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The role of social partners in reforming social dialogue for vocational education and training in Greece

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Abstract

The Vocational Education and Training (VET) in Greece needs reforms that are related to accessibility and connection with the labor market as well as the recognition of professional qualifications in order for horizontal and vertical transitions to get facilitated into national and European qualifications systems. In this follow-up paper, we discuss the role of the social partners in the social dialogue on the existing operational framework for Vocational Education and Training, apprenticeship and workplace learning. Based on a set of desired measures as these are expressed in a recent manifesto for social dialogue in VET launched by the representatives of social partners, we present and analyse some of the key results of a recent study that was carried out on behalf of the Hellenic Institute for Small and Medium-Sized Enterprises (IME-GSEVEE) as part of the social partners' plan for joint actions to restore public confidence and strengthen their effective participation in a targeted and meaningful social dialogue for VET.

Keywords: social dialogue, social partners, vocational education and training, labor market, apprenticeship, workplace learning, Greece.

Introduction

Social partners' involvement in a targeted and meaningful social dialogue on Vocational Education and Training, apprenticeship and forms of learning at the workplace is limited in Greece. They do not play an important part in decision-making although their contribution is considered to be a key precondition for educational policy reforms. The need for exploring the participatory basis of social dialogue in Greek VET and answering fundamental questions regarding its quality is considered imperative due to the implementation of a new institutional and organizational framework for VET that

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is prescribed in the seminal Law 4186/2013 (IME GSEVEE, 2015: 25-27). In the current framework apprenticeship as a form of VET is highly emphasized. Yet, systemic inadequacies and changing political and economic priorities have created more gaps than those the system was supposed to fill. Social partners' representatives, namely the General Confederation of Greek Workers (GSEE), the Hellenic Confederation of Professionals, Craftsmen and Merchants (GSEVEE), the Greek Tourism Confederation (SETE), the Hellenic Federation of Enterprises (SEV), and the Hellenic Confederation of Commerce and Entrepreneurship (ESEE), have recently expressed their opinion in a common policy manifesto for a tripartite social dialogue in VET in order to set new priorities. These priorities are the following:

1. Organization of an operational decision-making model for VET, so that the dynamics of the cooperation between institutional and social partners, businesses, employers, chambers, and providers are completely understood.

2. Revision of the way of governance and financial support for VET as well as the apprenticeship, and reinforcement of the sectoral, cross-sectoral and tripartite social dialogue at local and national levels.

3. Revision of the existing institutional and organizational framework with simultaneous update of the existing VET curricula, in order to increase the attractiveness of VET and youth participation in apprenticeship programmes.

4. Quality assurance and certification of VET and apprenticeship programs, and development of valid and reliable tools for quantitative and qualitative assessment of trainees' learning outcomes.

5. Formation of a reliable framework for validating skills that are acquired in non-formal and/or informal educational and/or learning contexts, with building on existing European tools (ECVET, EQAVET, EQF, Europass).

So far the apprenticeship system is implemented only as part of the Manpower Agency's (OAED) training programs. After the ongoing economic crisis began (2010 onwards) trainees' participation in any apprenticeship program, as well as employers' contribution, has severely declined. The Law 4186/2013 attempts in an erratic and inconsistent manner (Karatzogiannis & Panazis, 2014: 259) to introduce a new apprenticeship system in vocational high school as part of the final year of studies. This initiative, however, contradicts if not undermines the existing long standing (since

1954) and certainly more reliable apprenticeship system which is implemented by OAED and includes traineeships with workplace learning and specialization courses (GSLLL, 2013). Social partners opposed to this new initiative as being non-feasible due to the already low investment in apprenticeships by employers, but also because they were never invited to participate in a social dialogue regarding this matter, as the decision was made unilaterally by the Minister of Education without previous consultation or deliberation with social partners. This decision resulted in an expressed criticism that was articulated in a manifesto (policy paper) published by social partners in February 2017 (Zarifis et *al.*, 2017) after the publication of a study on social dialogue for vocational education and training issues in Greece[1]. The aims of the study were:

- to propose an up-to-date and comprehensive agenda for a continuous, dynamic and targeted social dialogue regarding apprenticeship issues (in addition to actions related to professional experience acquisition in general and transition from education to employment);

- to provide sufficient documentation with regard to formulating policy proposals to the competent Ministries of Education and Labour and the implementing bodies, in order to improve the existing institutional and operational framework for the implementation of apprenticeship;

- to draft documents and proposals to be adopted and established by political leaders and government, which, after being agreed by the social partners, shall be incorporated in common texts thereof (especially in the National General Collective Agreement).

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[1]The study was coordinated by IME-GSEVEE and was completed in a period of 2 years (2015-2017). A research team was assigned with the task to complete the study. Prof. G. K. Zarifis was the coordinator of the team. Mrs C. Manavi, Prof. N. Fotopoulos and Dr. L. Zanola (representing ILO) were the members of the team. The study was divided in the following parts:Part 1: Short presentation of the key points and characteristics of efficient social dialogue examples *on VET and/or apprenticeship schemes in Europe* or/and internationally with indications (for possible conditions for their effective implementation in the Greek context). Part 2: Collection of existing studies and surveys, review and processing of the contents and findings. This was a meta-analysis of existing studies aiming to*capture the key points regarding the agenda for social dialogue on apprenticeship* in Greece. Part 3: Review of the social dialogue on the existing institutional framework *for apprenticeship, aiming to formulate improvement proposals* (indication of weaknesses, lack of prerequisites, clarification of responsibilities of the relevant stakeholders etc.). Part 4: Ad hoc research mappingthe existing situationand evaluation ofsocial dialogue on VET and apprenticeship based onthe views of the social partners(with a questionnaire and a focus group). The research aimed to formulateproposals for improvingthe general social dialogue on VET frameworkwithfocus on the roleof socialpartners andproposekey pointsto the relevant agendaemphasizing the development of a reliable operational framework for the formulation of planning, specifications, available means and human resources, administrative and educational coordination etc. Part 5: Drafting of final documents-proposals to the partners in order to be included in regulatory documents or/and joint documents (such as the National General Collective Agreement). A thematic agenda was projected along with proposals on how to activatethe participation ofsocial partnersin actively contributing to the social dialogue in VETinGreece as well as suggestionsfor improvingapprenticeship and work-based learning as part of the relevantsocial dialogue agenda. The full study with the annexed policy manifesto is available in Greek at http://www.imegsevee.gr/images/ekdoseis/biblia/koinonikos_dialogos.pdf .

Drawing from examples from other European countries, the study argues for a quality tripartite social dialogue that addresses a shortlist of critical issues for the future of apprenticeship and workplace learning in Greece. In the following paragraphs,we present and analyze some of the major issues that social partners suggest they must be part of a focused social dialogue. These issues are also highlighted in the study based on the findings of the desk and field research we conducted with representatives of social partners in the period between June 2015 and February 2017.

Need for revising the existing governance and funding model

The National System for connecting Vocational Education and Training with Employment (ESSEEKA), is the coordinating body for all VET initiatives as well as the apprenticeship scheme. It typically operates on the basis of the tripartite and equal representation of the state, the employers, and the workers, and aspires through the national policies' coordination to contribute to a substantive revision of the social partners' role in the decision-making process in VET. However, it is estimated by the representatives of the social partners that it has failed to correct the dysfunctions of the First National Action Plan for Employment, which was mainly due to the lack of coordination of its operatives and the inefficiency of its structure (Hellenic Labor Inspectorate Corps-LIC, 2012).

With regard to the review of the current governance model in VET, the social partners set as priorities the effective connection between vocational education with the training, and their direct connection with the employment (GSEVEE, 2014; Voss, 2011). They further propose a model of consistency between all vocational education and training systems, the certification of professional qualifications, regardless of the ways these have been acquired, the restoration of the term 'apprenticeship' in Greek society, the creation of a mechanism which predicts skills, and the promotion of a cooperative governance model which gives an active role to each participant (OKE,1998, 2002 & 2003). More specifically according to IME-GSEVEE (2015: 122) the governance model in VET needs to be reformed in order to:

- Strengthen the relationship between the cross-sectoral and sectoral social dialogue, to increase the 'transparency' of this dialogue and improve the way its results are disseminated to local communities.

- Improve the transparency of the mechanisms for decision-making in the national social dialogue for VET.

- Develop a common way of understanding the role and the specific nature of the different types of apprenticeship and their means for implementation.

- Develop mechanisms in order to exploit new financial tools, attracting investments and optimizing financial resources.

