in general. Families can be resilient; they can become involved in the process of reinterpreting one's own experiences and they can act in agreement with new interpretations whose purpose is emotional regulation, but they are not characterized by cognitive flexibility.

Whereas parents who participated in the study may perceive difficult situations as controllable, they are not able to provide multiple alternative solutions for certain life events or to generate multiple alternative solutions for difficult situations. However, they have the ability of overcoming major life problems, by identifying for instance a solution that best suits in their relationship with the child. Questioning certain beliefs or behaviours no longer useful in their relationship with the child determines them to accept changing them in order to improve the relationship with their own child.

As for the strong points and opportunities of this research, I enumerate as follows: number of research participants, identification of the complementariness between transformative learning and family resilience, the possibility of elaborated and validating a measuring instrument for parents' transformative learning, also taking into account family resilience; the use of these scales as investigative approach to determine how parents manage to overcome the problematic events in their relationship with the child, in order to develop a parental education course.

As weak points/ limits of the research, I mention: the lack of a reliable instrument to measure transformative learning, the non-specification of a problematic life event for parents based on which they must fill out the 3 scales, the influence of other (uncontrolled) variables in the transformative learning/ family resilience relationship, the age of the family's child, answers in agreement with social desirability.

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# Intra-disciplinarity or interdisciplinarity in teaching mathematics in primary school?

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**Abstract:** The new curriculum for primary school has brought from kindergarten not only a new class - the preparatory class, but also a new approach of teaching, learning and assessment of mathematics. Specifically, the study plan provides for pre-school class, the 1st class and the 2nd class a new subject, *Mathematics and explore the environment*, which carries an integrated approach of former subjects *Mathematics and Natural Sciences*. The paper points some elements of monodisciplinary and interdisciplinary approaches and seeks an answer to the question *Intra-disciplinary or interdisciplinary teaching mathematics in primary education?*

**Key words:** intra-disciplinarity, interdisciplinarity, integrated approach, curriculum

## 1. Introduction

Intradisciplinarity and interdisciplinarity represent two extremes of scientific knowledge process, between them there is a variety of ways of separating or integrating disciplines. Intradisciplinarity or mono-disciplinarity is focused on independent study subjects on their own merits. Monodisciplinary or intra-disciplinary approach (traditional approach) requires action to tackle a project or solve a problem by limiting the data to a single discipline.

The term “interdisciplinarity” is not a scientific term, that has a unique and universally accepted definition. There are works in the literature, such as Jean Paul Resweber (1981), *La methode interdisciplinaire* and D' Hainaut (1981), *Curricula and lifelong education*, which identified the following levels of integration:

- intra-disciplinary integration;
- multidisciplinary integration;
- multidisciplinary integration;
- interdisciplinary integration;
- Integration across disciplines/transdisciplinary integration.

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Educational theory and practice use the term *interdisciplinary integration* at all levels with the exception of intra-disciplinary integration. There are authors who consider that for the last four levels would be more appropriate the term *non-disciplinary perspectives* (D' Hainaut, 1981).

## **2. Interdisciplinarity**

The principle of interdisciplinarity, as it accepted today, has emerged as a result of the projects initiated by UNESCO at the beginning of the seventh decade of the last century in various countries and called *integrated sciences*.

Early 80s had failed to clarify the concept. The article of Italian Giuseppe Gozzer, *Interdisciplinarity: a concept still unclear*, published in 1982, is relevant in this sense. Subsequent studies about the concept put it in various situations, ranging from "a universal pedagogical and epistemological panacea" (Văideanu, G., 1975, p. 4) to a formula likely to encourage superficiality and spiritual disorder which may lead to suppression or mixing disciplines and thus putting into question the teachers traditionally monodisciplinary trained.

However, interdisciplinarity is one of the most important and debated issue regarding knowledge and education. The most known arguments which advocate for interdisciplinarity include:

- Hughes Philip (1985) - the argument advocating interdisciplinarity is not that the subjects would be an erroneous theory of knowledge, but the subjects do not give us the full picture of things seen in isolation. Hughes (1985, pp14) proposed four forms of curriculum integration: integration through correlation of subjects, integration through themes, topics on ideas, integration in practical thinking, integration through the learner's own interested in inquiry.
- J. Moffett - the strongest argument for interdisciplinarity is just that life is not divided into disciplines.

In Romania, the term interdisciplinarity appeared relatively late in everyday language. Thus, we found it for the first time in *The neologisms dictionary* of Marcu and Maneca (1978) and in *Le petit Larousse en couleurs*, (1995), defined as establishing relationships between several sciences or disciplines. There appeared the terms, considered to be synonymous, pluri-disciplinarity and multi-disciplinarity, but the term transdisciplinarity is missing.

Most of Romanian specialists in education have addressed the issue of trying to approach a universally accepted definition of the concept. Here are some of the most cited:

- Interdisciplinarity involves a certain degree of integration between different domains of knowledge and different approaches and use of a common language allowing conceptual and methodological exchanges (Văideanu, G.,1988).
- Interdisciplinarity is a form of cooperation between different disciplines on an issue whose complexity cannot be revealed only by a convergent and caution combination of different points of views (Cucos, C., 1996).

- Interdisciplinarity is the interaction between two or more subjects that can go from a simple communication of ideas to integration the concepts regarding epistemology, terminology, methodology, data and research orientation (Manolescu, M.).

The integrated approach primarily involves curriculum integration. The study plan is organised based on seven curricular areas, which contains disciplines that have in common training objectives. This is an element of curriculum integration, at least for the disciplines from a certain curricular area. Although this isn't an ideal solution, it is a way that leaves the door open to many possibilities for an integrated approach.

According to the *Syllabus* approved by Order no. 3418 / 19.03.2013, discipline *Mathematics and explore the environment* has a novelty in relation to the disciplines studied before in the first two classes of primary education. In the study plan, the discipline *Mathematics and explore the environment* is part of the curriculum area *Mathematics and Natural Sciences*, realizing an integrated approach of concepts specific to Mathematics and Natural Sciences domains, which are allocated to the preparatory class and first class 4 hours per week and to the second grade, 5 hours per week. The main reasons that had led to an integrated approach to mathematics and natural science elements within the same programs are:

- A holistic learning at this age is more likely to be interesting for the students, being closer to their universe of knowledge.
- To contextualize learning by reference to the surrounding reality increases the depth of understanding concepts and procedures that are used
- Interactions between two areas: mathematics and science enables more efficient use of teaching time and increases flexibility of interactions.

Another element of curriculum integration is the integration of contents in integrated cognitive fields (Vlăsceanu, L., 1988) that transcend the boundaries between disciplines. In 1991, R. Case proposed four forms of content integration:

- integrating content by linking elements of different disciplines or within them;
- integrating skills or processes;
- school integration and self-integration through relationships between the student's school life and the outside world;
- global integration, ensuring close links between all student learning experiences, both planned and unplanned.

According to the syllabus for *Mathematics and explore the environment*, in the preparatory class, 1st class and 2nd class, the learning contents consist of inventory purchases necessary to student for literacy with basic elements of the two integrated "disciplines". Thus, they are grouped in the following areas:

- Numbers;
- Figures and geometric bodies;
- Measurements;
- Dates;
- Life sciences;
- Earth Sciences;
  - Physical Sciences.

The integrated approach of contents must be accompanied by a new approach to teaching, learning and assessment. The new National Curriculum, by passing the preparatory class at primary school, brought not only an extra year of study, but also operating with *themes, thematic topics*, issues underlying the design of teaching and represents an essential element of continuity between kindergarten and primary education. The themes chosen must provide an integrating opening vision, identifying in reality. In these situations, students could choose or propose some topics of study. For example, the *life theme* (Syllabus for Mathematics and environmental exploration -example integrated approach to IInd grade) can be used for training specific skills included in general competencies:

1. *Use numbers in elementary computations*: calculations with numbers representing data on the mass of animals, the distances covered during migration, the number of species that can be found in certain living environments.
2. *Highlighting the geometrical properties of objects located in environment*: pair elements of life seen environments with lighting and geometric shapes, identifying the axis / axes of symmetry schematic representations of plants and animals by geometric figures, realization and completion of tables data about subjects living environments, respecting the instructions that use the words "row" and "column".
3. *Identification of phenomena/relationships/regular/structures in the immediate environment*: composition of problems from favourite living environments, recognition of living environments in the drawings/pictures/layouts/documentaries/presentations, performing experiments in order to highlight the presence of air, performing experiments that highlight simple air movement.
4. *Generating simple explanations by using logic elements*: the staging of stories from real/imaginary from living environment studied using logical operators such "and", "or", "not", recognition the adaptations to the environment of plants and animals in discussions on the theme: "*What would happen if I move animals/plants from aquatic environment X to terrestrial environment Z?*", identifying changes/events in the life of plants, animals and humans due to day-night cycle.
5. *Solving problems from sorting and representation of data*: classification of the bodies, from a living environment, in the living and non-living and recording findings in a Venn diagram, grouping a variety of plants and animals based on



affiliation to a living environment and recording the results in a graphic organizer, the association of solving a problem with a graphic/drawing, solving problems using representatives' images of a living environment.

6. *The use of conventional standards for measurements and estimates*: identification of animals of a particular living environment based on characteristics regarding the length/weight ("higher", "shortest", "easier", "harder"), involving children in experiences in which they have to decide for themselves if they can/cannot buy an object with the amount of money they have.

### **3. Intra-disciplinarity**

Intradisciplinarity was one of the principles that formed the basis of traditional curricula. Such an approach crosses the teacher's work on the discipline he teaches, on the vertical transfer of content inside the discipline and less on the priority of education – the pupil.

According to the *Dictionnaire actuelle de l'éducation*, (Guerin 1993), intra-disciplinary integration is the operation which combines two or more interrelated contents in the same field of study, in order to solve a problem, studying a theme or developing the skills development. For example, integration of historical data of several countries to understand the dynamics of a whole epoch.

In mathematics, more than in other disciplines, intra-disciplinary approach (traditional, we will not dwell on that now) does not rule out the perspective of an integrated approach. Mathematics is an "interdisciplinary discipline". Even in primary education, mathematics treats interdisciplinary, at least, elements of arithmetic and geometry, two "disciplines" that led to the formation of a new discipline - mathematics.

We do not like the point of view of those who say that the monodisciplinary approach leads to the drain of scientific creation, reduced to mere technical research, monotonous and strictly specialized in a limited field.

### **4. Inter-disciplinarity versus intra-disciplinarity**

D' Hainaut (1981) presents a series of advantages and disadvantages for both intra-disciplinary approach and for the interdisciplinary approach. The answer to the following question *Interdisciplinarity or intra-disciplinarity* is not simple and should take into account a variety of factors, some of them listed below.

*The internal consistency of discipline* obviously increases in intra-disciplinary approach and decreases in the case of interdisciplinary approach. In mathematics, perhaps more than in other disciplines, interdisciplinary approach increases the risk of superficiality, of giving up the rigor and depth, essentials elements of mathematics.

*The horizontal transfer of knowledge*. Monodisciplinarity fails to provide the knowledge transfer from a discipline to another discipline. Thus, the student won't have an overview of the studied processes and phenomena in other disciplines. *To develop the capacity to communicate using mathematical language and developing the interest and*

*motivation for the study and application of mathematics in various contexts*, framework objectives in the curriculum for primary education remained, for most, as a wishes and hints. How many math teachers were not faced with the question: *What's the use?*

*Specialized encyclopaedic paradox* is one of the arguments used by some specialists for interdisciplinary approach. Simplifying, if knowledge is restricted, the level of knowledge of pupils increases. Forcing the language (mathematics) by passing to the limit, when knowledge tends to zero level, the knowledge about that area tends to infinity or translated to "non mathematicians", by excessive specialization is reached *by knowing all about ... nothing!*

But how much can go with interdisciplinarity? The logic of the previous example, if knowledge is extended, then the learning content decreases. In other words, when knowledge tends to infinity, the level of knowledge tends to zero, *get to know ... nothing about ... everything!*

*Human relationships between actors of the educational process.* Intra-disciplinary approach creates a rift between teachers of different subjects. Every teacher in his devotion to the subject they teach and ignorance of other subjects, get to disregard other disciplines. It also loses sight of the main objective of education - student, to the detriment transmission of knowledge.

*Teacher training.* In our country, most of the teachers are the result of a monodisciplinary initial training which make difficult the integrated approach in teaching of disciplines. The exceptions are few, this may include teachers for primary and pre-primary education. Unclear legislative framework, frequent changes correlated with immobility and lack of new continuing professional trainings, make difficult the integrated approaches. Add to this, the lack of pedagogical tradition and specific literature and researches influence the integrated approach.

*The teachers' attitude towards integrative tendencies.* The experience of curricular changes in preschool education demonstrated that after a period of latent or active opposition to the integrated approach, teachers have accepted and even supported this endeavour. The situation was the same with the preparatory class, before the implementation of it.

## **5. Conclusions**

The intra-disciplinary and interdisciplinary approaches are not incompatible, not mutually exclusive. Interdisciplinarity, even by its „definitions“, assumes the existence of disciplines and the absolute necessity of disciplines in some situations. "The interdisciplinary performed at groups of related disciplines or designed as a more radical notion of discipline does not imply abandonment of the term discipline. Conversely, subjects, with their own methods and epistemology -because of the very specificity - must be considered necessary for both a systematic intellectual formation as well as a good understanding of the world " (UNESCO, 1975).

Answer to *Intra-disciplinary or interdisciplinary?* question seems to be intra-disciplinarity and interdisciplinarity. The most effective solution consists of a balance between extremes. Based on the principle of unity of science and taking into account the characteristics of children's learning process, the National Curriculum requires the teaching-learning and evaluation process to be characterized by a shift as devoid of discontinuities, from full integration in preschool education and the first three grades of primary education, the separation more pronounced for the latter part of high school. In mathematics, this decision brought continuity between preschool and primary education - switching from the integrated approach from preschool level to the integrated approach at Mathematics in primary education - but unfortunately not solve the problem but only moved it between classes II and III of solving its remaining primary school teacher's account.

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# Nutritional education in kindergarten – an analysis of the Romanian preschool curriculum

Simona ILAȘ\*

**Abstract:** If the guidelines of nutrition education are followed, they will ensure a good health and a high level of comfort in life. Creating healthy eating habits and involvement in sports has a positive impact on children. This article presents a qualitative research regarding the specificity of nutritional education in preschool. The study contains an analysis of the Romanian preschool curriculum from the above-mentioned perspective. The results of the collected data are discussed by taking into account the educational objectives and behaviors as they are listed in the Romanian curriculum, and the nutritional education contents from the angle of the structured activities that take place in kindergarten.

**Key words:** nutrition, nutritional education, kindergarten, Romanian curriculum, content analysis

## 1. The increasing emphasis on the health of children and the need for nutritional education in kindergartens

Many recognize the need for changes to promote healthy school environments including food services, health related curriculum, and wellness activities and resources (Stallings VA, Yaktine AL, 2007; Longley C, Sneed J. , 2009; Rainville AJ, Choi K, 2009; Moag-Stahlberg A, Howley N, Luscri L, 2008). Nutrition education ranks high on the public agenda, and interest in food and nutrition is widespread, including an increased awareness of nutrition education in schools.

Early childhood is a period when children develop many food and nutrition-related attitudes, behaviors, and preferences during the preschool years (Birch L, Sullivan S., 1991). Therefore, positively influencing food preferences during early childhood aids in the establishment of lifelong healthy food habits.

Scientific literature shows strong evidence that the prevalence of pediatric obesity has increased rapidly in recent decades and that childhood obesity is seen as a primary pediatric health problem and crisis in developed nations (Ebbeling CB, Pawlak DB, Ludwig DS, 2002). Obese children of ages 2–5 are more likely to remain overweight throughout the preschool and school years (Skelton JA, Cook SR, Auinger P, Klein JD, Barlow SE, 2009) and are at greater risk for remaining overweight as adults (Guo SS, Wu W, Chumlea WC, Roche AF, 2002). Also, eating habits established in childhood are likely to track into adulthood (Kelder, et al, 1994; Resnicow et al, 1998;

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Singer et al, 1995). ). Obese preschoolers are subject to weight-based stigmatization from same aged peers (Puhl RM, Latner JD, 2007) and have more parent and teacher reported behavioral problems at entrance to kindergarten than healthy weight preschoolers (Datar A, Sturm R, Magnabosco JL, 2004). Furthermore, there is widespread concern amongst parents about their children's diets, and especially consumption of vegetables (Gibson et al., 1998). Environmental and policy changes in the school settings are one of the most frequently proposed measures to address childhood obesity (Gostin, 2007; Swinburn et al., 2004).

Larger portion sizes could be contributing to the increasing prevalence of overweight among adults and children (Hill & Peters, 1998). Roll et al. (2000) revealed by their findings that 5-year-old children ate greater amounts when presented with larger portions; in contrast, food intakes of 3 ½ year-old children were not affected by portion sizes. Their pattern of results is consistent with other findings indicating that as children develop, their food intake is increasingly affected by a variety of social, cultural, and environmental factors (Birch & Fisher, 1995; Birch et al., 1989; Birch et al., 1984).

McGinnis et al. (2006) noted that in addition to biological and socio-environmental influences, commercial and media promotion of branded foods and beverages plays a significant role in the development of healthful habits. Marketing of foods to young children usually includes positive and colorful environments with playful and appealing characters (Johnson, Bellows, Beckstrom & Anderson, 2007). Also, younger children are much more likely to believe that TV ads tell the truth (Clancy-Hepburn et al., 1974). Clancy-Hepburn et al. (1974) found that the children who reported more frequent consumptions of snack foods also indicated a stronger preference for consuming advertised foods.

The busy work schedule of the parents can influence the amount of time they spend in the kitchen in order to prepare meals, reason why consuming foods prepared outside the home can become a habit. Guthrie et al. (2002) mentioned that more Americans are making food prepared outside the home a regular part of their diet than ever before, and there is no expectation that this shift will reverse itself. Bowers (2000) also supports this, saying that one of the most notable changes in the food habits of Americans has been the shift away from home-prepared food. Increasingly, even meals consumed at home may be purchased from a restaurant or fast-food establishment to take home (take-out) or be delivered (Jekanowski, 1999).

Parents' own food preferences, intake patterns and eating behaviors influence the foods available to young children, and parents also serve as models for children's behavior, affecting early learning of food preferences and eating behaviors (Ventura & Birch, 2008). Preschool children are dependent on parents and caregivers for food; parents' choices about feeding include the context when feeding will occur, the foods and portions sizes that will be made available to children, and which feeding practices will be used to promote or discourage children's eating. Parents' choices about feeding become key determinants of children's eating experiences.

Children's food preferences impact heavily what is purchased because parents of children feel that it was not reasonable to purchase foods that children would not eat. But children's initial rejections of new foods do not

represent innate food preferences, but signal transient reactions that can be changed and developed through food familiarity experiences (Birch, 1998). “Food familiarity” refers to children preferring foods that are familiar to them. Repeated exposure to new foods (as many as 8 to 15 exposures may be necessary) in a positive environment has been shown to increase acceptance in children, whereas limited exposure to a variety of foods seems to limit food preference development (Pliner, Pelchat & Grabski, 1993; Birch, 1999, Wardle, Cooke et al., 2003; Wardle, Herrera & et al., 2003).

Introducing young children to new foods is critical because biological factors influencing children’s food preferences include a resistance to unfamiliar foods (Schwartz & Puhl, 2003), which is known as food neophobia – fear of new foods (Birch, 1998; Cooke, 2007). This neophobic response, or reluctance to taste new or unfamiliar foods is a natural and protective mechanism that is one of the most common reasons for food rejection in young children. “Visual familiarity” (children’s preferences for foods that they frequently see in their environments) can be a useful strategy for reducing children’s neophobic reactions to new foods and encouraging healthy food preferences (Dazeley, Houston-Price & Hill, 2012). Simply seeing a food on a regular basis can be key in children’s decisions to try novel foods (Story, Neumark-Sztainer & French, 2002).

Healthy eating habits are essential for the normal growth and development of preschool children; also, they prevent nutrition related diseases later in life (Dietz, 1994). Early childhood is a critical time in eating behaviour development, as children’s experiences during this period play a major role in shaping their lifelong eating behaviours and food preferences (Schwartz & Puhl, 2003). Examining the different food and nutrition experiences in kindergartens is important because children’s food preference formation is linked with their familiarity with foods during early childhood – the more familiar the food, the more it is preferred (Aldridge, Dovey & Halford, 2009; Cooke, 2007; Skinner et al., 2002). Also, to increase children’s familiarity with healthy foods is recommended by school-based nutrition education curricula (Wardle & Cooke, 2008).

## **2. The status and the goals of nutritional education**

Nutrition can be defined as the ensemble of the physiological processes related to the exchange of substances and energy between the organism and environment. The health state of people is the product of their genetic inheritance, age, nutrition, lifestyle issues (such as physical activity and smoking), social environmental factors (such as living conditions, hygiene), but also stress, working conditions and family support.

Nutrition education is defined as any combination of educational strategies, accompanied by environmental supports, designed to facilitate the voluntary adoption of food choices, and nutrition-related behaviors conducive to health and well-being. It is delivered through multiple venues and involves activities at the individual, institutional, community, and policy levels (Contento, 2011). The formal field of nutrition education can be considered to have had its start when governments began publishing dietary guidance recommendations for the public based on the findings of nutrition science and taking into account cultural eating patterns. In the United States, the first food guide was

published by the U.S. Department of Agriculture in 1917 as a teaching tool with the goal of improving the health of the nation's people.

A number of reviews have been conducted to examine the question of whether nutrition education is effective, based on the preceding view of nutrition education. One such review used the statistical method of meta-analysis to examine 303 studies conducted over a 70-year period from 1910 to 1984 that included a total of 4,108 separate findings (Johnson & Johnson, 1985). The meta-analysis found that, overall, nutrition education increased knowledge by 33%, attitudes by 14%, and behaviors by 19%.

Nutritional education combines the theoretical and practical perspective, and it is aiming to inform and train people on choosing, dosing and preparing food, identifying authentic food and nutrition value. Cuoş (2002) states the following objectives of nutritional education: creating a culinary culture and healthy culinary practices, safeguarding the specificity in the culinary arts, cultivating respect for other culinary habits or practices and experimenting new conducts in this direction. Macavei (2001) believes that the objectives of nutritional behavior aim at acquiring knowledge on nutritional functions, the need for proper nutrition, nutritional factors and nutritional value of foods, food errors, basic knowledge of the culinary art; rational, balanced, complete food habits, food hygiene, food preparation and storage, eliminating toxins from the body (food pauses, fasting), satisfying culturally food needs and civilized conducts by culinary ceremonies (organizing dinners).

School-based nutrition education interventions include educational efforts and programming designed to target healthy eating behavior change in children's diets. These strategies involve school-wide environmental change efforts, family-focused interventions, mass-media messages, community-based interventions, and government funded nutrition programs. Lytle and Achterberg (1995) identified six elements of successful nutrition education programming: (1) programs are behaviorally based and theory driven; (2) family involvement is incorporated into programs for elementary-aged children; (3) programs for middle school to senior high students include self-assessment of eating patterns; (4) behavior programs include intervening in the school environment; (5) behavior change programs include intervening in the larger community; and (6) programs include intensive instruction time. It was also mentioned that such school-based interventions are not the only food and nutrition experiences children encounter throughout the school day. In kindergarten classes, food is not simply provided at meals or only discussed during healthy eating interventions; it is often embedded in the curriculum and a focal point of various celebrations (Isoldi, Dalton, Rodriguez & Nestle, 2012; Johansson et al., 2009; Mikkelsen, 2011). These experiences are important because they can influence children's development of food preferences through food familiarity (Cooke, 2007).

### **3. Preschool children's understanding of food and nutrition**

Research suggests that 2-year-old children are only able to name or identify objects, but that 3- to 5-year-olds can begin to place them into categories such as size, color, and shape. In the food area, preschool children can

easily identify foods and they classify foods based on observable qualities such as shape, color and on function rather than by nutrient content (Michela & Contento, 1984; Matheson, Spranger & Saxe 2002). So research suggests that children have difficulty understanding food classification systems. Anliker et al. (1990) demonstrated that most children could classify foods into the fruit or cereal and grains groups, but not into the vegetable or milk groups. Michela & Contento (1994) revealed that 5- to 6 year-old children did not spontaneously classify foods into traditional food groups; they used two criteria, sweet taste and solid or liquid state, to classify foods. Singleton, Achterberg & Shannon (1992), which examined children's understanding of health, found that 5-year-old children incorporated the concepts of food and nutrition into their definitions of health and categorized foods as healthy or unhealthy. So they begin to be able to relate foods to health, but they do not really know what happens to food in the body to bring about its effects on health (Contento, 1981).

Birch (1998) mentioned that children eat what they like and leave the rest, and they are blissfully ignorant of considerations that influence many adult eaters: the fat and cholesterol content, nutrient density of a food, and its cost and ease of preparation. Gibson & Wardle (2003) found that children tend to prefer sweet foods and high-fat foods, while vegetables and foods of lower energy density are less preferred.

Preschool children playing in toy kitchens demonstrated that they already had some knowledge of meal planning, food preparation, table preparation, food serving, eating, and cleaning up; also, there were observed gender differences in children's play behaviors that were, for the most part, in accordance with gender stereotypes (Matheson et al., 2002). Johnson and Birch (1994) also reported gender differences in preschool children's food consumption. Specifically, girls were less able to regulate their energy intake than were boys, and the parents of heavier girls were more controlling compared with the parents of normal-weight boys or girls. But in most nutrition education research and practice, gender differences in food behaviors or nutrition attitudes are not addressed until adolescence and adulthood.

#### **4. The present-day preschool curriculum in Romania and its guidelines regarding nutritional education**

The curricular framework for preschool children is detailed in the Educational Ministry Order no. 5233 issued on 1<sup>st</sup> of September 2008, and it came into force at the beginning of the school year 2008-2009. Therefore, the education of the Romanian preschool children has been oriented since 2008 by the 146 pages document called "Curriculum for the early education of children aged 3 to 6 / 7 years old" (henceforth, Romanian Preschool Curriculum). The Romanian Preschool Curriculum has been seen as "an ideatic-normative construct, consistent with similar educational frameworks from other countries in the world (England, France, Italy, Germany and so on), with a new, original structure that is extremely complex in comparison with previous similar documents targeting preschool education in Romania. It suggests a radical change of optics on the contents offered to preschool children by explicitly assuming a certain curricular perspective in education. Thinking along D'Hainaut's idea, the authors of the quoted material highlight the fact that *the core point of the curriculum must be the pupil, not the subject matter... and*



*that when one talks about the contents of the curriculum, one must understand that it is not a matter of statements of subject matters to study, but of goals expressed in terms of a pupil's competences, ways of acting or of knowing, in general (Stan, 2014).*

The introductory part of the Romanian Preschool Curriculum, which is called in the analysed document “The context which has favoured the introduction of the concept of early education in Romania and, implicitly, curriculum revision” stipulates that “the kindergarten, as a formal education service, provides an environment that guarantees the children's health and safety... involving both the family and the community in the learning process”. Distinctive notes of early education are also mentioned; one of these underlines that at young ages, it is fundamental to have a multidisciplinary approach (caring, nutrition and education at the same time) - Romanian Preschool Curriculum, 2008, p. 4.

One of the documents that the Romanian Preschool Curriculum makes mention of is the Declaration adopted by the United Nations General Assembly, at its XXVI Special Session on the 10<sup>th</sup> of May 2002, which contains the guiding principles of the global movement for building a world fit for children. Among these principles, the following stands out regarding our research: “a better world for children is a world where all children will be able to enjoy the childhood years - a time of play and learning, when children are loved, respected and pampered, when their rights are promoted and protected, without any discrimination, when the safety and welfare are regarded as primary and when they can develop in health, peace and dignity” (Romanian Preschool Curriculum, 2008, p. 5).

“New accents present in the revised curriculum” is a part of the Romanian Preschool Curriculum where it is mentioned that the curriculum for preschool education promotes the concept of global development of the child, which is believed to be central in early childhood (Romanian Preschool Curriculum, 2008, p. 13-14). The global development perspective stresses the importance of the child development areas, considering that, in today's society, preparing children for school and life must take into account not only academic skills but equally, skills and attitudes related to socio-emotional development, cognitive development and physical development (motor skills, health, healthy eating, etc.).

Another document that the Romanian Preschool Curriculum makes mention of is “Fundamental benchmarks regarding learning and the early development of the child between birth and 7 years old”, which is an educational policy document drafted in 2007 with the support of UNICEF in Romania, through a consultative process involving experts in education and child development. The above-mentioned document presents a series of child development fields; the one related to nutritional education is called “Physical development, health and personal hygiene”, which includes a wide range of skills and abilities (from large movements such as jumping, running, to achieving fine movements like those needed in drawing or modeling), but also coordination, sensory development, along with knowledge and practices relating to care and personal hygiene, nutrition, health maintenance practices and personal security. The dimensions of the field are: physical development (developing motor skills and sensorimotor

development) and health and personal hygiene (promoting health and nutrition, care and personal hygiene, as well as personal security).

The annual study program in kindergartens is organized around six main themes: “Who am I/are we?”, “When, how and why is happening?”, “How was it, has been and will be here on Earth?”, “How we plan/ organize an activity?”, “With what and how we express what we feel?” and “What and how I want to be?”. According to the Romanian Preschool Curriculum description of these main themes, only one theme seems to mention health and nutritional content: “Who am I/are we?” – “an exploration of the human nature, of our beliefs and values, of the human body, of the own health and the health of our families, friends, communities and cultures with whom we come in contact (physical, material, spiritual, cultural), of our rights and responsibilities, of what it means to be human” (Romanian Preschool Curriculum, 2008, p. 24).

The “Methodology to apply the curriculum for children aged 3 to 6/ 7 years old” part of the Romanian Preschool Curriculum (2008, p. 22) points out a health and physical education setting that must be followed by preschool teachers “the daily schedule is mandatory to have at least one activity or a motion sequence (text and motion game play, physical education activity, sports competitions or tracks, walking etc.). At the same time, the teacher will take into account children's exposure to environmental factors, as a condition for maintaining the health and take the children outdoors at least once a day, regardless of season”.

## **5. Educational aims regarding nutritional education in the Romanian Preschool Curriculum**

The Romanian Preschool Curriculum stipulates the following main fields for preschool activities with children: the field “Language and communication”, the field “Science” (including mathematics and knowledge about the environment), the field “Aesthetic and creative” (including arts and music), the field “Man and society” (including “education for society” and crafts) and the field “Psychomotor” (physical education). For each of these main fields, there are presented framework objectives and reference objectives.

No framework objective mentions nutritional education; this is explained by the fact that the framework objectives enunciate very general aims. As for the reference objectives for each educational field, we found only one objective which stipulates content regarding nutritional education; it is an objective of the field “Man and society” – the child should “know and follow the rules that are necessary for social life integration, as well as personal safety rules (e.g. the importance of healthy food for the human body; activities and game rules, in order to avoid dangerous situations; minimum nature's protection rules and the danger of breaking these rules; rules regarding the protection of his own life and other's lives)” - Romanian Preschool Curriculum, 2008, p. 32.

Since we found only one reference objective regarding nutritional education, we were also interested to identify reference objectives regarding health education. Three such reference objectives were found in the Romanian Preschool Curriculum: the child should “acquire proper hygienic behaviors and attitudes towards themselves and towards other beings and objects” (the field “Man and society”); the child should “apply specific rules

of conduct in order to ensure the health and protection of human and nature” (the field “Science”); also, the child should “know and apply the hygiene rules of physical effort” (the field “Psychomotor”).

## **6. Recommended nutritional education contents at preschool level**

Specific contents for nutritional education include the human body (anatomy), the importance of healthy food for the human body, differentiation between healthy and unhealthy habits (e.g. excessive behaviours that can affect the health - alcohol, tobacco, coffee consumption), the value of food according to its ingredients for healthy life (e.g. fruits and vegetables and vitamins) and the family/the child in various aspects (e.g. at meals) and behaviours regarding social life (e.g. arranging a table, serving a meal, washing fruits and vegetables, engaging in preparing a salad or pastry products).

The Romanian Preschool Curriculum also presents some suggestions of individual themes or project themes: “Healthy and happy”, “The five senses”, “At the market”, “At the bread factory”, “From the field, on our table” and “Food for everyone on Earth”, themes that put together health education and nutritional education.

As for teaching strategies, the Romanian Preschool Curriculum mentions that the “present-day tendencies in pedagogy” are projects method, incorporated (integrated) activities and interactive group activities. Nutritional education is infused into the Romanian Preschool Curriculum as integrated into larger curricular approaches in order to promote interdisciplinary connections. Also, the Romanian Preschool Curriculum gives a lot of freedom to preschool teachers regarding the daily activity planning.