- Support SWAT development promotes mutual learning and exchange of experience between the social partners for determining the benefits, the weaknesses, the opportunities and the threats for the national social dialogue for VET and apprenticeship schemes.

- Understand and support through social dialogue the specific needs of each social partner.

Prioritizing a competence-based approach in curriculum development in VET

According to the European Centre for the Development of Vocational Training (CEDEFOP) in the present institutional framework there is no prediction mechanism for skills mismatching and therefore organizing the VET in a compatible way to the labor market's requirements or social needs is (CEDEFOP, 2014a: 2; also seeHellenic Labor Inspectorate Corps-LIC, 2012: 43;). Furthermore, the rapidly developing and evolving industry compels companies to require their staff to be able to successfully deal with modern technology and anticipated performance in dealing with major organizational problems by increasing its skills (BusinessEurope 2013, 2014; Mouza-Lazaridi, 2013: 251; SEV, 2014). The current VET framework, however, is defined from top to bottom and limits to a large extent the way the curricula are organized (in terms of specialties, learning outcomes, selection of competent trainers, etc.).

A recent report published by Randstad (2012) shows that the number of people with more qualifications than the ones their current job is demanding in Greece, is higher than in other parts of the world (68% vs. 47% on average) when at the same time half of the Greek employers face difficulties finding the appropriate workforce. In the future, it is expected that the lack of highly skilled workers will reach up to 44% for Greek workers (compared to the 47% global average). An important finding is also that in Greece employers invest less than average in (additional or continuing) education and

training (32% in Greece vs. 54% on average worldwide) when fewer workers believe that their employer provides them with the adequate career opportunities (36% in Greece vs. 54% on average worldwide).

Therefore, the relevant bodies (state and privately funded) involved in VET provision should develop the respective learning outcomes for each training program and activity drawing from a competence-based model approach than the existing content-based model. This means that the curricula must be reformed on the basis of a sustained dynamic and targeted dialogue that will gradually lead the vocational training towards obtaining know-how (professional and general skills and abilities) (see Law 3191/2003). This is probably more evident for many technical professions in Greece. According to GSEVEE (2014: 257), in order for the technical professions to offer competitive advantages, VET must provide programs that support cutting-edge technology and following the European framework, relevant programs should be expanded to include new-basic skills. What must be clarified in the current framework, however, is that learning and educative objectives differ from the "learning outcomes" in terms of their departure point and their orientation[1]. This practically means that whereas the trainees today at the end of the learning process are 'capable to explain, define, distinguish, design, solve, use, etc.', on the basis of the learning objectives set by the system itself and followed almost religiously by their trainers', the reformed VET curricula need to focus on the trainees' 'ability to use, to design, to develop, to solve, etc.,' based on the learning outcomes approach (Zarifis et *al*., 2013). The idea is that their definition at a national level will contribute to a more precise description of qualifications linked to occupational frameworks and systems, while at the international level it will serve transparency, comparability, credit transfer and recognition purposes.

As GSEVEE (2014: 278) points out, skills are a dynamic and changing concept and their matching with the changing needs of work and occupations will be always required, so the system needs recording and forecasting mechanisms regarding skills needs at local and sectoral levels. It is also crucial according to GSEVEE (2014) for VET curricula to focus on quality assurance. For the qualitative upgrading of the curricula, it is also appropriate to employ good practices from other European countries that have

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[1]The concept of learning outcomes is multidimensional and their identification is not a simple assumption, as it encompasses the ability of individuals to combine in a self-guided, tacit or explicit way, and in a specific environment, the various elements of their knowledge and skills.

already adopted the learning outcomes approach, as well as to develop counseling and mentoring systems to support trainees and enterprises (Kerckhofs & Koutroukis, 2006; Papadakis, 2014).

Nonetheless, some social partners (GSEE) have expressed some reservations on how much these VET policies (turnover to the learning outcomes, the qualifications framework, the European Quality Assurance Framework in VET and the Accumulation and Transfer Credit Training Units System), equally satisfy all European VET systems and national labor markets needs. In some cases, these measures are being reversed and practically abolished, because the political decisions and the business practices in each country are regulated by funding principles, which are determined by relevant governing bodies and European authorities through 'strategic programming frameworks' and 'operational programs' (also see GSEVEE, 2014: 285-286).

Quality assurance and accreditation of VET and apprenticeship programs as a necessity

The common conviction among all social partners is to improve the quality assurance system for VET from curricula to program evaluation and certification with the already agreed national quality assurance framework the Π3 (Ministry of Education, 2011). This framework responds to the clause on quality assurance in article 19 of the Law 3879/2010 that takes in the establishment of a system for continuing education and evaluation of all educational staff in nonformal education and second chance education, as well as a monitoring and evaluation system of all programmes operated under the auspice of the National Network for LLL (Law 3374/2005). This tool sets a framework of priorities and principles on quality assurance in nonformal adult education learning. This covers all forms of educational and learning provision for people over 16 years old and includes initial VET, all apprenticeship schemes, continuing VET, basic skills education and all liberal and/or popular adult education programs (EOPPEP, 2014). It further provides to all relevant structures a tool for organizing and delivering the evaluation of learning outcomes for those participating in any of the programs provided. This is essentially delivered on the grounds that π^3:

- defines quality by setting a number of principles and criteria in all three dimensions of education and learning, namely inputs, processes and outputs, and

- provides a large number of measurable quantitative and qualitative indicators for the evaluating the degree implementation of quality assurance principles by all relevant providers.

Nonetheless, social partners suggest that this framework was again not the result of a decision-making process based on social dialogue. The development of a quality system aiming at the credibility and attractiveness of the VET is a national and social necessity as they claim (Goulas & Fotopoulos, 2010; GSEE, 2014) with the condition that certain basic criteria are fulfilled. These criteria need to include:

- Real and, as far as possible, clear orientation of the productive model of economic development, so as to feed the vocational education and training system along with the developing and declining sectors based on long-term forecasts.

- Development of a diagnostic system for labor market needs, as well as for occupational specialties and skills.

- Flexibility of the vocational education and training system in covering these needs by providing the skills requested by the labor market, and through the development of modernized curricula, educational material, and workshops.

- Extension and upgrading of the business profiling registries and creating relevance of those to VET curricula and educational material.

- Creation and development of a registry for VET trainers who are highly competent and follow changes taking place in their field.

- Development and expansion of specialized laboratories, especially for apprentices in technical professions, and corresponding IT laboratories.

In addition, GSEVEE (2014) emphasized that apprenticeship has a very important role to play in linking theory to professional practice and promoting employment of the VET graduates as long as it is properly organized and does not become a 'reservoir' of workers with medium skills. Along the same line, SEV (2014) considers that strengthening the role of internships and apprenticeships should be promoted through more targeted placements in organizations and businesses that meet certain quality criteria, such as efficiency and reliability (Dimoulas et *al.*, 2007).

Furthermore, the social dialogue needs to readdress the development of a National Qualification Framework (NQF) that is compatible with the European framework and ECVET (Goulas & Fotopoulos, 2013). Their main argument in

readdressing the scope of NQF lies on the premise that the current NQF is not flexible enough as it is not focusing on skills and competences as it should but on accredited knowledge based on formal qualifications only. The 'flexibility' in the way trainees obtain knowledge, skills, and competences will enable the examination of the essence and the quality of the learning outcome, and not the way these are obtained. So in order to apply the new or innovative teaching methods and the evaluation of the expected learning outcomes properly, the ability of VET training instructors to systematically upgrade their relevant skills and their collaboration must be somehow ensured (Law 3369/2005).

As a final remark, social partners stress that a key criterion for setting the foundations for a quality assurance system for VET is the consultation with the educational community because this can help to identify the training needs of VET trainers and teachers and improve their performance (GSEVEE, 2010).

A reliable validation framework for skills and competences acquired in non-formal or informal settings needs to be negotiated

Over the last few decades, international organizations such as the European Union and the Organization for Economic Cooperation and Development (OECD, 2007, 2009, 2013) have turned their attention to non-formal and informal learning and have increased the necessary actions and policies for its recognition and validation (CEDEFOP, 2013: 11). In 2009, CEDEFOP presented its proposal on developing the certification of non-formal and informal learning (European Guidelines) a practical tool designed according to the common European principles for the validation of non-formal and informal learning adopted in 2004 by the European Council (CEDEFOP, 2009: 7).

According to GSEVEE (2014), the latest seminal Law 4186/2013 allows the trainees to be upgraded to Level 4, by following an annual apprenticeship program in the final year of training. Level 4, correspondingly, is awarded to an Institute of Vocational Training (IEK) graduate. Therefore, the apprenticeship year offers the advantage to a high school graduate to obtain a Level 4 degree by investing in another year of study. Conversely, as it mentioned by GSEVEE (2014), what should be recorded is the vagueness of the law regarding the kind of international classification of the educational qualifications to which it refers (ISCED or EQF). This sort of classification

concerns many social partners involved in training forms, including apprenticeships. GSEE, SEV, GSEVEE and ESEE in a common report, emphasize that certification should be implemented either through evaluation of ad-hoc learning experiences (examinations, tests, observation at work) and validation of prior learning (comparison of the evaluation results with the reference framework) or by evaluating the monitoring of a training program, specific modules and learning outcomes (Dimoulas et *al.,* 2007: 49).

Social partners concur that the concept of the workplace as learning field requires appropriate planning. Complexity of tasks, teamwork, autonomy and accountability in decision-making, combined with conditions requiring the enhancement or improvement of skills, mainly through the introduction of technological innovations, sectoral changes, restructuring and new organizational processes are only some of the variables that need to be part of the social dialogue before any decision on validation of non-formal and informal learning is discussed (Technical Chamber of Greece-TEE, 2009).

In addition, small and medium sized businesses are questioning the rigidly structured forms of training. These businesses due to their structural characteristics and the limited innovative challenges they face, cannot support any validation frameworks. They need external support, mainly consultative, and an appropriate framework for developing partnerships between them and with other organizations in a local frame in order to create a learning-based process of recognition and validation of their employees (CEDEFOP, 2014[b]).

By taking into consideration the current crisis conditions, the following measures are proposed by all social partners as part of an ongoing social dialogue with the government:

a) Upgrading the role of businesses and other social partners' role in the central management of the available resources (human and financial).

b) Need for reforming social partners' VET providers, into learning and support centers.

c) Organizational and coordinating role of trade unions in the design and provision of learning actions.

d) Merge the sectoral and local VET structure in order to strengthen professional organizations in learning actions.

According to the Technical Chamber of Greece (2009) however, there is still a primary confusion in the definition of functional terms such as 'assessment', 'validation' and 'recognition' due to the lack of a 'linking mechanism' with the framework of a national VET certification system. It is estimated that the conditions that should be fulfilled for the successful development and implementation of the nonformal education and non-formal learning outcomes certification system are the following:

- Development of a national strategy. Ensuring a social agreement (state, social partners, professional associations, chambers, education and training providers, educational community), with the cooperation of the parties involved and with public consultation.

- Quality safeguarding, monitoring and evaluation of the non-formal learning and non-formal learning process so as to build mutual trust between VET providers, employers and state bodies such as the National Organisation for Certification and Vocational Counseling (EOPPEP).

- Linking the validation procedures to the National Qualification Framework.

- Ensuring the consistency of learning outcomes and their response to standards that are identical or equivalent to the standards of the professional qualifications acquired through formal education programs (e.g. educational standard, professional standard, evaluation standard, validation standard, certification model).

- Ensuring the adequate human and financial resources.

- Education and training of the staff involved in the design and implementation of the non-formal and informal learning validation process.

In the study, most social partners agree that EOPPEP needs to ORGANISE vigorous evaluations by taking actions to promote the creation of a valid national qualifications framework as well as a reliable system for the recognition, approval, validation, and accreditation of learning outcomes that were acquired through non-formal and informal learning (i.e. in the workplace). Due to the criticality of the matter and since Greece does not have significant experience in qualification issues, it is

important to highlight the basic points, that are useful in shaping a modern and European-oriented implementation framework (Goulas and Fotopoulos, 2013). The social dialogue on qualifications and validation of skills acquired through non-formal or informal learning is non-existent. The Greek authorities have not yet comprehended the economic benefits of validation as it permits human resources to be distributed more rationally to the economy, by giving to people access to jobs that best fit their skills, facilitating the restructuring of economic activity by capturing and highlighting the capacities of those who become redundant and the ability to use this workforce in other areas of the labour market. Furthermore what has never been an issue for social dialogue but is eagerly proposed by social partners is the degree to which validation provides incentives for investing in training and leads to the strengthening of the framework for lifelong learning (Karatzogiannis & Panazis, 2014).

To summarize, the social partners' common position is that a reliable and qualitative system for validating non-formal and informal learning may provide many people who lack formal qualification the opportunity to make their skills more visible to the labor market. Certification, however, must fulfill the terms and conditions that ensure that a certified qualification responds to commonly accepted standards, adds value, and offers the opportunity for equal treatment in the labor market for those who wish to acquire a qualification and those who wish to validate a skill regardless the way through which they acquired it. Within the framework of the reservations expressed and according to GSEVEE (2010), it is estimated that there is yet a risk of developing a speculative market around validation of non-formal and informal learning, that will lead to the increase of private expense for training and certification, to the increase of certifications, the decrease of their unit value, as well as the increase of the professions practice costs, some of which are likely to be passed on to the consumer (also see Zarifis et *al.*, 2017: 102).

Building an agenda for a functional decision-making process is required

Last but not least a functional social dialogue in VET requires the organization of a constant communication and dissemination of the information between the parties involved, aiming at forming a commonly accepted social language (Cassell & Bickmore, 2003; Koutroukis, 2011). In Greece, however, the decision-making process on VET

issues in general and more particularly in apprenticeship schemes and workplace learning initiatives, is not the result of a targeted social dialogue that focuses on the current national VET and skills needs (IME-GSEVEE, 2015). Neither is there any negotiated strategy that formulates primary and alternative action plans. Social partners' position is not at all evident in the decision-making process.

However in a number of occasions during informal meetings with government officials and Ministry representatives social partners expressed their concern regarding the functional determination of the VET system's fixed characteristics, its controlled variables (e.g. number of trainees), the relevant environmental parameters (e.g. demand for qualifications), the relation between the variables and system constants that describe its function under the environmental restrictions; as well as the available resources (economic and human), the structure of the system, the use of technology and the objective function, which describe the performance of the system (profit, cost) as reliable indicators and evaluation criteria already used in other countries in Europe.

Nonetheless, these positions were fragmented, partial, and certainly not part of a tripartite social dialogue between the government, representatives from the employers' associations and representatives from the employees' associations. Neither was there any previous consultation among the social partners' themselves in this respect. Essentially, in order for the social partners to co-modify actively policies that lead to a new productive model for VET in Greece, they have to build a culture of mutual understanding and respect and be willing to make balanced compromises among themselves and the government (Kyriazis, 2015).

Conclusion

Examples of the coherent and dynamic involvement of the social partners in VET policy and apprenticeship come from countries belonging to the so-called 'social partnership status', such as Austria, Belgium, Germany, Luxembourg, the Netherlands, and Denmark. Although, due to the economic crisis to the Scandinavian countries as well, which traditionally have a high level of tripartite approach to the policy development process, the involvement of the social partners has been under severe pressure (Eurofound, 2013; European Commission, 2002;European Training Foundation, 2011; BusinessEurope 2013, 2014). Therefore, as social dialogue has been

'challenged' by current demographic and economic changes, policy issues on national social dialogue on VET are important in many European countries today -both to those with higher and those with lower levels of social dialogue, even those countries that are in the starting point and try undergoing structural adjustment.

The role of the social partners in the process of decision making for VET in the frame of a targeted social dialogue has not yet been recognized in Greece. A basic condition for promoting change in education policy and for creating conditions for growth and social cohesion is to strengthen the involvement of the social partners in the social dialogue for VET. The development of apprenticeship programs is related with commitments made by employers to provide workplace learning as well as their participation in VET program development (CEDEFOP, 2014[b]: 3-4). Providing apprenticeship training can increase an enterprise's ability to innovate, grow and compete. Training by high-qualified workers promotes the intergenerational learning and can increase young apprentices' ability to adapt to changing professional demands and challenges. In addition, workplace training should be an integral part of tertiary education curricula, at least 25% of the training period, combining learning in the educational structure and workplace training. A typical example is that of the Netherlands where two-year courses in tertiary education are provided and that is leading to the obtainment of preparatory qualifications (Eurofound, 2013).

Even though in the current unfavorable institutional and organizational framework that characterizes many aspects of Greek education and society, social partners underline that apprenticeship can operate as a supportive scheme to the existing formal education. However, the existing deficiencies, the declining attractiveness of VET, its limited connection with the labor market, the lack of coordination between different training levels, the lack of a reliable national qualification framework and validation system are all issues linked with the deficient social dialogue between the social partners and the relevant national authorities.