## **7. Conclusions**

Schools represent a popular and useful setting for intervention because schools offer continuous, intensive contact with children during their early years (Anzman, Rollins & Birch, 2010; Katz, 2009). Early childhood is a critical time in eating behaviour development, as children’s experiences during this period play a major role in shaping their lifelong eating behaviours and food preferences (Schwartz & Puhl, 2003).

The Romanian Preschool Curriculum recognizes the value of nutritional education and it stipulates that in early childhood education settings, it is fundamental to have a multidisciplinary approach (caring, nutrition and education at the same time). The nutritional education contents from the Romanian Preschool Curriculum focus both on children’s scientific knowledge and behaviours. But nutritional education does not appear as a discipline or school-subject; it is integrated in an interdisciplinary manner into more fields of study ( “Man and society” and “Science”). Also, nutritional education is put together with health education, and only one reference objective from the Romanian Preschool Curriculum stipulates content regarding nutritional education. We feel that nutritional education should have more clear lines and structure in the present-day Romanian preschool curriculum and that a revision of the curriculum is required.

Future research should be focused on a comparative analysis regarding nutritional education in the Romanian preschool curriculum and other European countries preschool curricula.

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## Schools and local communities

Ramona-Elena TUTUNARU\*

**Abstract:** Schools – along with all the other institutions which operate in a community – are directly influenced by the community's level of development of the community. Basically, the main purpose in the development of a community is the community's progress – which is a living process that sets in motion a multitude of elements, that involves carefully planned actions and requires constant control, and a perpetual reorganisation of subsystems – which are, in turn, in a permanent state of evolution.

The main purpose of community development is securing the wellbeing of the population. Community development aims to form and crystallise, in the members of a community, a feeling of belonging to the respective community they are part of and the desire to play an active social role in the community. Such results can only be achieved by getting people involved in social activities, by enhancing participatory mind-set and their desire to get involved in social matters. In this respect, it becomes natural for schools, families, and the community as a whole to cooperate with each other, to be open to dialogue and communication, and to be willing act. All stakeholders can benefit from partnerships between schools, families, and local communities and these partnerships become a good way to assess the strengths and weaknesses of the means through which each of the stakeholders involved can contribute to the greater good.

**Key words** Schools, local community, family, educational partnerships, society.

### Schools as core institutions within a community

Schools and society are two concepts that have long interested various specialists and professionals who have all tried, within their field of interest, to seize the characteristics and mechanisms which influence the manner in which schools, the stakeholders, to gather data from different sources. Also, researchers have been interested in all school and community related issues, in finding the various "bridges" and communication channels that exist between them, and the ways they influence each other.

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We believe that an assessment of the effects of schools on society may be useful to the local decision making authorities so as to find new means of action in order to bring beneficial changes to the communities. It would be great if the theoretical findings could be, at least to some extent, put into practice.

Schools are one of the core institutions within a community, they have specific roles, but they cannot function and develop without taking into account the type of families catering to and the specificity of the community within which they operate. Also, a community should reflect its specificity in the type of education it practices, promotes and supports. Each community has its own defining characteristics, its own needs and aspirations. Through good cooperation with the decision making factors within a community, schools can properly perform their social role.

The purpose of schools is to provide the society with schooled and trained youth who would integrate easily in the structures of society. Unfortunately, following the graduating from secondary school, young people face great challenges in finding a job, which raises questions regarding the cooperation between schools and communities.

Schools are a vital component of a society, a subsystem of the social system. They are the social institutions especially created and designed to accomplish the schooling of young generations, aiming to shape and train the young generation in line with the demands of society.

### **Ways in which schools can cooperate with families and the local community. Educational partnerships**

Schools – as components of a social system– naturally interact with and relate to other institutions. Some of them can contribute to the delivering of their educational mission, creating the premises of the educational partnership concept. The complexity of the educational process (in particular) and of the human and social reality (in general) are elements which support the development of said concept. From a different prospective, the collaboration between schools (institutions specially created to educate, institutions in charge of providing formal education) and other institutions, places the schools on new coordinates, structured in such a way as to serve the interests of the young generation.

Educational partnerships tend to become a core concept in the curricula type of approach – which means flexibility and openness towards educational issues.

Vrășmaș (2002) sees the educational partnership as a prerequisite to the efficient management of social and educational institution based on schools and community.

Partnerships imply cooperation. Educational partnerships imply cooperation among institutions and stakeholders interested in education and all related subjects, in the future of children and of society.



Thus, "educational partnerships are the form of communication, cooperation and collaboration which best serve children in the educational process" (Vrășmaș, 2002, p.139).

Implementing educational partnerships requires openness towards the resources of the community as well as expanding the framework for carrying out school activities in order to integrate said resources. In this respect, we should mention: using the community locations to organize and festivities, sports competitions, etc., getting the local authorities involved in organising various events, attracting sponsors, getting other community institutions involved, NGOs, the social services, in materializing some actions of social protection of children and in integrating some underprivileged and vulnerable children in the educational system.

Băran-Pescaru (2004) states several ways in which the cooperation between schools and society can be maximized:

- through communication channels going from schools to communities;
- by creating various activities through which students can illustrate what they can do for the community, gaining thus adults' trust;
- by designing some activities, opportunities for the members of the community to get directly involved in the students' activities.

By establishing various kinds of partnerships, schools develop their curriculum, and communities observe directly, understand and accept easier the changes in schools. Romania's "the educational system has gone, in the past two decades, through an almost constant transformation, in terms of structure, content and organization. The purpose of these changes has been to increase the equality of opportunity of the population regarding education and to improve the quality of the education system" (Mărginean, Precupețu, 2010, p.18), which generates changes in the way connections are set with the society as a whole.

### **The cooperation between schools and families generates effects for society**

Schools' cooperation with families contributes without any doubt to the enhancement of families interest in education. It is important to mention that families are the ones that set the basis, create the support on which schools can build on knowledge. But families' contribution to a child's development is not an action which can be limited in time but it is an ongoing process, with limitations in time. Collaborations with schools through specific activities, can make parents become aware of the role they play in their children's education, help them to better understand their children, make them aware of and help them correct any unwanted negative behaviours and attitudes within their own family, encourage them to get active, to get involved in organising various educational activities.

Stăiculescu (2012) lists the social phenomena which influence the evolution/progress of families and the school-family partnerships:

- the birth rate;
- the divorce rate;
- the migration of the work-force;
- going from community families to societal families.

In order for families to have direct relations with schools, they have to get interested and concerned by this topic. But not all families are equally interested in their children's' education, in what education implies, and what schools mean for society. The more parents show an interest in education, the bigger their desire to get involved gets, to contribute in all ways they can in the educational process.

Parents have a different take on the purpose of schools. Attitude towards schools develop over time and are generated by a series of factors, such as: the level of education/ culture/ material, living conditions, standard of living –just some of the factors worth mentioning. Also, it is well known that parents are (their) children's closest role models. Therefore, if parents do not emphasize the role of schools through their actions and discourse, then their children's attitude towards schools will not be one to enhance. The *éducogène* environment of families has a very strong influence upon the development of a child's personality and behaviour which sometimes preserves its educational impact throughout their whole life" (Bontaş, 1998, p.287). It has been shown that children's motivation, especially in their first years of institutional education is extrinsic. Only through increased interest and supervision from families, can the institutional education turn into an intrinsical one. Only by being there for their children, can parents influence their children in getting good results at school.

In turn, families could benefit greatly from such an attitude, and family values will be shaped in line with the values promoted in schools.

On a social level, a good cooperation between schools and families can generate positive long-term effects.

### **Schools and local communities**

All institutions within a local community are interdependently interconnected and they all have a significant influence on the local community. Together, they set forward the features of that environment. Therefore, it would be best if there were cohesive actions between all of them. "Social cohesion is a fundamental concept which accompanies the development strategies a modern, sustainable society is based upon."(Mărginean, Precupeţu, 2008, p.17).

Developing an educational partnership within a community in which children can grow and develop is a natural prerequisite. Only by working together, prioritizing communication, and setting common objectives focused on students

can outstanding results be achieved. Due to the complex nature of societies, nowadays, schools can no longer work alone. They must be supported by any institution that has any role in children's development. These institutions within the local communities carry educational values and can further develop cooperation among institutions, contributing to a better chance of schools in delivering their mission.

Schools are institutions which carry out their activity within a community. Schools, together with families, statutory authorities, government and non-government organisations, companies, etc. shape people. Schools have an influence on the other factors of education, as schools are the ones to set forth the educational coordinates, and, in turn, are influenced by such other factors. Schools are subject to economic/ social/ cultural/ political circumstances. Schools are influenced by the human and material resources within a society, by the society's current take on the world and on life, by everything happening in that society.

Schools operate within local communities. They have their own "features" and characteristics which inevitably impact their activities. Looking at things from another perspective, the future of the community depends on how schools carry out their mission.

Even from the 1980s, there has been a strong emphasis on a "site-based management" which implies getting all stakeholders within a local community together to take decisions regarding the teaching and learning process, funding schools and employing teaching personnel in the schools within that community. Such a management strategy relies on two arguments: one sustains the idea that people concerned by the education related decisions should be involved in taking such decisions; the other one sustains that decisions, once taken, have better chances to get materialized if those concerned by them have been involved in taking those decisions.

Stăiculescu (2012) states that more than often schools are the ones that initiate the dialogue with the local authorities/ parents/ NGOs/ medical establishments/ churches and other local representative institutions.

The structure of a school's management team which relies on the local community is quite complex but mostly very diverse. It includes teachers, parents, directors, members of the community, students but also members of the local business environment, of the various associations and foundations with an interest in education. Due to the large number of participants, such a type of school management — may be faced with issues related to finding time for meetings, different views on things, difficulty in designing a unitary action plan, etc.

The main reason for setting good collaboration relations between schools and local communities is connected by the desire to support students. When parents collaborate with the other members of the community, students get supported from different directions and, thus, their chances of success increase.

Relations between schools and local communities should be open, should promote mutual respect and a desire to understand the others' points of view, empathy and trust.

Some of the suggestions Iosifescu (2001) makes in his study in terms of making educational partnerships a component of our reality are of great importance also. He suggests adopting several measures which he finds useful to the education system in general. These suggestions concern laws, the teaching personnel and society as a whole. As far as laws are concerned, Iosifescu considers they must be changed so as to encourage and favour partnerships. Teaching personnel should be trained in communication and cooperation strategies as these two are the main coordinates of educational partnerships. Society, in turn, needs to change in terms of increasing the level of attention and care towards education and its needs.

## **RESEARCH METHODOLOGY**

### **1. Objectives and hypotheses**

This study involves a questionnaire based survey carried out in the town of Deva, on 120 persons, non-institutionalized, with ages between 25 and 45 years. The questionnaires have been applied at the respondents' homes (the "face-to-face" method).

Afterwards, the questionnaire has been also applied to two control samples, one from an urban area (50 de persons, non-institutionalized, with ages between 25 and 45, domiciled in the town of Hunedoara; the subjects have been selected based on the data provided by the Town council of Hunedoara), and another from a rural area (50 de persons, non-institutionalized, with ages between 25 and 45, domiciled in Ribița, a township situated in the north part of the Hunedoara County, in the Hollow of Brad, in the Land of Zarand; the subjects have been selected based on the data provided by the Township council of Ribița).

#### **Objectives of the research**

- Assessment of the relation between citizens and public institutions;
- Assessment of the intensity of the feeling of community belonging;
- Assessment of the view on the educational system within the respondents' hometown;
- Assessment of any real collaboration between schools and the community they operate in.

## **Hypotheses of the research**

Following a thorough and methodical consideration on the meaning of my scientific research activity, I have come up with the following hypothesis on the subject:

1. "Schools play an essential part in the development of the youth." – key idea shared by the vast majority of the population.
2. There is no actual cooperation between communities and the schools within.
3. The living habitat has no influence on people's opinions regarding education.

## **2. Procedures of the research**

### **Methodological considerations with regard to the sampling**

#### **a) The population investigated and its size**

The sample subjected to the survey involved persons within the population targeted for research – the inhabitants of the town of Deva.

#### **b) Deciding the size of the sample. Reasons**

After having made a list of addresses of the multi-home buildings and single-home buildings based on the data provided by the Town council of Deva, I have proceeded with a proportionally layered sampling, based on the variables *living habitat and gender* thus obtaining my sample by selecting its components from each layer, in direct proportion with their number within the whole population investigated.

In order to determine the size of the sample for the layered sampling, I have considered both the level of exactness of the estimation (accepted error), as well as the trust scale. I have thus agreed upon an accepted error of  $\pm 5\%$ , at the trust scale of 95%, which, according to the table of **z** distribution, is of 1.96. Finally, I have set the size of the sample to 120 units

#### **c) Framework of the sampling**

In this research, the observation unit is represented by the person from which the primary data are collected therefore any person, male or female, living in Deva, between the ages of 25 and 45 years.

Questionnaires were applied in May 2015

#### **d) Selecting the control samples**

The control samples have been formed based on the living habitat.

The first control sample has been selected from the urban environment – the town of Hunedoara – and the second control sample has been selected from the rural environment – the township of Ribița; the criterion used in selecting the subjects was their permanent domicile within their localities.

#### **e) Designing the questionnaire**

Designing the questionnaire – the research tool that we have employed in gathering the data related to the population of Deva was a process that started having as a stepping stone the hypotheses of the research. Based on their intent, the questions of the questionnaire have been designed bearing in mind that any questionnaire is functional and viable only if it is connected closely with the hypotheses the validity of which they are testing. Chelcea (2001, p.178) states: "besides testing the hypothesis, there is no other value to a questionnaire".

Upon designing the questionnaire employed, strong emphasis has been given to using a language register that all respondents can understand.

The questionnaire has 10 questions, mostly opinion questions. One of the questions is a layering one aimed to provide us with a hierarchy useful in our research.

### **Results Analysis and Interpretation**

1. On a scale from 1 to 12, where 12 stands for "maximum", how would you rate your trust towards the following public institutions:
  - a. Church - 12
  - b. Army - 11
  - c. EU - 4
  - d. Mass-media - 10
  - e. Police - 8
  - f. Legal System - 9
  - g. Local Town hall - 7
  - h. Trade Unions - 3
  - i. President of the country - 5

- j. Parliament -2
- k. Government - 6
- l. Political parties - 1

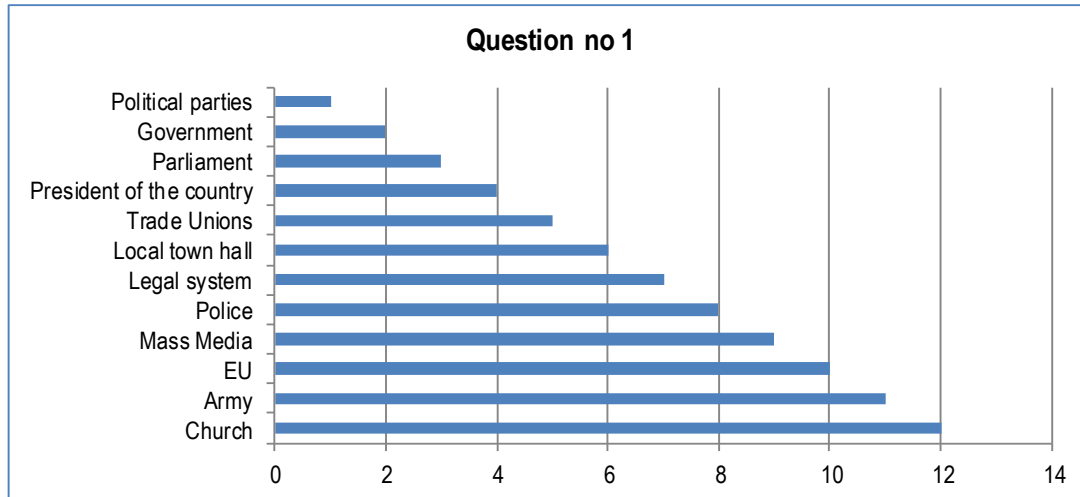


Fig. 1 Graphic representation of people's trust in the main institutions

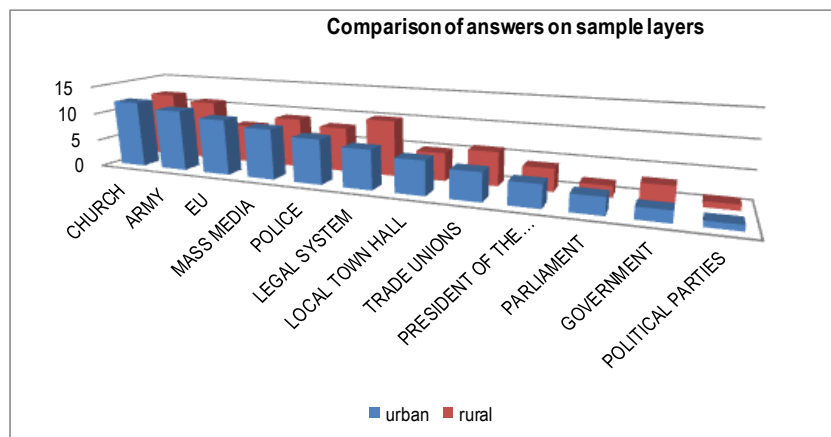


Fig. 2 Graphic representation of the comparison of answers on sample layers with regard to the main institutions

This question aims to investigate the sampled people's trust in institutions. A 1 to 12 score scale aims to provide us with a hierarchy of the institutions based on how much/little people trust them. A 12 point score is for the highest level of confidence people vest the institutions with.

Starting from the above mentioned considerations, the respondents have given the highest score to churches (12 points); next, was the Army (11 points), followed by Mass-media (10 points). The legal system and the Police are in the first half of the confidence in institutions axis. Local town halls are next to the middle of the chart (7 points).

The political parties come last (1 point). Also at the end of the chart we have the Parliament (2 points), followed closely by the Trade unions (3 points), EU (4 points), the President of the country (5 points), and towards the middle of the chart we have the Government (6 points).

Comparing the answers of the people living in an urban environment versus those living in a rural environment (fig. 2), we can notice a shift in their answers with regard to Mass-media, namely that people living in an urban environment award more points to Mass-media compared to those people living in rural areas. The same shift can be notice with regard to the Town hall / Village hall as well: people living in urban areas are less trusty towards this institution compared to their counterparts living in rural areas. The same goes for the Parliament.

## 2. What role do you think the Church plays in your community?

- A major role of education and social cohesion – 60%
- A role of economic and psychological support for the church-goers – 25%
- It is an institution as any other – 13%
- DK/NA – 2%

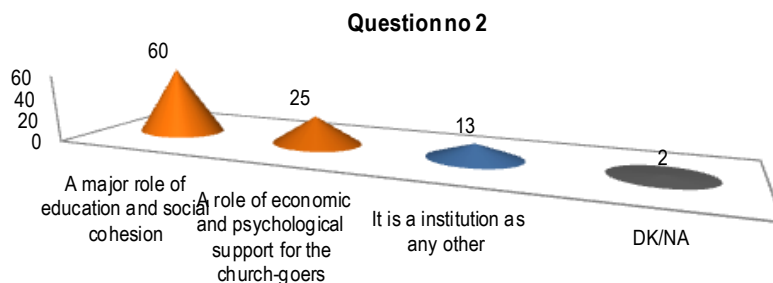


Fig. 3 Graphic representation of opinions related to how the Church is perceived on a social level



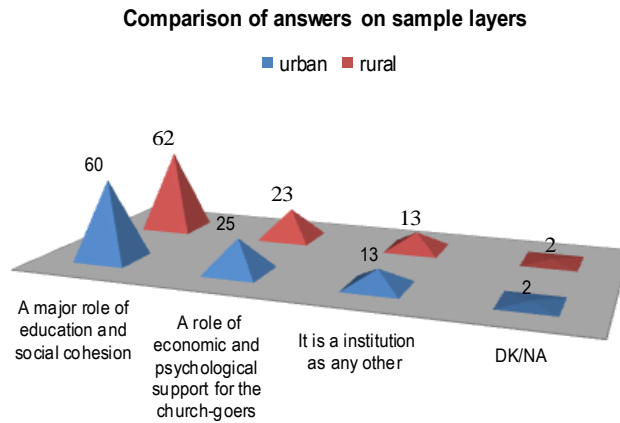


Fig. 4 Graphic representation of the opinions related to how the Church is perceived on a social level from a comparative sample layers perspective of people's answers

The participation of the Church in the day-to-day life of the community, the way this participation is perceived by people is the focus of this question. 60% of the respondents think that the Church has an active presence in their community and that "it plays an important role of education and social cohesion". Vesting the Church with such attributes, roles and expectations underlines a rural type of mentality of the sampled population.

25% of the respondents think that the Church has "a role of economic and psychological support towards the church-goers". These people expect major and exhaustive help from the Church in terms of both psychological and material aid. We think the actual support is more of a psychological one, and that, unfortunately, the material aid is of smaller extent.

There are people who think of the Church, in terms of its participation to the community social life, as of "any other institution" - 13%. These people do not see this institution as one with special, major attributions within the community but as one with obviously its own features, duties, social purpose but with no superior powers or roles – not above all other institutions.

The opinions of people living in urban areas versus people living in rural areas with regard to the participation of the Church in the life of communities do not differ much. We can see (fig. 4) only a small shift, namely that a percentage of 62% of the rural respondents think that the Church fulfils its role of "education and social cohesion" within the community, a mere 2% more than their counterparts from urban areas. This 2% shift goes the same for the next answer but reversed, namely that people from urban areas support less the idea that the Church has a role of "education and social cohesion" within the community. For all the other answers, the percentage remains the same for both rural and urban areas.

### 3. What role do you think schools/education play in a person's life?

- a. Essential – Without education we are nothing – 63%
- b. Necessary / Education is a must – Necessary at least the minimum mandatory education –10%
- c. Not important – Nowadays, Schools cannot help people anymore – 25%
- d. DK/NA – 2%

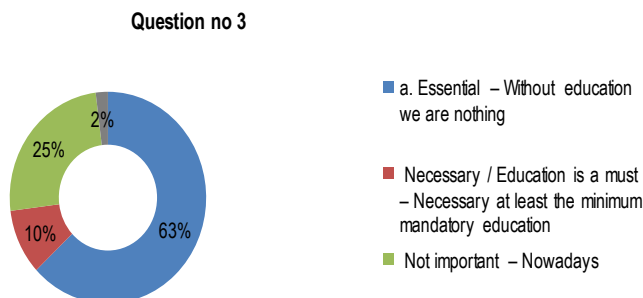


Fig. 5 Grapic representations of people's opinions regarding the role schools play in their lives

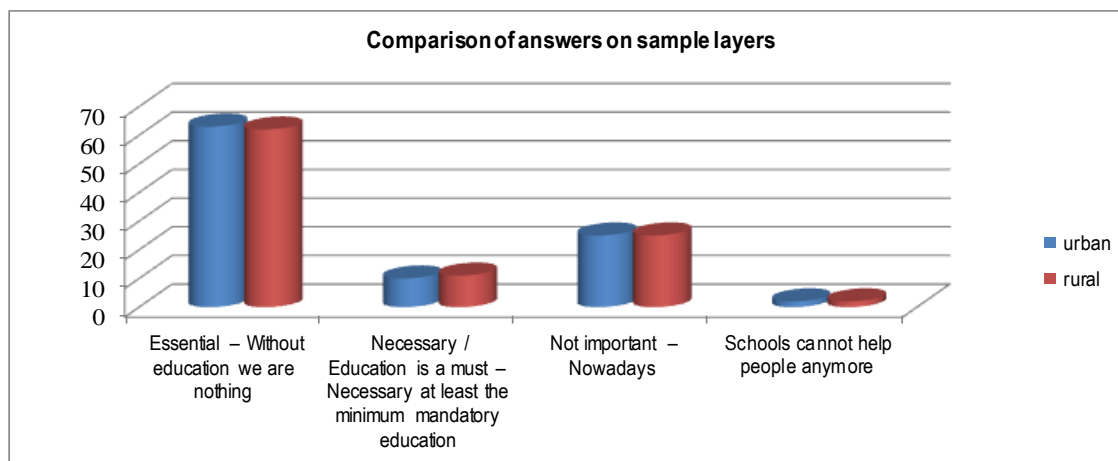


Fig. 6 Graphic representation comparing the answers on sample layers with regard to the role of schools (education) in our lives

This question focuses on a key aspect – the role of schools/education in our lives. 63% respondents think that schools and education play an essential role in anyone's life "Without education we are nothing" – which makes more than half of respondents agree that education is essential to each individual. Education, along with the ways it is delivered, has a major influence on how people choose their paths in life. Churches and schools – core values in urban environments –

interact naturally as the percentages they score when people are asked how important they consider these two institutions show it.

It is important to mention the percentage of people who have lost their confidence in the force of schools and education – worryingly, there are a lot people who share this opinion. These people do not have good opinions on schools or education and they do not give them any credit anymore. 25% of the respondents do not associate success or failure in life with good academic results; these people think schools are not important in life ("Nowadays, schools cannot help people anymore"). So a quarter of the population of Brad thinks that schools and education have a smaller role in people's lives. Our current education system is not associated with success in life. This opinion stands for and generates a certain attitude towards schools/education. Failure in education, not going to classes, abandoning education come as natural consequences of a mentality such as the one mentioned above. And we should not overlook that the age of the respondents varies between 25 and 45 years. These are people who live life to the fullest, have children upon which they bestow their opinions and raise them instilling such worrying and dangerous attitudes towards schools and education.

10% of the subjects share the consider that schools and education play a necessary role in their lives "There is a A need for at least the minimum mandatory education" – in other words, the minimum mandatory education is necessary but also enough for 10% of the respondents. Therefore, schools have a limited role in these people's lives but this role is not a very important one and one they should allocate more time. Adult education, lifelong learning are concepts that these people do not think they are important.

Comparing the answers of people who live in urban areas with the answers of people who live in rural areas, the findings do not show a significant shift in opinions therefore, the living habitat does not generate such differences of opinions (fig. 6).

4. How would you rate the quality of schools/high schools in your town?

- a. High – 63%
- b. Medium – 30%
- c. Low – 5%
- d. DK/NA – 2%

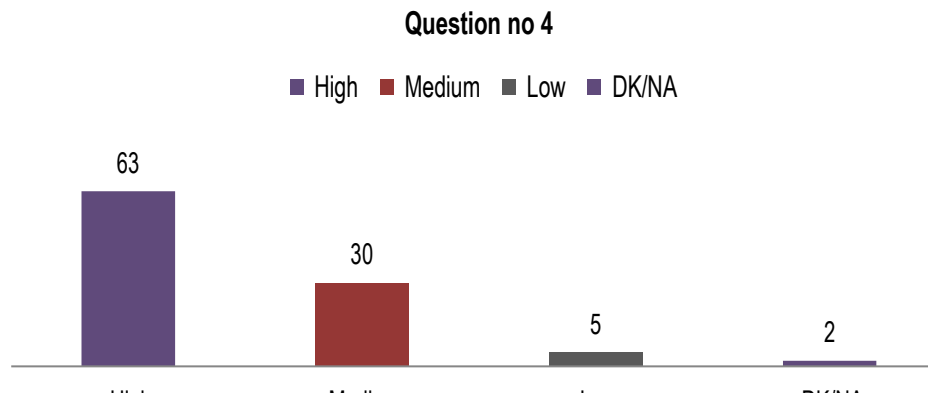


Fig. 7 Graphic representation of opinions regarding the quality of schools in your town

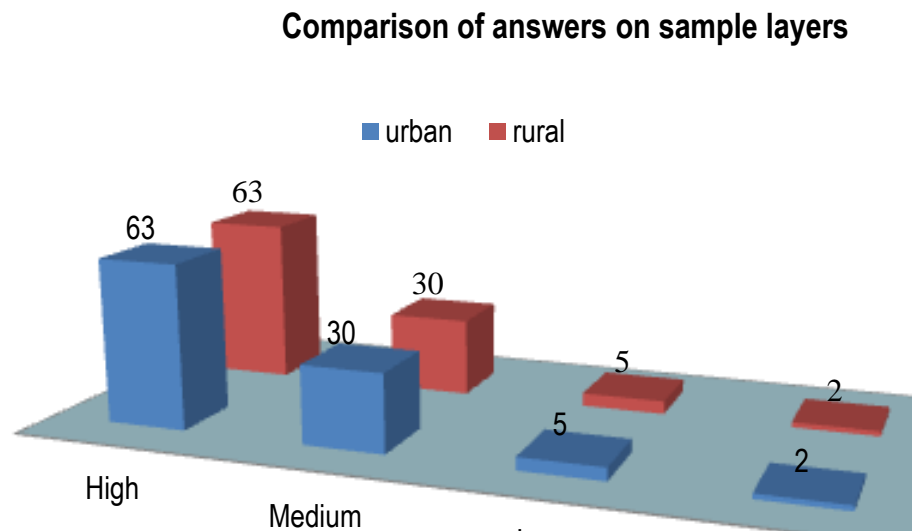


Fig. 8 Graphic representation of the comparison of answers on sample layers, regarding the quality of schools in your town

It is important to underline that more than half of the respondents (63%) consider that the education and training process in the local schools is one of good quality. A lot of respondents consider the quality of the educational establishment is of a high nature. 30% of the respondents believe though that the quality of these institutions is a "medium" one and 5% think that it is a "low" one.

The positive opinions regarding schools relate perfectly with the percentage of the answer to the previous question where schools are considered as playing an "essential" role in people's lives. The same percentage (63%) is valid for both choices of answers to the two questions together. This makes us think that they were the same people who have chosen those answers too – namely, that the people who think schools play an "essential" role in people's lives also believe that the quality of the local educational establishments is a "high" one.

The same correlations can be made between the other answers as well. Summing the percentages from the two answer options to this question, we can see they overlap with the sum of the other answers given to the previous question. Equally, negative opinions concerning the role of schools and education in people's lives can be associated with the quality of the educational process delivered in the local schools.

Comparing the two layers of the sample group – layers formed based on the criterion of the living environment – generates similar answer which means that the said criterion does not generate differences of opinion in terms of the quality of the manner in which local schools function (fig. 8).

5. Do you think that the current educational system supports students in process of their social integration and in their integration on the job market?
  - a. To a great extent – 15%
  - b. To some extent – 60%
  - c. Not at all – 22%
  - d. DK/NA – 3%

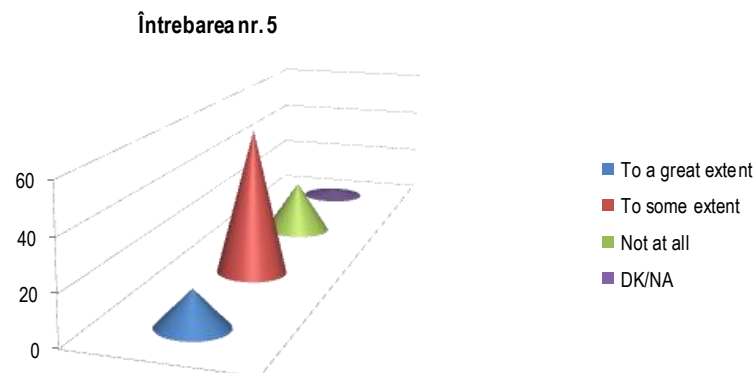


Fig. 9 Graphic representations of the opinions referring to the support given to students by the educational system in their process of social integration

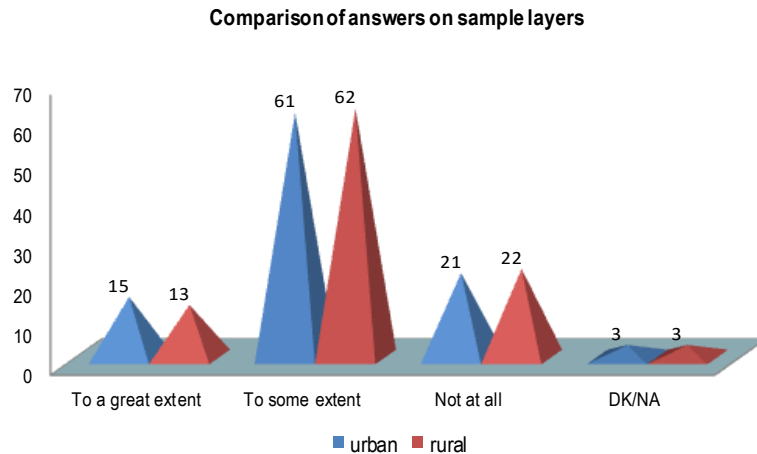


Fig. 10 Graphic representation of the comparison of answers on sample layers referring to the support the educational system gives to students in their process of social integration

Asked whether the current educational system supports students in the process of their social integration and integration on the job market, 15% of the respondents stated that this happens "to a great extent"; 60% of the respondents say it that happens just "to some extent". It is worth mentioning that there is rather significant percentage of respondents – 22% – who say that the current educational system does not support students "at all" to in their integration in structures of the society as well as on the job market. 22%; therefore, the number of those who notice the gap between schools and the needs of society is quite large. Schools and the educational system should be an integral part of the society, and due to their prospective characteristics, schools should know the society's needs, which, respondents' perspective, does not really happen.