According to GSEVEE (2014: 276-277), within the Law 4186/2013, no substantial provision has been made for anapprenticeship to fulfill in a positive way any market dynamics and help complete students' basic knowledge by acquiring the experience from related professions, in order to facilitate their transition from school to work. The inadequate institutionalization of the VET system and the limitations it besets (e.g.

matching apprenticeship with a relatively short practical training after the completion of studies), the inadequate funding of laboratory facilities, the lack of modern VET programs and educational material, the inadequacies of the teaching staff, literally undermine the apprenticeship system.

A significant progress in this deficit framework would be the development of a meaningful, yet qualitative, social dialogue on training and employment issues through the active involvement of the social partners for the creation and operation of effective practical training with a goal for a more effective transition to employment. The response to the crisis and the redeploying of the productive forces of the country presuppose a new framework for reforming the policies regarding the development and management of human resources. This framework should emphasize not only business support and reinforcement of a new business model through innovative and competitive productive activities, but also the development of new business financing tools and rules for the development of human resources and vocational training, to support 'cooperative development' rather than individual actions, and create new support mechanisms for businesses based on learning results.

In the context of neoliberalism, new ideas, such as the knowledge society, excellence, competitiveness, employability and other ideological mechanisms, have been adopted in both formal education and VET. The aim of the current inadequate and poorly targeted social dialogue is to make them 'compatible' to the functioning of the 'markets'. This status, however, could not be the only dominant one in times of economic crisis and high unemployment. This means that the social dialogue, which must be carried out in conditions of mutual trust, in the context of developing social capital, must be orientated towards developing the basic conditions for upgrading and reforming the coordinates that define the scope of VET. Such an outline includes the issue of developing a stable, reputable and reliable qualifications framework and a transparent system for validation of non-formal and informal learning. However, this process should also include measures relating to the recognition, transfer, accumulation and certification of skills in a transparent and objective manner, providing equal opportunities for training, certification and employment for all, by emphasizing those with low educational qualifications and at risk, or the ones that are directly affected by unemployment, poverty and social exclusion.

In addition, the social dialogue on apprenticeship programs, in particular, must include the following topics as well:

- The role of the learning environment, which should alternate between the workplace and education or training body.

- Whether apprenticeships should be integrated into the formal VET system or operate as a stand-alone scheme.

- The way in which, after successful completion of a training program, trainees acquire a specific qualification compatible with a professional standard as well as an officially recognized certificate.

- The way in which apprentices are placed under an official employment status during their apprenticeship and are paid for their work.

- The circumstances under which apprenticeship agreements or formal agreements between the employer and the apprentice is drawn up, as well as the relevant contract with the educational institution.

- The way in which previous knowledge and experience gained in a non-formal or informal manner are validated.

Actions or initiatives or workplace learning programs in which the quality of the final outcome is questionable and the social security is not guaranteed can degenerate into contemptible job-creating systems without any chance of acquiring skills. Empowering the workplace as a learning field could work effectively to the transition of young people from education to the labour market, with a prerequisite, however, for creating a holistic and structured apprenticeship system that focuses on learning outcomes, taking into consideration the needs of trainees as well as the employees and respecting the conditions and procedures that would ensure both the required quality and the desired results.

Social partners in Greece –a country that is more than ever in need for a serious restructuring of its VET and apprenticeship system as well as a reform of its social dialogue practices– point out that the basic development feature of an adequate and effective VET system is the necessity for a close and continuous cooperation between the educational system and the labor market to ensure the complementarity or synergy between practical training, which is usually provided at the end of the formal educational process and aims to the understanding and adjustment of the trainees in

everything they have learned in theory, and the work experience so as to access the or re-enter the labor market.

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The Educational Team – an Alternative Solution for Romanian Secondary Education?

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Abstract

In the last twenty-five years' Romanian society sought solutions for the improvement of students` performances. Many problems were reported by diverse educational factors: students, parents, teachers, decisional factors and several solutions have been proposed. Our paper theoretically analyzes a possible solution to improve the students' academic performance and learning understanding: the educational team approach. Traditionally, teachers work alone in every step of the didactic process: student`s assessment, planning, and implementation of the curriculum and monitoring student`s progress. Current research demonstrates that team work in education has benefits both for teachers and students. A definition of the concept is proposed and some characteristics of an efficient educational team are taken into consideration. The three main team models, multidisciplinary, interdisciplinary and transdisciplinary are critically analyzed and their benefits and disadvantages underlined. Also, possible solutions for practically implement this model in the Romanian educational context are proposed.
Keywords**:** educational team, secondary education, professional learning communities

Introduction

Human resources are the most important factor in any educational system. Teachers and students are the core of education and quality of education mean quality teachers and quality students.

Regarding teachers even is one of the most sociable profession, based on multiple interactions both on vertically and horizontally, in reality, the teacher is alone in the classroom. He/she teaches alone, designs alone, assesses alone. Rarely she/he asks for feedback or offers feedback to her/his colleagues. The biggest danger in the teaching profession is the routine because is very difficult to maintain a good level of motivation, to develop and improve your competencies without any kind of feedback or working

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with others. Working with others means learning from each other's, comparingthem with others, offering and receiving feedback, easily finding solutions to different educational problems, sharing your thoughts, beliefs, and expertise.

Students should be partners in teaching, but often they are perceived as passive actors, who have to listen, learn and then reproduce what the teachers taught. The results of PISA assessment does not look very well for Romanian educational system. We are on the 45 place from 65 countries at the assessment from 2012. The average performance in Reading of 15-year-olds is 438 points compared to an average of 496 points in OECD countries and in Mathematics is 445 points compared to an average of 494 points. Based on the assessment report for our country, 73% of Romanian students declared "I feel alone in the classroom" and the Romanian students a less motivated and unhappy at school (MECS, CNEE, CNO, 2014).

These are the facts that determine to find solutions to some problems of our educational system. We cannot ask our students to work together and learn from each other, if us, as teachers, don't work, don't debate and don't try to find solutions to different educational challenges and problems.

Theoretical framework

In the current state of affairs of Romanian education, a real change is demanded by all educational factors, and ways of achieving this change were searched and suggested for 25 years, unfortunately without significant results. We propose a possible solution that aims to the core of the educational philosophy, a change of the teaching paradigm. The current Romanian educational main teaching approach is the traditional one, in which the teacher is the owner of knowledge and the sole decider of what, how and where is learned. In teacher-centred approach, students become passive learners and have no control of their own learning (Ahmed, 2013). Duckworth (2009) stipulates that teacher-centered philosophy instead of enhancing learning actually prevents it.

The student-centred approach is not a new one in the Romanian education, many books, seminars and training courses promoted it. But unfortunately, the paradigm internalization and its application in practice are not so frequent, only a small number of practitioners embrace and use it in the classroom context. "While Student-centred learning (SCL) is increasingly discussed in K-12 and higher education, researchers and

practitioners lack a current and comprehensive framework to design, develop, and implement SCL" (Lee, Hannafin, 2016). Maybe, in Romania too, the explanation of this fact is due to the theoretical ways of promoting it and the difficulties encountered by teachers to apply it to practice. Our concept, the educational team (ET), also student-centred, wants to be more applied, describing the practical ways to collaborate, assess, plan, apply and monitor the students` activity.

The student-centred approach is a social constructivist one, seeing learning as a process of knowledge construction, where students actively discover and transform information, in order to integrate them into their own system of notions, and thus become "theirs". How the teacher chooses what (curriculum), how (teaching strategy), where, when and with whom the school setting) directs the student, so as to learn actively, consciously and thus to form their own knowledge."With the learner-centred approach, teachers bring command of content knowledge but design flexibility for learners to construct their learning." (Brown, 2003).

DuFour (2004, p. 1) states that the "core mission of formal education is not simply to ensure that students are taught but to ensure that they learn. This simple shift—from a focus on teaching to a focus on learning—has profound implications for schools."

In the Romanian educational approach, the teacher is alone in all the aspects of the didactic process, solitary assessing the students` performances, planning the curriculum or designing the instructional strategy. Our view is a collaborative one, in which teachers meet, share ideas, plan together, discuss and learn from each other. Strahan (2016) shows that an important characteristic of a successful school is that teachers work collaboratively, and in consequence develop stronger instructional strategies and these strategies enhance student achievement. The educational team concept has its roots in two separate approaches, each contributing to the architectural concept with its own vision: collaborative professional communities (PLC) and school-based problem-solving teams (SBPSTs).