The difference in answers from people living in town versus those living in villages/rural areas is of 1-2 percents so their domicile and the area where it is situated do not generate a difference in opinions (fig. 10).

Those indecisive or who did not wish to answer to this question make up 2%.

6. Would you support your children financially and morally so they can go on a school exchange programme/professional internship abroad?
  - a. Yes – 72%
  - b. No – 24%

c. DK/NA– 4%

### Question No. 6

Figure 11



Fig. 11 Graphic representation of people's willingness to support their children in going on a school exchange programme or doing a professional internship abroad

### Comparison of answers on sample layers

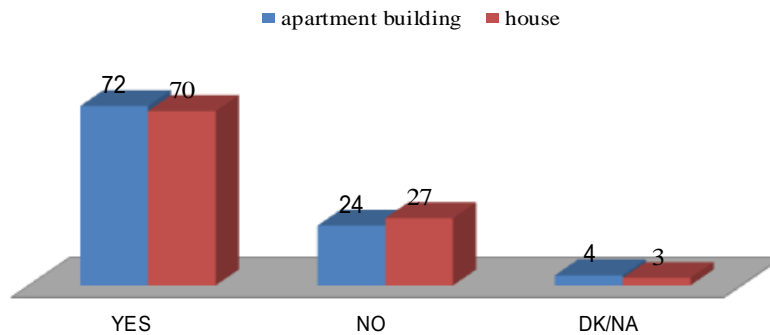


Fig. 12 Graphic representation of the comparison of answers on sample layers related to people's willingness to support their children in going on a school exchange programme or in doing a professional internship abroad

A great majority of respondents – 72% – would like to help their children in going on a school exchange programme or in doing a professional internship abroad. For these parents, their children would benefit greatly from an

educational/professional training programme abroad. The high percentage of people who would sustain both financially and morally their children in embarking on an educational or professional training programme abroad shows the high level of trust the people of Brad give to the idea that investing in one's education and profession will definitely pay off. Also, going on such an educational or professional training programme weighs in more if done abroad.

But there are also people who would not support their children in going abroad on such programmes. The data collected following the questionnaire shows that 24% of the respondents would not support their children's initiative in going abroad to get an education or a professional certificate.

There is no significant difference of opinions between the people living in urban areas and those living in rural areas on this topic. Although the difference is only of 2-3%, we can notice that people from Brad – who are living in an urban area – are more interested in supporting their children in going abroad for their studies or profession.

## 7. How proud do you feel as a member of your community?

- a. Very proud – 40%
- b. Quite proud – 36%
- c. Not so proud – 19%
- d. Not proud at all – 3%
- e. DK/NA – 2%

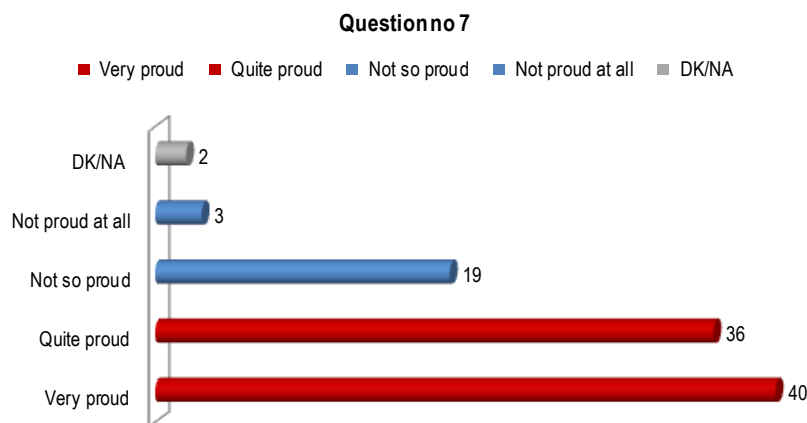


Fig. 13 Graphic representation of opinions regarding the feeling of pride of being a part of a community



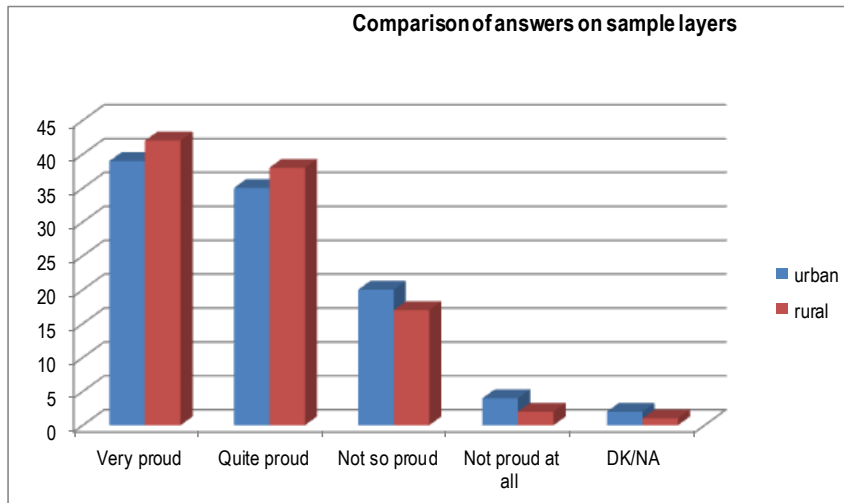


Fig. 14 Graphic representation of the comparison between answers on sample layers, related to the pride felt as being part of your community

This item refers to people's feelings and attitudes in reference to them being members of the community. 40% of the respondents say they are "very proud" they are part of the local community where they live and another 36% of the respondents are "quite proud" of the same thing. Another 19% of the respondents say "not so proud" and some 3% are "not proud at all" (fig.13).

People living in rural areas are more proud for being members of their community than their counterparts living in urban areas – the difference between the two sample layers based on the habitat criterion is small though, of only 2 percent.

8. If you had to choose between a job in your home town and a job abroad, which one would you choose?
  - a. Definitely a job in my home town – 40%
  - b. It all depends on the salary and work conditions – 38%
  - c. Definitely a job abroad – 21%
  - d. DK/NA – 1%

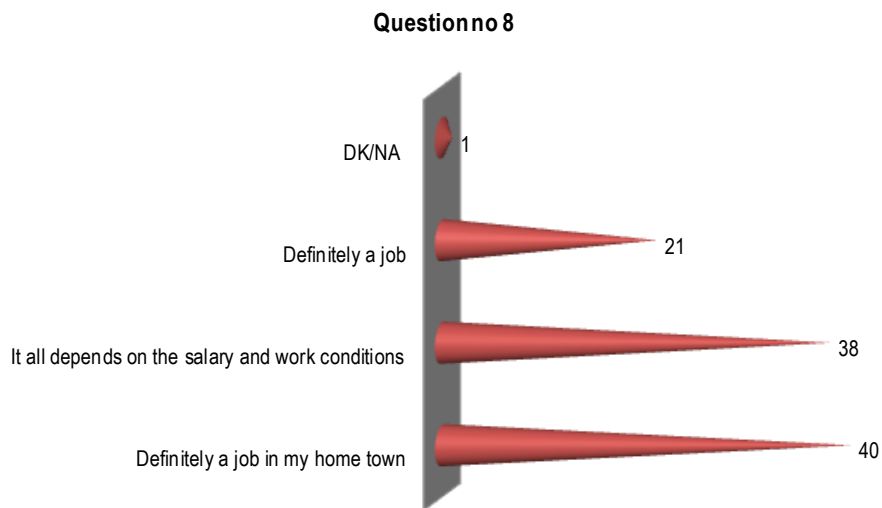


Fig. 15 Graphic representation of the answers referring to the location of a desired job

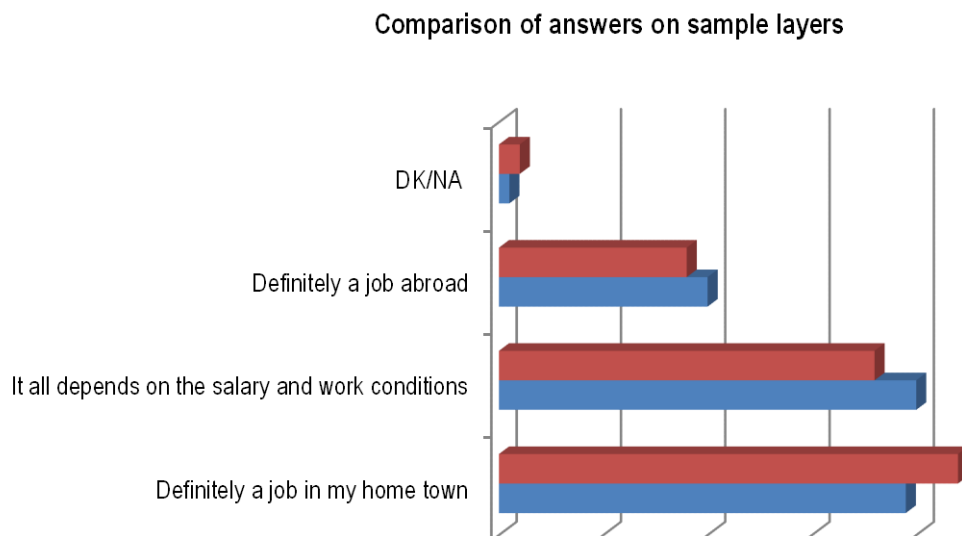


Fig. 16 Graphic representation of the comparison between answers on sample layers referring to the location of the desired job

Given the choice – whether to go for a job in their hometown or for one abroad – a lot of respondents, 40%, would choose a job in their hometown. For these people it is of great importance to have a job close to their family – this provides them with a sense of security and control.

Some 38% of the respondents are more cautious in taking a decision regarding the location of their job and they would not take such a decision without weighing in all the pros and cons as the money/salary aspect is an important criterion for them besides having a job in their hometown.

21% of the respondents would definitely opt for a job abroad as for them what is important is working abroad. They want something different, to live in a new place, to experience a different way of life.

People living in rural areas are more conservative and more attached to their hometown (fig.16). By comparison, people living in urban areas are less attached to their country, to their hometown, in general. As the difference between the two sub-sample groups is not significant, we can say that in this case the living habitat can be a factor which may generate different opinions and mentalities.

9. In general and at this moment, do you think that there is a actual collaboration between schools and communities?
- a. Yes – 15%
  - b. No – 80%
  - c. Don't know- 5%

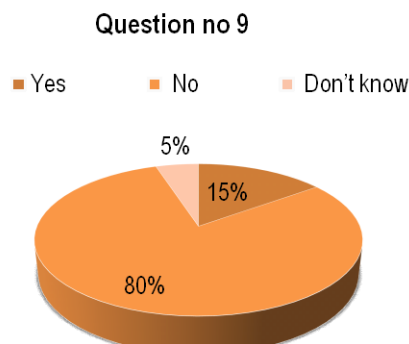


Fig. 17 Graphic representation of the answers referring to whether or not there is a actual communication between schools and communities

### Comparison of answers on sample layers

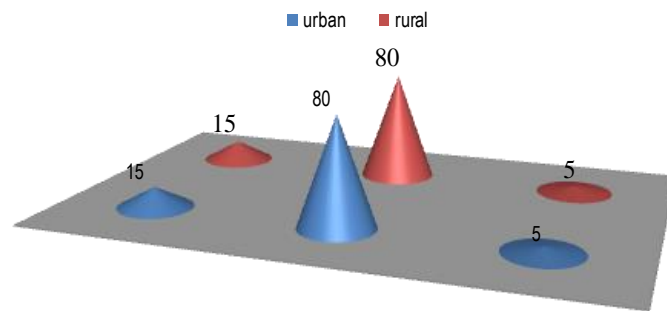


Fig. 18 Graphic representation of the comparison between the answers on sample layers on whether or not there is a actual collaboration between schools and communities

80% of the answers to this question are negative. Only 15% of the respondents think that schools and communities cooperate. The comparative analysis of the answers of people living in urban areas and those from rural areas shows there is no difference of opinions generated by the respondents' habitat.

10. Has the relation between schools and communities improved, remained the same or got worse?
- Has improved – 10%
  - Has got worse – 55%
  - Stayed the same – 33%
  - DK/NA – 2%

### Question no 10

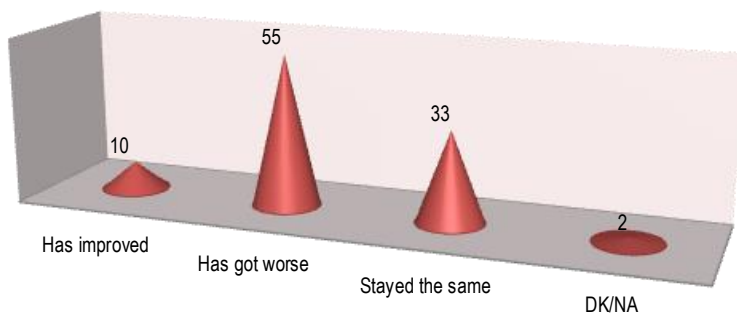


Fig.19 Graphic representation related to the evolution of the relations between schools and communities

### Comparison of answers on sample layers

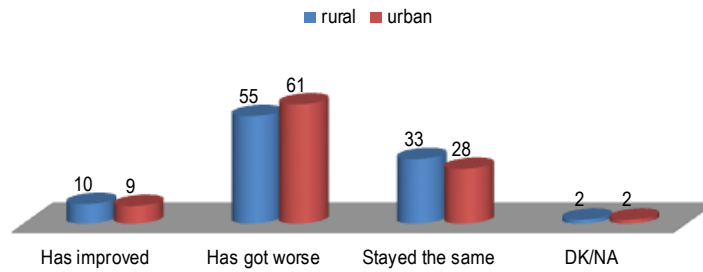


Fig. 20 Graphic representation of the comparison of the answers on sample layers, referring to the evolution of the relations between schools and communities

Instructed to consider the last 20 years, respondents were asked to assess the evolution of the relations between schools and communities. A little more than half (55%) of the respondents believe that this cooperation "has got worse", 33% say "it has remained the same", and 10% believe that "it has improved"

The comparative analysis shows some differences between the way the urban population and the rural population think, namely that the latter are more demanding, stating that cooperation schools and communities "has got worse".

### Conclusions

Local communities should be regarded as a complex system constantly transforming itself; they are like living organisms that live among people who, voluntarily or involuntarily, shape the future of their communities.

Schools are an essential component of the local communities and their role/purpose is to shape and train the young generation. The first hypothesis of this research survey focuses on the key idea according to each "schools contribute in a decisive manner to the shaping of the youth, an idea to which the communities adhere to". The questionnaire data analysis and interpretation underlines that a major segment of the population (63%) thinks that schools are essential to individuals, and that education is vital. The same way goes for the role of the Church within the community. Basically, schools and churches – key institutions for people living in rural areas – are also important for people living in urban areas.

A major aspect of this research survey showed that a lot of people have lost confidence in schools and that they do not give much credit to schools. 25% of the respondents think that education does not provide people with a certain professional path and that success or failure in life does not depend on education. Behaviours based on this type of

mentality may be very dangerous as the respondents who support this type of attitude are between the ages of 25 to 45 therefore likely to instil their own children with an indifferent attitude towards school and education.

Thus, even if the majority of the population considers school have a positive impact on their lives, the concerning opinions of people who do not value schools and give them second or third degree importance in their lives and communities it is not to be overlooked .

In theory, the relation between schools and communities works great. In practice, however, even though the schools within their communities are viewed as positive aspects of their lives and the level of training provided to students is seen as a "high" quality one, the cooperation between schools and community is rather poor. In fact, it is widely believed that this relation has been on a descending path in the recent years. This means that people do not notice an active presence of this partnership in their lives which reveals a series of serious consequences.

As far the habitat is concerned (urban versus rural), it does not seem to influence greatly the way of seeing things, as the differences in answers are not significant.

Therefore, in our opinion, people would benefit greatly, – socially and attitude-wise, from the schools' active participation within communities.

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# How to use the Hanen approach in developing communication and language in children

Elena Liliana DANCIU\*

**Abstract:** Modern approaches in education have pointed out that, though neglected for a long time, early intervention is increasingly necessary in children's development. As a key component of early intervention, parent training responds to the need for explicit training with a view to reach effective education. The experiment presented here showing the efficiency of some programmes and methods in the development of communication and language in autistic children and difficulties of communication aimed at implementing the Hanen programme in parents' activities with children. The three groups of children involved in research got parental help after a training programme run by a specialist in communication and language and certified Hanen for three months. The approach, the results of this implementing together with its limits, blockage, and success, as well as the project of continuing the programme is the topic of this paper.