The concept of PLC is focusing on teacher professionalization and on the positive effect on students` learning performance. Vescio et al. (2008)state that PLC is a result of the increased need for school reform and reorganization toward professional development. The teachers` competencies develop on collaboration basis, when they

share ideas, work together to better their performance and progress through collaborativelyexamining their day-to-day practice. Bolan et al. (2005) describes five characteristics of PLC, which can be integrated in our educational team approach: shared values and visions, a clear and consistent focus on student learning, reflective dialogue on curriculum, instruction and student development, collaboration focused on teaching and learning and promotion of collective and individual learning.

Segura, Pirtleand and Tobia (2014) enumerate the following activities that can take place in a PLC meeting, also integrated in our educational team approach: studying standards and reviewing concepts, selecting instructional strategies and assessment techniques, planning lessons, implementing lessons, analysing students` work, and adjusting instruction after reflecting on teaching experiences. The team consists of general education teachers and decisional factors.

The second concept from whom educational team approach defines its identity is SBPST. This teaming approach is "an indirect service delivery approach consisting of a group of three or more educational professionals who share the responsibility of working with a colleague or family member to develop and evaluate an action plan to address an academic or behavioral problem or to meet someother specific goal." (Welch et al., 1999, p. 38). The principles of SBPST are: the use of a systematic, problem-solving process, focus on assessment of student needs, use of interventions that have a demonstrated success, monitoring the consistent implementation of strategies and determine the student response to intervention (Schwanz, Barbour, 2004). The SBPST team members are the same as in a case management team: specialists, general education teachers, and decisional factors, and also the activities they perform: assessment, planning, implementation, and monitoring.

From these two methodological perspectives, we develop the educational team concept. In Table 1 we present the common points with PLC and SBPST.

Table 1: A comparative view on PLC, ET and SBPST

PLC	Educational team (ET)	SBPST
Teacher –centred	Student-centred	Student-centred
Goal: teacher professionalization, that leads to student progress.	Goal: all students` development through learning.	Goal: resolving the problems of SEN students.
Team members: general education teachers and decisional factors.	Team members: general education teachers, and when needed, specialists.	Team members: specialists and general education teacher.
Activities: share knowledge, selecting strategies, curriculum planning, sharing implementation, adjustment of the whole process regarding students' progress.	Activities: assessment of students needs and knowledge, selecting strategies, curriculum planning, monitoring and adjustment of the whole process regarding students' progress.	Activities: assessment, planning, implementation and monitoring an individualized educational plan (IEP).
Type of instructional strategies: all strategies, theaccent is put in finding new and effective ones.	Type of instructional strategies: differentiated instruction and when needed individualized curriculum adaptation.	Type of strategies: all types, but the accent is put on selecting the ones effective for a specific student and a specific need.

Conceptual framework

The educational team refers to a group of specialists who work together in order to improve the learning process through customized psycho-pedagogical interventions, addressed to the whole classroom and to each student.

This collaborative way of addressing the didactic process is proposed for the following reasons and aims to overcome some of the secondary education problems:

- The work solitude experienced by many teachers, who are all alone in planning and implementing the curriculum. They don`t have a real feedback of their teaching process, only from the students` performances, but often this indicator is not taken into consideration by teachers as a reflection of their work quality, but of student indifference toward learning. A team effort is more productive, objective and performance-centred.

- The teachers are the onlyones responsible for the students` academic performances, and often they are not objective in analyzing them. A team shares the responsibility of their work and the pressure is placed upon the entire team, the teachers feel more secure and free to engage, experiment new methods or search for a way of improvement.

- The teachers who work alone have a unique, personal perception upon the didactic process and often they are incapable of recognizing that something is not how it should be or finding what really goes wrong. An independent, objective perspective from another specialist is always welcome and can be a valid mode of assessing the teaching performance and correcting the problems.

- A group of specialists provides for all members different didactic and scientific perspectives, diverse experiences, creative points of view, each teacher benefits from their entire colleague's expertise.

- An educational team is a form of collaborative professional development, in which teachers learn from each other and professionalize as individuals but also as a group.

The goal of the educational team is the constant improvement of students` individual and group learning and helping them to achieve their potential. This goal requires a differentiated instruction approach, which recognizes the individual differences, and values them.

All team members are teaching different subjects in the same class and guide the same students, but their teaching approaches are different. In the current educational practice, the students from one class experience many different teaching styles, requirement, classroom rules or communication methods. They must adapt to this variety and are expected to perform equally well in all subjects. In our working methodology, the educational team analyze the best individual practices and select a recommended sample of teaching strategies, assessment, communicational methods, classroom rules, classroom management strategies based on the classroom and students` individual profile. In this way, a unitary and coherent educational practice is formed and applied by all teachers of the same class. The students` must adapt to a single, unitary type of educational methodology and not six or more different ones.

Each student has a unique personality, with its own familial and educational background, different learning styles, motives, interests, abilities and learning pace. Therefore, in order to maximize the learning of each student, a differentiated approach to instruction is needed. We propose in our educational team philosophy the differentiated instruction approach, and when children with special needs (SEN) are integrated into the classroom the curriculum adaptation may be addressed too.

The principles that regulate the educational team functioning must be stated from the beginning and respected throughout the teams` activity. The working group is composed of teachers with different specialization, teaching experiences, ages or gender and therefore they must accept and value these differences, relating to them as a valuable resource for professional development. The team goal can be achieved only by a permanent process of sharing information, about teaching practices and students` individual characteristics and progress. Only when all team members have common knowledge and the same initial data to be analyzed we can speak of taking joint didactic action. The teachers will present different points of view, based on their specific expertise, and formulate didactic goals for each subject. The team duty is to agree on common principles of educational goals development andlater, to negotiate and prioritize those goals. Basic principles for educational goals development that can be taken into consideration are: promoting learning understanding and relevance for students, developing daily basis abilities and traversal competencies. In the negotiating process, all opinions must be valued and analyzed, adopting the conclusions that are reached democratically. All team members must adopt in their teaching practice the reached conclusions and proposed measures and collect information about their effectiveness. The teachers must relate to the team also as a collaborative professional development frame, sharing teaching experiences, negotiating and reflecting upon them as a group surely leading to individual and group progress.

Putting the concept into action

The educational team is a very practical concept, and easily applicable to practice. All that is required for its implementation is the will to do it and the managerial decision to experiment it at the school level. Of course, like in any situation, there will be resistance

to change attitudes but they can be overcome by seeing and experimenting the good effects of its implementation.

Educational team members and their roles

In the educational team, all teachers from a particular class are included and represent the core of the team. Their role is to participate with all their knowledge and experience to the team effort, respect the working principles and take part in all the team activities that will be described further.

When SEN students are integrated into the class or some of the students' experience learning difficulties, additional team members are added: psychologists, psycho-pedagogues, speech therapists or educational counselors. Their role is to contribute to the team effort with specific expertise and to offer consultancy in assessment, curricular adaptation or school environment accessibility.

Another possible member of the educational team is the curricular expert, who can contribute with his own expertise in planning and implement the curriculum.

A crucial role in team dynamic has the team manager, the role played by the class master. His responsibilities are both as a specialist and as the team coordinator. He must ensure that the team function efficiently and coordinate it accordingly. He convokes the meetings, coordinates them, mediates the negotiations, ensures that proposed measures are applied, prepare and gather necessary documents.

Team activities

The main activities of the educational team are: collaborative developing and designing assessment tools, classroom observation, and individual assessment, prepare initial evaluation report, formulate didactic goals and negotiate them, collaboratively planning the curriculum, implementing the curriculum, monitoring the progress and final evaluation and team reflection upon a year` work.

Always the educational process begins with the assessment. Every teacher must assess the students` knowledge in their specific field, but also the children` interests, learning motives, learning styles and learning pace. To begin this initial process, the team must plan it, and develop assessment instruments. In this stage, the psycho-pedagogue can contribute by offering specific tools in measuring the learning styles, motive or pace. This process may take two weeks, followed by three weeks of individual assessment in the classroom. After the assessment is finished each teacher must prepare an evaluation report, in which they record the classroom and individual knowledge

level, and reflect upon the assessment instruments` validity. All teachers` reports are analyzed in a team context and conclusions are drawn.

Based on the assessment results each teacher formulates didactic goals and presents them in the team context. Afterward, the goals negotiating process takes place, in which the whole team prioritizes them occurring to the principles stated above.

The curriculum planning is a team effort and targets the annual, quarterly and lesson-unit levels. The teachers must make compatible all types of documents, and compare the themes all across subjects to find possible integrative ones. All documents must be made to be flexible in order to adjust them accordingly to the students` progress and understanding.