**Keywords:** communication, language, Hanen approach, parent training, parent coaching

## Introduction

Impairment between goals and objectives of parental training and early intervention approaches within a family ask for new directions that meet the concepts of contemporary family services, the need for explicit training of service suppliers in parental education strategies and that carry out research on the long-term effects of parental training on both children and families.

Parents wish to get information on the specific ways in which they can help their children develop and this asks for early intervention parental training.

They experimented the use of Hanen programmes in search of solutions for the speeding up of learning, for the development of communication and language in children with retard in language development and autistic.

However good a specialist an adult could be in matters of communication and language, being a parent gives him/her a status difficult to equal. It allows parents to understand and learn to turn children's communication into deep reality favoured by the level of affectivity and sensitivity of the parents. It has already been proven that parents are the first and most important teachers of their children and that the latter learn easier and quicker in a natural, family environment.

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## Methods

This is what the Hanen approach aims at – educate parents to facilitate their children's language using the everyday situations in a child's life for the learning process to be continuous, to develop simultaneously the link between parents and children, and for the parents to be able to rely on all necessary means to help the children develop at their best their speaking, social interaction and learning skills.

Though maybe difficult to believe, teaching the parents to observe their children, listen to them, wait for the things to occur and let the children take the floor in communication and maintain it is much more important for children's evolution than trying to teach them to speak. The Hanen approach focuses on children's parents or carers as linguistic facilitators and Hanen programmes are meant for both children without development issues and children with delays in language development and autistic (fragile X, Asperger) aiming at:

- Admitting their children's development stage and communication style to establish the intervention algorithm;
- Identifying the reasons for interacting with the children to know how to start a pleasant, stimulating conversation with them;
- Adjusting daily routine to keep a continuous interaction with the children;
- Strengthening children's self-confidence and encouraging communication;
- Adding words and communication elements to help the children acquire the language;
- Adjusting the way of playing and reading to help the children learn how to speak;
- Changing the way of speaking to the children to facilitate understanding and the learning of new words.

Because the main goal is for the children to feel the joy and advantage of communication, the Hanen approach provides solutions that may seem paradoxical to many of us given the unnatural responses when communication fails. Instead of being

told what they should do, parents are left to find the solutions themselves (McConachie et al., 2005).

Since 1975, when Ayala Hanen Manolson, a pathologist specialised in language from Montreal, Canada, developed an innovating programme for groups of parents whose children had language delays, providing professional intensive training in the way they could help their children develop communication skills, there have been good results and the Hanen Centre was established.

Because it privileges the development of sensible contacts with children (pre-school and even infants) to encourage them to communicate when they are sick, stubborn or moody and acquire verbal structures, the Hanen approach is also called the way of the three As:

- Allow the child to take the initiative (A1);
- Adapt to be able to live the moment together (A2);
- Aid development through language and experiences (A3).



**Children are allowed to take the initiative (A1)** to inform the parents/carers on their needs, interests, feelings, to influence the development of feelings and of inner beauty, to discover them, to know how to listen to them, and to wait for their attempts to communicate. The range of roles played at the same time, the tendency to facilitate learning situations by speaking or responding in the children's place when the latter seem not to be able to do it deprives them of an opportunity to manage and speak, of making decisions for their own behaviours. Usually, adults find the time to talk to the children, but they do not have enough time to listen to them because they are too busy and overwhelmed by their professional or personal problems and they tend to monopolise the conversation forgetting that they should let the children expose themselves (Caselli et al., 2015).

Adults get to know children well by observing them (what draws their attention, the expression on their faces, their body language), by acknowledging their feelings and needs, by waiting for them to express in their way and by listening to them to better understand them, to respond with more sensitivity, and to encourage speaking. Adults need to win children's trust. Communication develops progressively and children make progress in their own way going through the five steps or levels of development while they learn to play the game of communication (Girolametto et al., 2007).

**Level 1** – children cry, look, smile, shout, make sounds that resemble vowels and change their voice (pitch, tone, etc.), change their complexion, and move their body.

**Level 2** – children are amazed by anything, are interested in people and objects, communicate through face expressions, move towards objects and people, make sounds that resemble more and more to consonants and vowels, and can focus on objects or people.

**Level 3** – children manage to communicate easier, ask for help or draw adults' attention on themselves in a more precise manner (nod their heads or move their arms, associate sight and sounds and gestures, point to precise people or objects, show through gestures what they mean, and sometimes use isolated words/signs).

**Level 4** – children use isolated sign-words; combine the words that adults understand with difficulty, using them in phrases or sentences.

**Level 5** – children make up sentences of 3 or more words.

**Adults adapt to spend quality time together with their children (A2)** to encourage the latter if they need it, to share experiences, to persist in communicating, to understand them, to look them in the eyes, to avoid patronising them, and to show the children they are interested in what they say trying to make them relate verbally through all kind of strategies or subterfuges – therefore, they listen to the children. Adults keep contact with the children by **mimicry** (they repeat sounds, gestures, facial expressions; they practice postures and pantomimes), by **interpreting** (they “translate” in a loud voice by appealing to the adults' vocabulary to make sure that children will retain something of what the former communicate), by making **comments** regarding everyday gestures, actions accomplished or desired, misunderstandings or blockages, to raise the children's interest in participating in the

**conversation** that needs to be maintained through mimicry, verbal signs, significant pauses (wait, question, approval, disapproval, etc.) and **questions** that stimulate imagination, make choices and decisions, stimulate ideas and curiosity (Venker et al., 2012).

**Adults should not forget to share their experiences with the children (A3)** to make them aware of what they communicate verbally or non-verbally, of what they initiate or to what/whom they respond.

To make sure they share the same wave length when playing or trying to communicate, adults need to mimicry the children's actions, gestures and sounds: they make the mistake of translating "attempts to communicate by actively waiting one's turn", by commenting what is happening, by asking questions adapted to their level and by being responsive to their mood and changing behaviour getting involved in their games.

***"The most important learning act at the beginning of one's life and, maybe, in one's entire life, is acquiring one's mother's tongue. Once we can rely on language, we own a key that will open more than a gate..."*** (David Crystal, 2003).

Time is the best and the worst friend in language development in children both when acquisitions are numerous and when they are high quality, and when progress is slow developing frustration in adults. Children need **TIME** to record information and improve their ability of understanding the meaning of the words. Even before a language takes contour, children learn much about contacts, relations, meanings, interdiction and access, acceptance, rejection and communication. However, adults need to be reasonable and not infer that, if children manage to utter a sound properly, they will also make up words. By monitoring the children's communication behaviour, adults need to make sure that children understand what they hear, that involuntary, meaningless gestures are understood and have a special meaning, that they have learned to express their wishes and they rely on non-verbal and para-verbal communication to emphasise the meaning of the message, that they use grammar structures properly and makes sentences easily. Children's progress is obvious during playtime, in everyday group activities, when there are special moments involving children.

Parents share many of the children's experiences, particularly during everyday activities when they verbalise behaviours and actions, repeating many times to make sure the children understand and remember words and phrases from the moment they wake up, they get ready (washing, combing, dressing), they have meals, they play, to the moment they take their evening bath and go to bed.

Depending on the children, adults can make them benefit from their experience and availability to make them their partners in such activities as laying the table, preparing something tasty, going shopping, tidying up, gardening, etc.

There are programmes specially designed to solve efficiently, reasonably communication, and language problems in children. There are Hanen experts trained for the following Hanen programmes.

**It Takes Two to Talk** (Manolson, 1992) – designed to help the parents of children with language delays better understand how children develop language, and that supply algorithms for the building up and development of linguistic skills during the day (Zanobini, Viterbori & Scopesi, 2015). Parents learn how to observe, wait, listen and be less directive; they become more aware of the needs of their children and they try to understand and meet their demands for relationships and communication, to better understand messages and be able to respond easier (Manolson, 1992).

This programme takes 12 weeks and it includes:

- Orientation meetings;
- Previous documenting on the programme;
- Eight sessions of teaming;
- Three individual counselling sessions with video feedback of the subject taught by a certified Hanen instructor;
- Eight sessions of parent training (16 h);
- Three sessions of parent coaching (3 h).

The programme **It Takes Two to Talk** relies on clear principles of research and intervention:

- The focus is on the family. Parents are trained about what to do to help their children learn and develop harmoniously and get involved in activities of stimulation and consolidation of their speaking to the children.
- Speech development activities are part of the daily family life and children learn to communicate in their natural environment from real situations together with the beloved ones. This will motivate them to communicate and use the skills acquired in new situations.
- Child – parent interaction is the main catalyst for language learning and it is stimulated when the parents:
  - Are very receptive of the children's efforts to communicate;
  - Simplify and adjust what they tell the children so that the latter can understand and learn from the situation.

Receptivity to the children's need for communication supposes:

- Promptness in answering (usually, 1-2 seconds after the children did or say something);
- Positive attitude (to make the children be sure adults are really interested in what they do or say) ;
- Focus on the children's message (topic, interest in what they do and nothing else, and increase of self-confidence).

The method of talking in pairs suggests algorithms of development of linguistic competences during simple activities such as reading a book, attending at table and develops and supports learning opportunities agreed by the children or meeting educational demands (Pepper & Weitzman, 2004).

**The OWL strategy** facilitates insertion in adults' relationships with their children: the latter follow the formers' example (words, gestures, mimicry) to keep interacting more time and take the initiative in verbal inter-relationship. At the same time, children practice and get the feedback they need to build up communication skills, to retain verbal algorithms, and to develop children's confidence in activities.

In most cases, the OWL strategy is put into practice in partnership with the **strategies O = Observe, W = Wait and L = Listen**.

"It Takes Two to Talk" proved to have many positive effects on the development of children's language and in specialised clinics. It is true that, in order to get expected results, parents need to commit in a particular way and to pay substantial attention to children to make the approach part of their everyday family life.

The programmes are completed by practical strategies that can be used in different situations. The best-known are:

**More Than Words** (Sussman, 1999) – a family programme focusing on groups of parents with little children with autistic issues (ASD), with difficulties of social and communication adaptation, as well as with disorders that affect social interaction, that provides practical strategies necessary to approach children's specific needs for communication and for the development of social and game skills during their daily activities during game activities such as expanding game, manipulation or symbolising, developing more opportunities for communication through objects and food.

*More Than Words* helps parents take advantage of daily opportunities and develop opportunities for communication situations that engage children socially through group sessions combined with individual counselling using film recording as feedback.

The strategy does not neglect the social aspect of communication; therefore, parents are trained to organise or take advantage of group sessions, of individual counselling that they can record on video tape as feedback.

Parents are also presented ways of developing predictable routines that facilitate learning, understanding and using image and writing to diversify attempts and interactions of communication (Sussman, 1999).

The programme includes 5-6 families and it is run by an expert in communication and language certified Hanen and a pathologist or logopedist specialised in working with autistic children with social disorders related to the learning process.

The programmes take 7 weeks and it includes:

- *In-home pre-programme consulting to evaluate the child's level of communication;*
- *Training sessions (4 for parent groups, 2 individual, in home, video feedback sessions with the parents and the children);*
- *A written report with recommendations and guidance for continuous practice and generalisation.*

**Learning Language and Loving It** is an educational services programme with three main components aiming at **preventing, intervening, and enriching language**. In order to put it into practice, it supplies practical

interactive strategies for the building up of linguistic competences and early literacy of pre-school children including children with language retard or children learning a second language. Though all the other objectives refer mainly to the assimilation of linguistic structures, the main goal of Learning Language and Loving It is to find the best strategies to make parents better understand how to meet the needs of their children with disorders of or delays in speaking. The same importance for the development of children is attributed to the increase of productivity and of verbal interaction between pairs through continuous training (Weitzman & Greenberg, 2002).

In learning languages, the highest efficiency is when the settings are more naturalistic (Rosetti, 1996), i.e. when children learn to communicate in real life situations, when they decide themselves the topics to approach, when they censorship less and less and initiate dialogues (though for short periods of time), when asking becomes a natural fact.

If direct therapeutic intervention is time-limited and the therapist stops contacting the child, Hanen programmes supply intervention strategies that incorporate everyday language because parents are always supplying examples and actions, because they encourage the child to get involved in social games that allow the practice of language and early development of linguistic skills so that learning becomes a continuous, progressive process (Rosetti, 1996), produces pleasure and stimulates the child to wish to continue.

It is very important for the therapist to be Hanen certified if we need efficient results because inexperienced therapists tend to be more directive when communicating with children (Doherty et al., 2000) and do not facilitate their interaction (Girolametto et al., 2000).

Learning languages is more efficient if children are involved in interactions and simplified models that can be easily remembered, that allow analogies, that they can practice without feeling stressed or saturated (Girolametto et al., 2003, 2006). The more opportunities of communicating, the more one builds and practices different structures and linguistic forms, the more attention one pays to the answers and interventions or questions one initiates (Bohannon & Bonvillian 1997, 2004), the more the results expected are. We need to be aware of the fact that children can sometimes refuse to get involved in communication because they believe either they are misunderstood or they do not trust their interlocutors, or they are afraid of something, they hide something, they believe they do not know the answers or they do not like the topics. In either case, children's refusal of talking is a way to protect themselves (Bornbaum, 2015).

This is why we should not insist on making them talk because they could block even more or they could react cholericly and cry, make disordered gestures or even get violent.

**Target Word** – developed especially for the parents of children with language delay (they have good understanding, motor and learning skills, but they use less words than other children of their age) to teach them how to build an expressive vocabulary.

**TalkAbility** is a programme designed for the parents of functionally autistic children, including the Asperger syndrome, as well as with other social communication difficulties. It allows building up stronger social skills, interpersonal relationships and activities based on children's unique interests.

**Teacher Talk™ Training Series** (Weitzman, 1992) is an introductory programme of teacher training for the learning of languages through affective approach; it refers to the principles and strategies of this key programme for Hanen specialists in communication and language. The training covers three one-day training sessions.

These techniques can be taught through **five basic strategies**:

- **MOTIVATE COMMUNICATION AND WAIT!**

The role of the parent is to find a motivating object for the child that attracts attention due to its colour, shape, or movement, and wait for the child's communicative response. Autistic children will always react in an unpredictable manner but, little by little, they become more aware of their environment and learn to interact with people.

- **FOLLOW THE CHILD'S FOCUS!**

Paying attention simultaneously to a person and to a shared object (Mundy & Gomes, 1998) defines "common attention in infants and this will be a fundamental aspect of early social development and a condition for later cognitive competences" (Carpenter, Nagell & Tomasello, 1998). Vocabulary acquisitions will be more numerous, more diverse, more complete if the interests and motivations of the child are the reason of communication.

- **KEEP IN TOUCH WITH THE CHILD THROUGH REPETITIONS!**

If, during the pre-verbal period, children learn the meaning of communication gradually, if they initiate increasingly often communication and respond to challenges, later the message semantics becomes more important than the message itself. The game will keep its place with the same intensity due to routine repetitions, interactivity, high level of affection, and diversity of meanings. It is but normal because each stage of development has its specificity, limits, blockages, and excesses.

- **HELP THE CHILD UNDERSTAND WHAT HE/SHE SAYS!**

Children with autism disorders (Asperger syndrome, functional autism, and fragile x) have not only communication problems but also understanding problems (content of communication, significance of an action, of gestures and mimicry). This is why parents (in their capacity of therapists) need, besides other tasks, need to consider the development of phonematic hearing, the correct emission of phonemes, the practice of simultaneous self-management elements such as dressing, putting on shoes, eating through games that facilitate the level of understanding (Lord, 1985).

- **USE VISUAL AIDS TO FACILITATE UNDERSTANDING!** (Sussman, 1999)

Facilitating understanding is always linked in ASD children to strong visual aids, to mini-programmes, to the practice of visual skills. It is important that, in all our communication attempts, in all our attempts to make children

aware of their own existence, children be able to decode all direct messages and show it through mimicry, gestures, or posture (Quill, 1995).

## **Results**

In order to initiate research, we invited a specialist in communication and language Hanen certified to train parents for five days. He did not award Hanen certificates, but each participant was allowed to apply the practical elements learned from the activities with the children. The most used methods/programmes were **Target Word**, **More Than Words** (Sussman, 1999), **TalkAbility**.