Each teacher implements the curriculum in a differentiated manner. They value individual characteristics, respect students` learning pace, offer different learning methods, in order to meet all the learning styles and maximize the learning potential. Different forms of teaching assistance may be conducted insight the team: mentoring, coaching, team teaching or inter-assistance. In the mentoring process, the experienced teachers offer their expertise to those in their new career beginning, facilitating the transition from one post to another. Coaching is used whenever a teacher feels the need for assistance, not necessary in the beginning of a new teaching experience, and consists in a peer-to-peer relation aiming the overcoming of a difficult situation. In the inter-assistance situation, the teachers participate in each other lessons, analyze them in order to better it. Team teaching is the situation in which two specialists teach together the same class in an integrative manner. A specific form of team teaching is the co-teaching, in which a support teacher helps the class teacher to manage the SEN students.

Monitoring the progress is the feedback stage of the teaching process. In the ongoing evaluation, the individual and class progress are evaluated and conclusionsare drawn about the validity of the proposed methodology, the effectiveness of the teaching strategies and also of the entire educational team approach. Conclusions are obtained and strategies rethought, new objectives proposed.

The final stage of the team effort is the final evaluation, in which each teacher evaluates the students` progress and the class results and generates a final report. All the team members reflect on the one-year experience and re-evaluate the positive and

things that need to be improved in their collaborative work. Measures for the year to come are made and plans for bettering the whole process proposed.

Conclusions

The change in the educational paradigm is needed and demanded by all educational factors, especially in the secondary education. Our approach proposes a practical model, in which teachers collaborate in a team effort in order to improve the learning process through customized psycho-pedagogical interventions, addressed to the whole classroom and to each student. The teachers share information about teaching practices and students` individual characteristics and progress, take joint didactic action on which they rely on their specific expertise, formulate didactic goals that promote learning tounderstand, adopt conclusions that are reached democratically. The teachers must relate to the team also as a collaborative professional development frame, sharing teaching experiences, negotiating and reflecting upon them as a group surely is leading to individual and group progress.

The team is led by the head teacher and has its core is represented by all the teachers from one class and additional members as psychologists, psycho-pedagogues, speech therapists or educational counselors.

The main activities of the educational team are: collaborative developing and designing assessment tools, classroom observation, and individual assessment, prepare initial evaluation report, formulate didactic goals and negotiate them, collaboratively planning the curriculum, implementing the curriculum, monitoring the progress and final evaluation and team reflection upon a year` work.

Table 2: A SWOT analyses for the educational team approach

Strengths	Weaknesses
Different didactic experiences	A relative new method
Different subject specialists	Lack of experience in collaborative work
Different specializations (general teachers and psycho-pedagogues)	Lack of experience in coaching, team teaching or co-teaching
Collaborative work	
Different approaches to curriculum	

The holistic team advantages Integrated perspective about learning Collaborative professional development	
Opportunities	**Threats**
Many competent teachers The will of change in the educational system level The structure of the educational team is present, but not practiced Collaborative professional development	The resistance to change in the individual level The lack of procedures in implementing the concept More time consuming More financial resources must be allocated More support technologies needed

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Do Teachers Really Need a Master's Degree? Student Teachers' Perspectives

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Abstract

In recent years, considerable attention has been paid in European debates on teacher education to upgrade teaching qualifications at the master's level. However, still little is known about the usefulness of master's level preparation for teachers' professional practice. This study seeks to add to the existing body of knowledge by exploring student teachers' perceptions of the usefulness of master's studies for their (future) professional practice. The survey questionnaire was completed by 343 student teachers enrolled in master's programs in Polish, Romanian, and Latvian universities. Generally, the surveyed student teachers declared that master's level education was an appropriate and useful type of education for teachers. However, this study also found that some student teachers had unclear or even negative views on this type of education for teachers. Several issues which emerged from the results are discussed, with reference to implications for current efforts in developing teaching as a Master's level profession.

Keywords: Master degree, student teacher, teacher education, teaching as a Master's level profession

Introduction

Over the past two decades, European debates on teacher education have shown a growing interest in moving teaching to an all-masters profession. As is highlighted in many policy documents, this type of education for teachers could be one of the means to address the challenge of developing necessary skills and qualifications for the increasingly complex nature of teaching in the classrooms of the 21st century, and to help teachers become innovators and researchers in their workplaces (see e.g., Council of the European Union, 2007; Eurydice, 2015). In fact, master's level work is clearly

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conceived as a strategy to engage teachers with theory and research in order to improve their practice (Niemi, 2008; Campos, 2010; Teixiera and Menezes, 2012; Gray, 2013, Eurydice, 2015). This, in turn, seems to be directly linked to promoting ideas of "teacher as a researcher", "teacher as a reflective practitioner" or "inquiry-oriented teacher education" (Erixon, Frånberg, and Kallos, 2004). Hence, it is not surprising that governments in many European countries develop policies aim at incorporating teacher education into the university sector and raise the required qualifications for all new teachers to the master's level (17 countries from Europe). Despite the increasing number of national and European debates surrounding the curricula and expected outcomes of Master's studies for teachers, still little is known about the usefulness of this type of education for teachers' professional practice.This paper seeks to add to the existing body of knowledge by focusing on Polish, Romanian and Latvian teacher students and exploring their perceptions of the usefulness of master's studies for their (future) professional practice.

The paper starts by reporting the existing research on the usefulness of master's level preparation for teachers' professional practice and outlying the current teacher education policy in Poland, Latvia, and Romania. We then present the research methodology and the findings. We conclude by discussing several issues which emerged from those findings, with reference to implications for current efforts in developing teaching as a Master's level profession.

Background.
The Value of Master's Study to Teachers' Professional Practice

The results of recent research show that the usefulness of student teachers' enrolment in and completion of a master's programme (both as part of initial and continuing professional development) for their (future) teaching practice is not clear. Several studies clearly indicate that student teachers considered a master's degree as significantly contributing to their (future) teaching, mainly in terms of gaining new knowledge and skills, gathering more confidence in the profession, renewing their vision of the teaching profession, being able to apply the inquisitive approach to research reports and policy documents and new initiatives, becoming a more reflective practitioner, deepening their understanding of what takes place in the classroom

process of teaching and learning, and obtaining a strong theoretical foundation needed in their professional work (Drennan and Clarke, 2009; Arslan and Kara, 2010; Dymoke and Cajkler, 2010; Burton and Goodman, 2011; Dickson, 2011; Brooks et al., 2012; Gray, 2013; Menezes and Sousa, 2013; Tucker and Fusher, 2013; Dixon and Ward, 2015; Ion and Iucu, 2016). According to the findings of studies by Teixiera and Menezes (2012) and Snoek et. al (2017), master's level education can also inspire student teachers to become innovators of practice or generators of changes in their workplaces.

However, not all studies reveal the same positive student teachers' views on the usefulness of master's level education for the teaching profession. There are also studies suggesting that this type of teacher education in some cases did not live up to student teachers' professional goals and expectations. For example, Jacksons' (2009) study found that at the end of the course only 30% of students thought that the master's degree was beneficial on the job market. However, the most common claim reported in those studies is a gap between what happens in university classrooms and teaching classrooms (Zeichner, 2006; Søjle, 2017; Snoek et al., 2017a). In other words, in these studies, respondents reported a 'gap' or 'divide' between theory and practice or educational research and practice. For example, master's student teachers involved in Søjle's study (2017) argued that academic education was too theoretical, and hence not reflecting real work. They also reported considerable struggle connected with literature in their university courses in education, e.g., difficulty in understanding the language of the text and irrelevant literature topics. Besides, they perceived the lack of connection between the university world and the school world, meaning that the students learn one thing on the campus and see something completely different at school. Similarly, authors such as Bevan (2011) and Gore and Gitlin (2004) found that teachers overwhelmingly dismissed academic research on the grounds that it was not practical, contextual, credible, or accessible. As Snoek et al. (2017a, 3) argue with reference to Tsui and Law (2007), this disconnection can be explained by the fact that: 'The school and university can be considered as different worlds that have different expectations, an own culture and a unique discourse using different languages. As a result, the main focus of the teacher education institution often relates to maintaining academic standards of student research projects which are translated to academic criteria regarding the quality of research, while the main focus of the school is on improving the quality of teaching and

learning at the local level.

Context for the study

Poland, Romania, and Latvia, as post-communist countries, have common priorities and tendencies in the field of teacher education. A lot has changed within teacher education systems in those countries as a result of deep transformations in their social, economic and political context. The Bologna Declaration of June 1999 began a series of reforms in all the countries, necessary to make national higher education more compatible and comparable with European countries. This has also led to the reorganization of teacher education. A lot of hard work has been done to develop and improve the quality of teacher education by closer integrating it with the university and research sectors, raising teaching qualification standards, and developing a teacher education curriculum (Iucu, 2004; Wiłkomirska, 2005; Žogla, 2006; Stark and Zoller, 2014; Camelia and Elisabeta, 2014; Geske et al., 2015; Madalińska-Michalak, 2017). Whereas before signing the Bologna Declaration teachers in those countries had been educated both in higher-education sector and secondary education sector (e.g. pedagogical secondary schools, teacher education colleges), now teacher education increasingly takes place in higher education institutions with three cycles of studies. For example, in Poland, since 2015, initial training for teachers of different levels and types of school may only be provided by the higher education sector.

As for the Master's degree in teacher education policies in those countries, in Poland, all teachers working in lower and upper secondary as well as basic vocational schools are required to obtain a Master's degree (MEN, 2009). In Latvia, teachers at all levels are required to have a higher education degree to obtain the right to teach (OECD, 2014). However, there is no formal requirement to hold a Master level degree to be a teacher. In Latvia, teachers can have 5 levels of qualification, but no extra points are given for having a Master level degree (Ministrukabinets, 2014). In most situations teachers enter a Master's degree program voluntarily, to increase their qualifications and acquire more knowledge on education. There are two situations when Master level degree is formally valued in a formal setting – if the teacher wishes to obtain an administrative position or to continue education and get the doctoral degree. In Romania, for preschool and primary teachers it is compulsory to acquire a bachelor's

degree in Science of Education, and for secondary school teachers, it is necessary to acquire a bachelor's and Master's degree in a specific scientific field and attend a didactic module during the study. Teachers who want to pursue a research career or be very well evaluated follow a Master's degree. However, it is worth mentioning that even though in all the considered countries a Master's degree is not a necessary qualification for all teachers, a growing proportion of teachers are getting involved in Master's programs. In Poland for example, at present, teachers who hold a Master's degree account for 92% of all teachers working in the school education sector (ORE, 2015). In Latvia, as TALIS results (Geske et al., 2013) show, 32% of the teachers who have a Master's degree have it in educational science.

Despite these increasing measures, there is no compelling body of evidence around the usefulness of Master's studies for teachers' professional practice. Thus, there is, even more, relevance in considering what student teachers involved in Master's programmes think about teacher's preparation at the Master's level and how they perceive the usefulness of Master's studies for their (future) professional practice. The study presented in this paper is a part of broader research effort into master's students in the field of education in five European countries (Poland, Portugal, Latvia, the UK, and Romania) leading to examining their (1) motivations for choosing master's studies in Education; (2) perceptions of the contribution of master's studies to their (future) professional practice; (3) experiences of the process of preparing their final dissertation/thesis; (4) perceptions of the usefulness of their final dissertation/thesis work for their (future) professional practice; and (5) differences/similarities across national contexts, students' age, gender, field of study programme, type of master's studies, and professional work experience. For the purpose of this paper, we used data collected only from Polish, Romanian, and Latvian student teachers to answer the following research question:

How do student teachers perceive the usefulness of master's studies for their (future) professional practice in terms of

(a) developing the capacity to apply theory to practice;

(b) gaining the ability to use and conduct research in professional workplace settings?

Method

A descriptive, survey research design was used in order to obtain student teachers' views into the usefulness of master's level work for their (future) professional practice.

Participants

The sample group for the purpose of this paper included 343 student teachers participating in master's programmes with a thesis/dissertation as the final assessment at public universities in Poland (n=134, 39,1%), Romania (n=141, 41,1%) and Latvia (n=68, 19,8%). The participants were selected by convenience sampling (Creswell 2008). All student teachers registered in the 2015/2016 and 2016/2017 academic year at universities where the researchers work were asked to participate. The response rate was 87% in Poland, 77.9% in Romania, and 98% in Latvia. Most of the respondents from Poland are going to become primary school teachers, with no or little professional work experience, while most of the respondents from Romania and Latvia are active teachers with advanced professional work experience. The detailed profile of the participants is presented in Table 1.

Table 1. Profile of the participants (N=343)

Gender	Men:4.4%
	Women: 95,6%
Age	M_{age}= 29.44(SD=8.35 range 22-54 years)
Years of professional work experience	$M_{professional\ work\ experience}$ = 8,61years (SD=8.72; range 1-37 years)
Type of study programme	Full time:81.6%
	Part-time: 18.4%

Data collection, analysis, and ethical considerations

The student teachers were asked to complete the questionnaire instrument. The questionnaire was prepared in English, translated into respective languages by the authors, and composed of four main parts: (1) a section on students' demographics; (2)

a section on students' experience of their master's degree programme in general; (3) a section on students' experience of the process of completing the thesis; and (4) a section on students' suggestions for improving the quality of master's degree programmes to better prepare them for their future job. The questionnaire included multiple choice questions, forced choice, and Likert scales, as well as open-ended questions. Findings that will be presented in this paper refer to some questions included in the second section of the questionnaire.

The questionnaire was administered to student teachers by the researchers themselves during the classes sessions. Prior to the start of data collection, all the participants were informed about the aims of the study, ensured about anonymity, voluntary participation, and guaranteed the possible feedback of research findings via email after the conclusion of the study.

Quantitative data were analyzed using RStudio and Microsoft Excel. The frequency of the answers was calculated for multiple-choice answers and descriptive statistics (means, standard deviations, minimum and maximum values) were obtained. Qualitative data from open-ended questions were analyzed in the following way: first, the researchers analyzed student teachers' responses independently in order to identify initial categories and themes emerging from the responses to each open-ended question; second, the main categories found by the researchers were translated into English by the authors, and then they were compared and discussed within the research team to reach the common list of categories for each open-ended question.

In the following sections, we report the findings, which are inevitably limited as they do not include the comparison of student teachers' views between the participating countries. In future publications, in-depth analysis of data obtained as part of this study from student teachers in each of the countries will address the national specificities of their views.

Findings

For better understanding student teachers' views on the usefulness of master's level education for their (future) professional practice, firstly, there is a need to describe their motives for choosing a master's program. The results show that the most frequent motive to choose the master's program among the student teachers was to gain deeper

knowledge and skills in the field of education (70.3%), along with enhancing personal development (65%). Other important motivational factors were related to enhancing professional development (56.3%) or enhancing professional status on the educational job market (52.2%). Nearly half of the participants (45.8%) indicated that a master's course was the obvious next step after bachelor's studies. Other motivational factors reported by student teachers were related to employer's demand (27.1%), the need for intellectual challenges (26.2%), enhancing remuneration (19.2%), the desire to apply for Ph.D. studies in the future (16.6%), and gaining research-related skills (16.6%). A small proportion of the respondents indicated the following factors as motives for choosing a master's program: a passion for doing research (10.5%), the influence of friends/family (8.7%), and the lack of better opportunities in life (4.4%).

The next question included in the second part of the questionnaire investigated what student teachers thought about the appropriateness of master's level education for teachers (see Figure 1). More than 50 per cent of the respondents (59.7%) agreed that master's level education was an appropriate type of education for teachers (M=3.65; SD=0.96). However,24.2%of the surveyed student teachers were not sure about the appropriateness of this type of education for teachers and 13.1% disagreed with the statement.
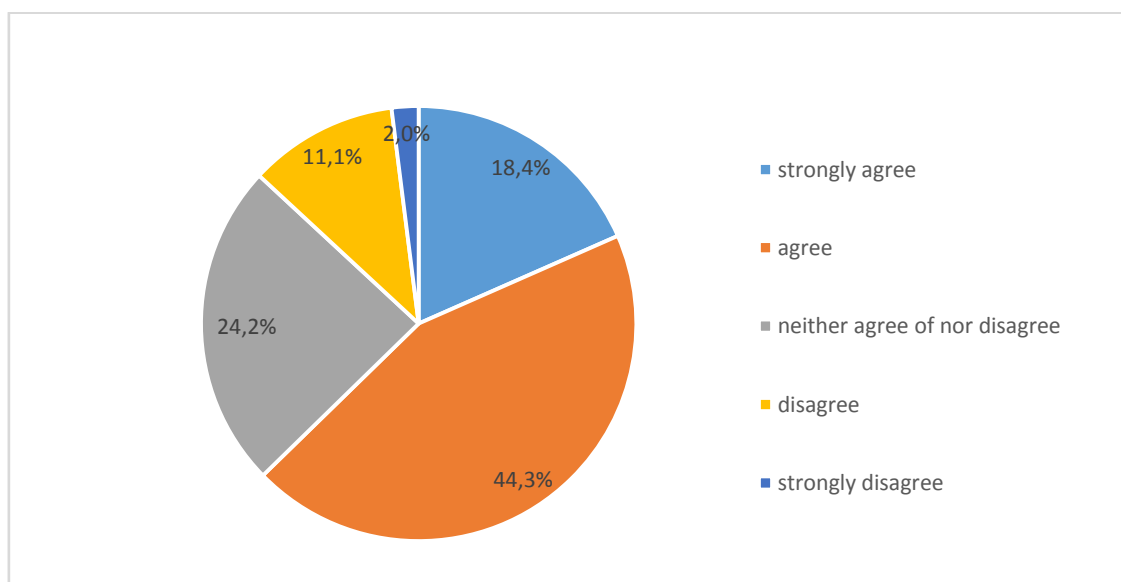

Figure 1. The appropriateness of master's level education for teachers

In addition, the participants were asked to explain their responses. 70.0% of all the respondents decided to do this. Table 2 provides lists of categories with example

quotations emerging from the responses provided by three groups of student teachers: those with a positive view (n=167), those who neither agreed of nor disagreed (52) and those with a negative view (n=21).