## **Hypotheses:**

1. *Using the Hanen programme improves children's communication at a speedy pace;*
2. *Applying the Hanen programme results in better family relationships at all levels;*
3. *Combining logopedic therapy and the Hanen programme increases the number of acquisitions, children's independence and develops their understanding and verbal interaction.*

## **Objectives**

- *Applying the Hanen programme on a group of 15 children with ASD, social adaptation and communication problems*
- *Training the parents in the spirit of the Hanen programme aiming at recovery therapies*
- *Monitoring the effects of the logopedic therapy and of the Hanen programme on ASD children with social adaptation and communication problems at cognitive, affective, and behavioural levels*
- *Observing blockage in children during the attempts of recovery*
- *Selecting the most pertinent solutions in the solving of communication and language blockage*

## **Sampling**

We considered three samples of five ASD children with social adaptation and communication problems each. The first sample was subjected to logopedic therapy alone, the second sample was subjected to the Hanen programme, and the third sample was subjected to both logopedic therapy and Hanen programme.

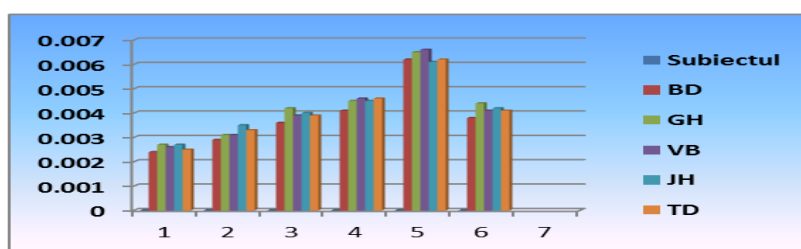
The experiment lasted three months and the evaluation consisted in five tests:

- Test no. 1 Isolated words
- Test no. 2 Action and feeling words
- Test no. 3 Two-word phrases
- Test no. 4 Three-four word phrases
- Test no. 5 Sentences

In group no. 1, the highest result was 0.27%, in the second group it was 35%, in the third group, it was 0.42%, in the fourth group, it was 0.46% and in the fifth group, it was 0.65%.

Table 1. Results of the tests in the first group (logopedic therapy)

Subject	Test 1	Test 2	Test 3	Test 4	Test 5	Final result
BD	0.24%	0.29%	0.36%	0.41%	0.62%	0.38%
GH	0.27%	0.31%	0.42%	0.45%	0.65%	0.44%
VB	0.26%	0.31%	0.39%	0.46%	0.66%	0.41%
JH	0.27%	0.35%	0.40%	0.45%	0.61%	0.42%
TD	0.25%	0.33%	0.39%	0.46%	0.62%	0.41%



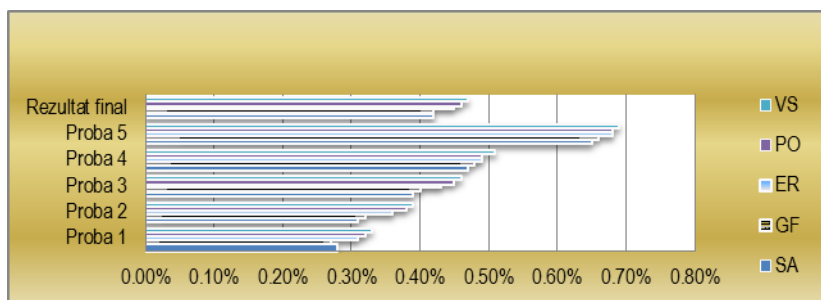
Histogramme 1. Results of the tests in the first group (logopedic therapy)

In the second group, the highest value in the first test was 0.33%, in the second test it was 0.39%, in the third test, it was 0.46%, in the fourth test, it was 0.51% and in the fifth test, it was 0.69%. There is a substantial increase of the percentage of tasks achieved.

Table 2. Results of the tests in the second group (Hanen programme)

Subject	Test 1	Test 2	Test 3	Test 4	Test 5	Final result
SA	0.28%	0.31%	0.39%	0.47%	0.65%	0.42%
GF	0.27%	0.32%	0.40%	0.48%	0.66%	0.42%
ER	0.31%	0.36%	0.43%	0.49%	0.68%	0.45%
PO	0.32%	0.38%	0.45%	0.49%	0.68%	0.46%
VS	0.33%	0.39%	0.46%	0.51%	0.69%	0.47%





Histogramme 2. Results of the tests in the second group (Hanen programme)

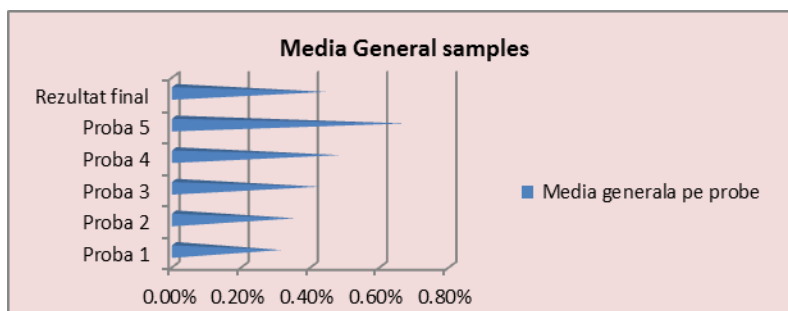
Table 3. Final values of the results of group no. 1 per test

Subject	Test 1	Test 2	Test 3	Test 4	Test 5	Final result
General mean	0.25%	0.32%	0.41%	0.44%	0.63%	0.41%

Table 4. Final values of the results of group no. 2 per test

Subject	Test 1	Test 2	Test 3	Test 4	Test 5	Final result
General mean	0.31%	0.35%	0.42%	0.48%	0.67%	0.44%

The last tests present obvious quantitative and qualitative increases with differences that show an improvement in the communication with the children (Test no. 4=0.44%/0.48%, Test no. 5=0.63%/67.00% and the final mean of all tests 0.44%).

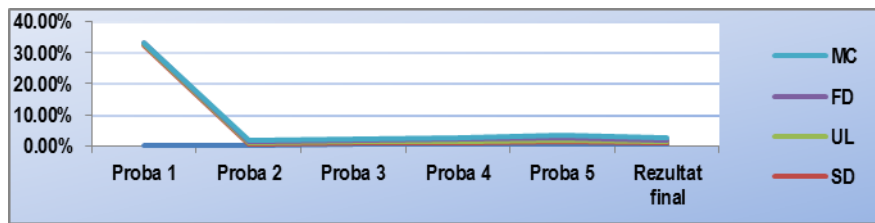


Histogramme 3. Results of the first two groups

In the third group, the highest value in the first test was 0.35%, in the second test it was 0.45%, in the third test it was 0.53%, in the fourth test it was 0.62% and in the last test it was 0.74%, which shows that alternating logopedic therapy and Hanen programme was the best variant for the development of children's communication and language.

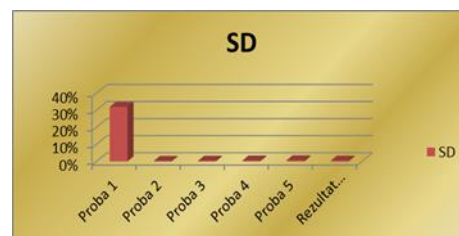
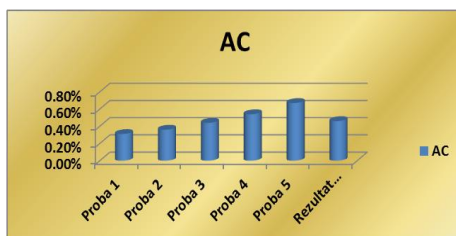
Table 3. Results of the tests in the third group (logopedic therapy and Hanen programme)

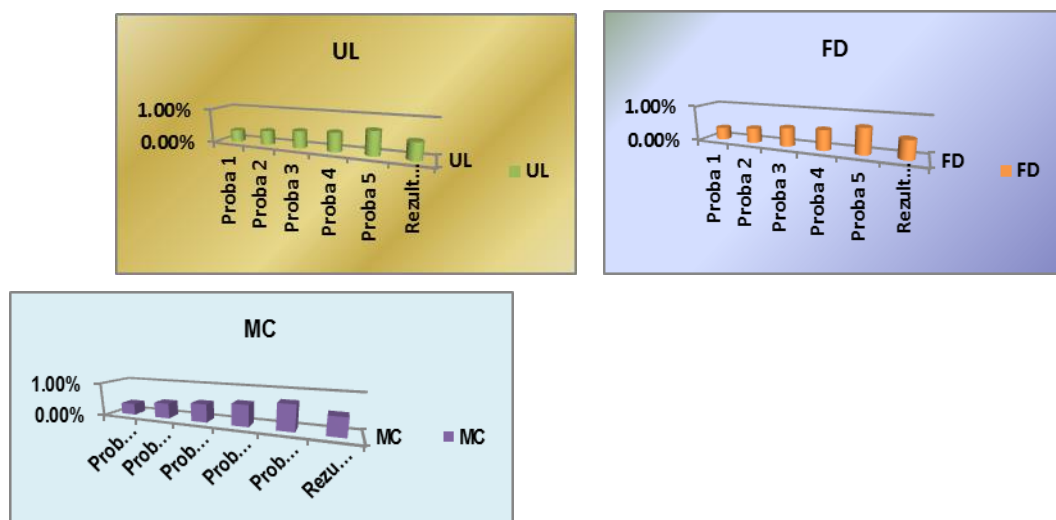
Subject	Test 1	Test 2	Test 3	Test 4	Test 5	Final result
AC	0.31%	0.36%	0.44%	0.54%	0.67%	0.46%
SD	0.32%	0.38%	0.48%	0.53%	0.69%	0.48%
UL	0.34%	0.41%	0.49%	0.54%	0.68%	0.49%
FD	0.35%	0.42%	0.52%	0.56%	0.71%	0.51%
MC	0.34%	0.45%	0.53%	0.62%	0.74%	0.53%



Histogramme 3. Results of the tests in the third group (logopedic therapy and Hanen programme)

Except for a single child with serious deficiencies and whose progress was only at active vocabulary level and other tests are only 0.5-0.6%, progress in the other children was obvious particularly in AC, whose evolution was exceptional.





As for the results of the third group, we noted successive increases in each test, which makes us conclude that using both methods was the best choice when it comes to get positive results in communicating with children.

Subject	Test 1	Test 2	Test 3	Test 4	Test 5	Final result
General mean per tests	0.33%	0.40%	0.49%	0.55%	0.68%	0.49%

## Conclusion

The results obtained allow us to check the validity of our hypotheses.

### Checking the validity of hypothesis no. 1 - *Using the Hanen programme improves children's communication at a speedy pace*

If we compare the results of the tests in the first group (logopedic therapy) with the results of the tests in the second group (Hanen programme), we see successive quantitative increases from 0.1 to 0.6 in each test and qualitative increases in introducing words in sentences, in finding simple synonyms and in changing the meaning of synonyms depending on context. This shows the validity of the first hypothesis.

## C

### Checking the validity of hypothesis no. 2 - *Applying the Hanen programme results in better family relationships at all levels*

Using an observation protocol of the parent-child relationship, we can point out the following aspects:

- Mothers became more receptive;

- *Interactions mother-child were more balanced, frequent and longer;*
- *Parents reported an improvement of the family relationships;*
- *Parents, in general, and mother, in particular, had better relationships with their children at all levels;*
- *Empathy and patience exercises were extremely fruitful.*

However, there were also **blockages** at both **parent**:

- *Insistence in guiding child's activities even when not necessary;*
- *Patience is an issue for parents, particularly for fathers;*
- *The lack of quick results discourages on short-term;*
- *Some interventions were not completes;*
- *The use of improper tone in communication;*
- *Some communication simulations were performed rather as tasks and not as a sign of love for their children,*

and **child level**:

- *The fear of error which made them either give up or respond randomly;*
- *The stress caused by being aware of the effects of their answers;*
- *The impossibility of verbalising in the presence of foreigners or of people seen as authoritarian.*

The validity of hypothesis no. 2 is confirmed.

### **Checking the validity of hypothesis no. 3 - *Combining logopedic therapy and the Hanen programme increases the number of acquisitions, children's independence and develops their understanding and verbal interaction***

Results of the tests and observations made while applying the two methodologies point out a better relationship with the parents, a proper response to the words "target" and "signal", understanding words in sentences, increase of interest in communicating (though not for a long time), spirit of initiative, use of several sounds and words to make themselves understood, significant development of language and opening towards initiating communication.

Of great importance for both therapist and children after the first training in the Hanen programme (it will continue) is that children were more independent and asked for help only when necessary; their state of mind was good (where health state was good), they expressed themselves without emotions, they insist in correcting without pain, they are quicker in their reactions, they use words in simple (sometimes elliptic) sentences, they decode quicker gestures and mimicry, they decode messages easier, and they understand more sophisticated orders. In a word, the volume of acquisitions increased visibly and verbal interaction has new qualitative dimensions. All this shows the validity of the third hypothesis and the fact that all research objectives has been reached.

At the end of the three months of implementing, parents were asked to share their opinions on this approach. Below are a few of their answers:

- *It was interesting and, most important, useful. I have learned how to get closer to my child;*
- *I have learned action algorithms and also algorithms of adapting to different situations, to my child's personality;*
- *I cannot believe that my encounters with my child, marked by stress and stubbornness, are now amiable and affectionate;*
- *I have learned step by step the way to his/her soul and the language of my child in which nothing seemed improper so far;*
- *I sometimes felt like I did not know how to behave with my own child. Now I am so patient that I do not recognise myself and failed repetitions no longer upset me that much;*
- *I have learned to be patient, to anticipate reactions, my child's desires, to find the proper time to communicate and to find other proper times for communication myself;*
- *I believe that the confidence your child places in you and love-based learning can do miracles;*
- *For me, the most difficult thing was to adapt to my child's pace. I am not too much of a patient person and I like to control everything! However, for my child, I have put aside my pride, I have braced myself and I have observed the directions gradually. And now I am a happy parent, I feel useful, I feel I can do something for my child and guilt no longer weighs so much.*

Investigations continue.

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# Possibilities and Challenges for Teaching Students with Visual Impairments

Claudia Vasilica BORCA\*

**Abstract:** The current pedagogy is based on effective learning achieved in the education bidirectional relationship; the student becomes an active part of their training, engaging in a systematic and organized effort of learning.

The study of school population with disabilities cannot be achieved outside the new trends transforming the educational process concerns in this area focuses on the most appropriate ways of recovery / rehabilitation/reduction of the gap between actual and potential manifest.

It has conducted a study on a group of 55 children with vision impairment. We proposed to investigate whether there are differences in metacognitive reading achievement for students with low vision and students with blindness. It has applied an *Inventory of metacognitive awareness of reading strategies* (MARSİ). We conducted a comparative analysis based on metacognitive reading achievement: *Global Reading Strategies*, *Strategies for Problem Solving*, and *Strategies for Reading Support*.

The results of this research revealed that students with blindness not more frequently used metacognitive reading strategies.

**Keywords:** teaching, students with visual impairments, metacognition, metacognitive strategies, reading process

## Introduction

In the last 30 years, learning concerns covered various areas, complex and comprehensive. In this regard, published papers devoted to *academic study* (Levin and Pressley, 1986), *meta-knowledge* (Paris, 1987), *self-learning theories* (Zimmerman, 1990) *motivational influences in education* (Brophy, 1999), *phenomenological aspects related learning* (McCombs & Marzano, 1990), *social and cultural influences on self-regulating learning* (Boekaerts 1998, Pressley, 1995), *monitoring reading* (Pressley & Ghatala 1990), *personal cognitive development* (Ferrari & Mahalingam, 1998) (Scott Paris & Alison G. H. Paris, 2001).

Research on metacognitive development was initiated in the early 1970's by Ann Brown, John H. Flavell, and colleagues (see Brown, Bransford, Ferrara & Campione, 1983; Flavell, Miller & Miller, 1993; Schneider & Pressley, 1997).

Metacognition was defined by John H. Flavell as "*knowledge about cognitive phenomena*" or simply "*thinking about thinking*" (Flavell, 1979).

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Schneider (2008, pp. 114.) considers that *"this concept refers to knowledge that people have about their abilities to process information and knowledge about the nature of cognitive tasks and the strategies used to cope with such tasks."*

If initially, metacognition, as a concept, emerged in the context of development research today is widely used in various areas of psychology, including motivation research, clinical and educational psychology. Recent developments also include models of cognitive neuroscience in metacognition (Shimamura, 2000).

*Self-regulation learning* is conscious and controlled process, which allows students to direct and control their thoughts, behaviors and emotions to be successful in their learning experiences. Learning Self-regulation is a "construct" that includes issues such as cognitive strategies, metacognition, motivation, and commitment to solving the task.

Self-regulation learning emphasizes autonomy and control of the person who monitors and adjusts lead actions to acquire information, resulting in increased expertise of the learner.

According to Zimmerman (2000, p.14), self-regulation learning *"refers to thoughts, feelings and self-generated actions that are planned and adapted cyclically personal goals"* (as cited Alison Scott G. Paris & Paris, 2001).

The cyclically popular of self-regulation learning has three distinct phases: *planning, monitoring performance and reflecting experience* (Pintrich & Zuzho, 2002; Zimmerman, 2000). During the planning phase, students analyze specific task and set goals that will follow to achieve the learning task. In the performance monitoring phase, students use strategies to advance the learning task and monitor the effectiveness of these strategies in achieving pregnancy. In the final step, the reflection on performance, students assesses your performance regarding the learning task, analyzing the effectiveness of strategies chosen and followed. (S. Zumbrunn, J. Tadlock & E. D. Roberts, 2011).

To promote self-regulation learning in the classroom, teachers must teach students **specific strategies to facilitate their self-learning**. This process often includes tasks such as: *determining the goal, the following objectives* (Winne & Hadwin, 1998; Wolters, 1998), *planning* (Zimmerman, 2004; Zimmerman & Risemberg 1997), *self-motivation* (Corno, 1993; Wolters 2003; Zimmerman, 2004), *attention control* (Harnishferger, 1995; Kihl, 1985 Winne, 1995), appropriate use learning strategies (van Broek, Lorch, Linderhorm & Gustafson, 2001; Winne, 1995), self-monitoring (Butler & Winne, 1995; Carver & Scheier, 1990), seeking adequate relief (Butler, 1998; Ryan, Pintrich & Midglez, 2001) and self-assessment (Schraw & Moshman, 1995). (Cited S. Zumbrunn, J. Tadlock & ED Roberts, 2011).

### **Metacognitive development - educating metacognitive functions**

Assuming that metamemory declarative children improve with age (Schneider & Lockl, 2002; Schneider & Pressley, 1997 cited E.R. Lai, 2011), there are three core functions of metacognition can be educated: functions knowledge functions procedural and executive functions (Flavell, 1979 as cited in S.E. Israel, 2007). The function of



knowledge is to understand the roles and metacognitive strategies. Metacognition executive function refers to knowing when and how to execute (to perform) metacognitive strategies.

Metacognition procedural functions enable the reader to understand how to conduct effective strategies and then execute strategies without thinking.

Also, knowledge of metacognition functions helps to place metacognitive development levels regarding the most appropriate teaching strategies. (Israel, 2007).

### **Cognitive development in children with vision impairment**

In the literature, some authors support the idea that cognitive skills are likely to grow more slowly or in a different way to visually impaired children than those without visual impairments. Bishop (1996), for example, believes that the most notable delay in the development of children with visual impairments is the motor areas, followed by delays in the development of cognition (in the case of severe visual impairment).

Cognition includes many areas such as training concepts about the world and objects, memory, thinking, problem-solving and creativity. Severe vision loss involves general restrictions, each of which affects the development of cognition: the variety of experiences, the ability to control the environment, the ability to self in the environment.

In ontogenesis, "object permanence " is usually the first sign of intelligence development, while being a visual capacity. As a consequence of this situation, while limiting the visual function of difficulties in determining the cause and effect of events - "what happens when ..."

Cognitive factors such as classification, conservation, comparison, correspondence one - on - one, are also core elements in the formation of the concepts, critical areas that are to be learned.

In the formation of concepts, vision plays a significant role in motivational functions, stimulating and inclusive. Concerning blindness, a child may have great difficulty in perceiving using tactile - kinesthetic and other senses an object in its entirety. (Preda, 1993)

Referring to the development concepts, Bishop (1996), Chapman & Stone (1989) noted that this is the most affected area cognition in people with visual impairments; cognitive concepts form the basis for development. Damage to this area is due to the lack of vision or decrease the quantity and quality of visual experience and factors which act indirectly, that feeling of insecurity, fear the independent exploration of the environment. Intervenes here utility developed by initiating early intervention family support specialists, parents become co-therapists in recovering their children from the earliest years of life.

Visually impaired child builds concepts about the world in a different way; he followed the same sequence in cognitive development as seers but at a slower pace, being different and the way they are shown a series of cognitive abilities. They are more dependent on information of "second-hand" needed intercession access to the

surrounding world, helped by an adult or another competent person. Therefore, verbal descriptions of objects and experiences must be very clear and precise.

Barraga (1974) argues that without vision, many concepts cannot develop without the intervention strategies planned by the teacher to combine experience "first hand" in exploring objects with verbalization of issues that cannot be perceived visually (as cited Chapman & Stone, 1989). Scott (1982) describes the astonishment that visually impaired children living in concept formation, likening the experience to an "*unexpected black hole*".

To avoid confusion arising in the process of forming concepts is recommended as a natural framework and that certain steps that the student will go through (Preda, 1993).

### **The learning conditions in blindness**

Learning in children with blindness follows the same steps as when the child without visual impairment, provided the use of private coping mechanisms for gathering information from the environment.

Besides the difficulty of receiving information from the environment are complete, Guinea (1985) (apud Best, 1995) recalls three significant features of the learning process of the child blind: 1) analytic perception of reality. 2) A delay in learning acquiring 3) Temporary obstacles in Learning, through imitation.

When we talk about educational process in children with visual impairments, include here and specific ways of teaching - learning, so learning the special conditions can be successfully achieved by adapting teaching style by teachers and given some factors such as location, presentation, experience, Expectations, Providing information, speed. (Chapman & Stone, 1998).

Students with blindness and low vision at the without other associated disabilities can receive the same education as a student with normal vision and necessary adaptations of some of the activities, resources and teaching materials for the success of understanding and knowledge of the integration into a normal social environment.

Best (1995) considers the need to include in the curriculum for children with blindness following aspects education: the senses; Visual stimulation; Orientation in space and mobility; Knowledge of specific techniques and tools; the abilities of individuals' personal autonomy.

Specific strategies of education for visually impaired can be systematized in the sense of Ștefan (2000) as follows: (1) adequate correlation between the activity of perception and the logic-verbal (2) Adapt the material conditions of the learning needs of their visually impaired ; (3) concentration strategy; (4) strict and rigorous grading individualization and (5) Ensuring the stability of cognitive acquisitions.

### **Study Metacognitive awareness of reading strategies for students with visual impairments**

#### ***The hypothesis of the study:***

1. *Students with blindness using a higher frequently strategies for solving the tasks of reading compared to students with low vision.*

2. Students with blindness using higher frequency strategies to support reading compared to students with low vision.
3. Students with blindness using with a higher rate overall strategy for reading compared with students with low vision.

**Objectives of the study:**

O1: Quantifying the frequency with which blind students use problem-solving strategies in reading tasks, compared to students with low vision

O2: Determining the frequency with which blind students use support strategies of reading, compared to students with low vision.

O3: Determining the frequency with which blind students use reading overall strategy compared to students with low vision.

**Method:**

Inventory of metacognitive awareness of reading strategies (MARS), Version 1.0 Author: Kouider Mokhtari și Carla Reichard, 2002, contains a total of 30 items, grouped in according to with metacognitive reading achievement:

1. Global Reading Strategies
2. Strategies for problem-solving
3. Support strategies for reading

**The sample:**

55 students with visual impairments, grades III – X, Special High School "IRIS" from Timisoara.

**Verification of the hypothesis no.1**

Students with blindness using more frequently strategies for solving the tasks of reading compared with students with low vision.

Table no. 1. Strategies for problem-solving * Type of visual impairments Crosstabulation					
		The type of Visually Impaired		Total	
			low vision	blindness	
Strategies for problem-solving	low frequency	Count	5	1	6
		% within Strategies for problem-solving	83,3%	16,7%	100,0 %
	medium frequency	Count	12	8	20
		% within Strategies for problem-solving	60,0%	40,0%	100,0 %
	high frequency	Count	24	5	29
		% within Strategies for problem-solving	82,8%	17,2%	100,0 %
Total	Count		41	14	55
	% within Strategies for problem-solving		74,5%	25,5%	100,0 %

17,2 % of students with blindness using more frequency strategies for problem-solving in reading, compared to 82,2 % of students with low vision.

Therefore, hypothesis is disproven, students with blindness do not use a high-frequency strategies for solving the tasks of reading compared to students with low vision.

### Verification of the hypothesis no.2

Students with blindness using higher frequency strategies to support reading compared with students with low vision.

Table no. 2. Strategies to support reading * Type of visual impairments Crosstabulation					
			The type of Visually Impaired		Total
			low vision	blindness	
Strategies to support reading	low frequency	Count	13	8	21
		% within Strategies to support reading	61,9%	38,1%	100,0%
	medium frequency	Count	16	4	20
		% within Strategies to support reading	80,0%	20,0%	100,0%
	high frequency	Count	12	2	14
		% within Strategies to support reading	85,7%	14,3%	100,0%
Total	Count	41	14	55	
	% within Strategies to support reading	74,5%	25,5%	100,0%	

Data analysis shows that 14.28% of students with blindness using more frequency strategies to support reading, compared to 85,7% of students with low vision.

In conclusion, hypothesis is disproven, students with blindness do not use with a higher frequency strategies to support reading compared to students with low vision.

### Verification of the hypothesis no.3

Students with blindness using with a higher frequency overall strategy for reading compared with students with low vision.

Table no. 3. Global strategy for reading * Type of visual impairments Crosstabulation					
			The type of Visually Impaired		Total
			low vision	blindness	
Global strategy for reading	low frequency	Count	9	3	12
		% within Global strategy for reading	75,0%	25,0%	100,0 %
	medium frequency	Count	20	7	27
		% within Global strategy for reading	74,1%	25,9%	100,0 %
	high frequency	Count	12	4	16
		% within Global strategy for reading	75,0%	25,0%	100,0 %
Total	Count		41	14	55
	% within Global strategy for reading		74,5%	25,5%	100,0 %

25,0% of students with blindness using a higher frequency global strategy for reading compared to 75,0 % of students with low vision.

Hypothesis is disproven: a student with blindness does not use a higher frequency global strategy for reading compared to students with low vision.

### Conclusions

Students with blindness do not use a high-frequency strategies for solving the tasks of reading and reading strategies to support comprehensive strategies for reading compared to students with low vision.

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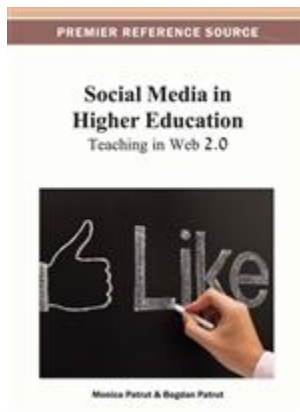
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## Social Media in Higher Education: Teaching in Web 2.0

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With the emergence/increased use of social media tools, a large number of higher education institutions are embracing this new ecology of information offered by social media. More and more colleges and universities from all over the world are transitioning from traditional teaching/learning towards social media teaching/learning, widening their curriculum landscape beyond technology by integrating different forms of social media, like social networks, microblogs, or cloud computing. However, in this era of fundamental changes in education brought by virtual worlds and augmented reality, dominated by mobile devices and applications, it is necessary to rethink the academic work environments based on social media tools and applications like Facebook, Twitter or YouTube, in accordance with the learning needs, skills, and competencies of students.

Thus, as the title suggests, this book provides a framework in which diverse scholars explore different issues of using social media in education, in general, with a focus on the academic environments, both from the perspectives of educational actors and institutions.

The 19 chapters of the book document the many distinct aspects in which higher education actors perceive and use social media, trying to find out the answers to questions such as:

- How do faculty members use social media like Facebook, Twitter, or document sharing tools as reflective and collaborative teaching and learning tools, also for research and professional development? (See Chapters 5, 10, 12)

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- Could social media be a main communication/collaboration/sharing channel in the Aula? Or, regarding power, teaching, and assessment, does it rank low among other online applications? (See Chapters 4, 14)
- Do we know which social media tools/applications are the most used by our students as learning media? Can Twitter or Facebook be regarded and used as effective and efficient educational tools? If yes, in what way(s)? (Chapters 5,12,13)
- Which are the most popular social media tools within teachers' communities? (Chapters 8, 19). And how are they used (with an emphasis on Web 2.0 teaching strategies in the case of gender studies)? (Chapter 3)
- What are the main ideas that should be considered when elaborating software systems for the communication's streamlining and diversification between the actors of a learning system? (Chapter 11)
- Today's students are tomorrow's knowledge workers. More importantly, employees have to take over responsibility for their own personal development. Such as: What skills and competencies are needed for students' future careers, to become highly educated citizens? (Chapters 2,6,7,8,9) What are the trends in the development of cross-curricular writing skills in their curriculum? (Chapter 10)
- It is well known that young people, particularly the Generation Y'ers, are expected to possess extensive social media skills, need to know how they can use social media in a business context to ensure their personal development and be successful in their jobs. Thus: What role does the educator play in his own developmental learning of the tools of the trade? How does this inform his preparations for the learners' experiences? (Chapters 2, 7)
  - Which are the potential benefits, challenges, and disadvantages in using social media in universities? Are there special policies? (Chapters 13, 17)
  - How can social networks provide access to remote students, in a country with very long distances between rural and urban zones? (Chapter 13)
  - Which is the bad and the ugly side of information age? Which is the role of the parental education? (Chapter 16), etc.

The international perspective of 31 contributing authors focuses on conceptual and on practical issues as well as, presenting a diverse set of viewpoints on the trends and issues of social media theory, research and practice in higher education (like publishing projects in which students can participate from the University of Augsburg or examples that demonstrate the positive effects of students' participation in such projects on the development of media literacies from Romania, Germany, Australia, or Spain).

Social media have evolved from an entertainment tool to a marketing tool, and nowadays they have become a widespread pedagogical tool. The case studies presented in the book cover the use of emerging such technologies in higher education research, teaching, and policy, emphasizing the increasing interest in training, in emerging technologies for educators and affiliated university staff. It is also shown that the

contemporary educational process is greatly affected by two innovative phenomena: social media and personal identity online (Chapter 6). More importantly, different models of e-learning are analyzed, such as University 2.0 (Chapter 1) - a framework that supports, by advanced Web 2.0 tools, the teaching and the research in the university.

The broader perspective within which these ideas are debated is represented by the context that is created through the inception of what in the specialized literature is called mobile social media (as a problematic universe) and mobile Web 2.0 (as a fundamental technological ubiquitous universe). In Chapter 18, the most relevant theoretical frameworks in the field of Mobile Learning are provided, especially when linked to social learning and the nature of the 21st century learners. An overview is offered of the most outstanding features concerning the pedagogical challenges that social media may imply for the Higher Education stakeholders, and the chapter poses some questions on the challenges that educational institutions have to face.

Although social media redefine the relation between technology and education, using it in academic courses does not represent an easy teaching/training/researching and learning method. It implies a sum of efforts, and especially knowledge of these technologies, with both advantages and limits. As such, in this volume, one can find not only highlights of rigorous and critical theories and paradigms but also best practices and findings of researches, carried out by scholars engaged in teaching with social media in higher education from all over the world. However, the authors herein stressed and underlined just a small landscape/picture of what social media represent for academia.

More importantly, this book can serve as a(n) (in)valuable/reliable pedagogical (re)source for academic actors: students, teachers, researchers, and practitioners.

## Recommendations for authors

The recommendations below are meant to clarify the expected quality of the journal and it's articles.

The authors can send the electronic version of articles at: [resjournal@e-uvv.ro](mailto:resjournal@e-uvv.ro)

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2. The words and quotes in foreign languages are written in Italics. The quotes in Romanian are written normally. Every quote shall have a foot note.
3. Citations should be indicated in parentheses the author, year of publication, page, can be easily identified with a complete reference to the citation from the end of the article. For example, if references to an author who had two publications in the same year, 2010, will be written including one bibliography 2010a works, to be easily identified. Footnotes should be used only in exceptional cases, if necessary annotations by the author.
4. Every author shall insert his name below the title of the paper, upper right on the paper, with a foot note that shall stipulate: academical title, institution, city, country, e-mail.
5. Every text shall be preceded by an abstract; every abstract should be up to followed by the key-words section up to 5 key-words. The abstract and the key-words section should be up to 800 characters; the abstract and key-words shall be written both in Romanian and English.
6. Each abbreviation shall be explained only at first use.
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### *Technical criteria:*

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CRITERIA	1	2	3	0
<b>A. Scientific merit of the paper</b>				
A.1. The importance and the actuality of the discussed topic, as well as the relevance of the discussed question				
A.2. The level of information (e.g. actuality and relevance of the publications from the bibliography) and the quality of the description of the current progress of knowledge in the				
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B.1 The research question is adequately answered, raising conclusions related to the theoretical basis presented in the article and the shared new ideas.				
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