Table 2. Student teachers' views on the appropriateness of master's level education for teachers

	Categories	Example quotations
Agree (n=167)	- It allows me to gain deeper professional knowledge and skills (81.1%); - Professional development (52.1%); - Personal development (43.7%); - Providing new professional opportunities (27.5%); - Employers' demand (19.2%); - Complementing bachelor's studies (18%); - Collaboration and meetings with new colleagues (16.2%); - Necessary type of education of high quality teachers (10.2%).	- Acquiring in-depth knowledge in the subject matter; - Master's studies enhance professional and personal development; - Master's degree is needed in the school; - The studies help organize, consolidate and deepen the knowledge acquired during bachelor's studies; - Teaching profession is so important for the society, so teachers need advanced research training.
Neither agree of nor disagree (n=52)	- Lack of/limited practical experience (96.2%); - Too many subjects unconnected with teachers' everyday reality (86.5%); - Depending on student teachers/teachers/schools (69.2%); - Gap between theory and practice (61,5%);	- Too many subjects unconnected with the teaching profession; - Not enough practice!; - Skills, not just diplomas; - It mainly depends on the teacher and the school; studies alone will not help much if the teacher does not want to introduce changes; - Too much theory, too little practice.
Disagree	- Lack of practical experience (95.2%);	- Theory without practice – it is impossible to prepare teachers in this

| (n=21) | - Lack of practical relevance (95.2%);
- Provided artificial picture of teachers and school world (66.7%);
- Bachelor's studies are much better (61.9%);
- The gap between theory and practice (47.6%). | way;
- Master's studies provide a completely different image of the teaching profession and teachers' problems than in the reality;
- Bachelor's studies gave me much more skills useful in teaching than master's studies. |

The majority of the respondents who agreed that master's level education was an appropriate type of education indicated that it allows gaining deeper professional knowledge and skills (81.1%), and enhance professional (52.1%) and personal development (43.7%). Those participants also stressed that master's training provides new professional opportunities (27.5%) and complements bachelor's studies (18%). The participants who were not sure about the relevance of this type of education for teachers mainly emphasized the lack of or limited practical experience and too many subjects unconnected with teachers' everyday reality. They also reported that the potential of master's studies depends on student teachers/teachers/schools (69.2%) and pointed out a gap between theory and practice (61.5%). Similar categories emerged from the responses of student teachers with negative views. They mainly highlighted the lack of practical experience (95.2%) and lack of practical relevance (95.2%), providing an artificial picture of teachers and school world (66.7%), the advantage of bachelor's studies over master's studies (61.9%), and the gap between theory and practice (47.6%).

Master's level education is recognized as a strategy to engage teachers with theory and research to improve their practice. Participants' were asked to answer three questions by using a5-point Likert scale to express their views regarding the usefulness of master's studies for their (future) teaching practice, as well as the usefulness of educational theory and research-related skills gained during their master's studies (see Table 3).

Table 3. The usefulness of master's studies, educational theory and research-related skills for student teachers' (future) professional practice

Item To what extent …	Extremely useful n (%)	Somewhat useful n (%)	Usefulness not clear n (%)	Not very useful n (%)	Extremely useless n (%)	M	SD
is doing **master's studies** useful for your educational practice (or how useful could it be for your future practice)?	124(36.2)	103 (30.0)	62 (18.1)	42 (12.2)	12 (3.5)	3.83	1.15
is the **educational theory** gained during your master's studies useful for your educational practice (or how useful can it be for you future practice)?	103 (30.0)	120 (35)	71 (20.7)	36 (10.5)	13 (3.8)	3.77	1.11
are **research-related skills** gained and deepened during your master's studies useful for your educational practice (or how useful can they be for your future practice)?	114 (33.2)	111 (32.4)	75 (21.9)	29 (8.5)	14 (4.1)	3.82	1.14

Data from these three questions showed that the respondents similarly rated the usefulness of master's studies, the theory, and research-related skills gained during master's studies for their (future) professional practice (M=3.83; M=3.77, M=3.82, respectively). Although a relatively high proportion of the respondents had a positive view on the usefulness of master's studies, educational theory and research-related skills for their (future) professional practice (66.2%; 65.0%; 65.6%, respectively),there were also some student teachers who did not have a clear opinion about the usefulness

of master's studies, as well as theory and research skills gained during master's level education for their (future) professional practice (18.1%; 20.7%; 21.9%, respectively) or had negative views on these issues (15.7%; 14.3%; 12.6%, respectively).

In addition, the participants had the opportunity to further elaborate on their answers by explaining their choices in each of these three questions. A relatively high proportion of the surveyed student teachers decided to do this (67.6%; 52.2%; 58.6%, respectively). The categories emerging from the responses of those participants who explained their views on the usefulness of master's studies for their (future) professional practice seem to be very similar to those emerging from the answers to the question about the appropriateness of master's studies for teachers' professional practice. The participants with positive views who provided the explanation on the usefulness of master's studies for their professional practice (n=181) mainly stressed that the studies allowed to gain deeper professional knowledge and skills (90.1%) ('It provides a lot of useful knowledge and skills for my professional practice'), and enhance personal (66.9%)and professional development (65.7%). Also, those participants indicated that master's studies helped them understand the relation between theory and practice (24.8%) and between educational research and practice (13.3%) ('Studies help to get a deeper understanding that theory and practice are closely interrelated'). The respondents with no clear view (n=38) mainly emphasized a gap between university classroom actives and classroom practices (92.1%) ('What we are taught by university teachers is different from what I see at school on a daily', Poland). Those participants who had negative views (n=13) stressed the gap between theory and practice (84.6%) and the lack of practical experiences during master's studies (84.6%) ('Too little practical experience').

Regarding the usefulness of educational theory gained and deepened during master's studies, the majority of the respondents with positive views who provided the explanation (n=111) argued that it provides a tool for reflection on experiences (82.9%) and a strong foundation for understanding pupils' behaviors (78.4%) and classroom practices (65.8%) ('Without theory you can't understand your pupil's behaviors'; 'If you learn Bronfenbrenner theory, you know that children's behaviors depend on family, peer group and local environment'). Besides, they emphasized that educational theory helps in choosing teaching methods (54.9%) and improving teachers' effectiveness

(42.3%). The student teachers without clear views who decided to explain their answers (n=32) mainly pointed out that the language of theoretical consideration is too difficult (96.9%), and a lot of articles read by students are not relevant to teachers' problems (75%) ('Most of the articles read during the studies are irrelevant to teaching practice and do not provide practical implications'). Also, they emphasized that they did not have ideas 'how to transfer theory into practice' (65.6%). The participants who explained their negative views (n=36) argued that the educational theory is completely different from the teachers' real life (94.4%).

As for as the usefulness of research-related skills gained and deepened during master's studies from the point of view student teachers' (future) professional practice (n=201, 62.2%), the study participants with the positive views on the issue (n=133) mainly stressed that contemporary teachers should not only be users of educational research but also should do research in their workplaces (91.7%) to examine the effectiveness of their teaching practices (75.9%) ('You have to do research on your practice, so you should have research-related skills'). Those student teachers who declared unclear usefulness (n=52) most often argued that teachers do not have time to do research because of a lot of bureaucracy, so these skills are not very useful (80.7%), and those with negative views (n=16) mainly claimed that didactic skills are more useful in teachers' work than research-related skills (87.5%) ('Teachers need, first of all, didactic skills').

How student teachers evaluate the usefulness educational theory and research-related skills from the point of their professional practice does not necessarily mean whether they are going to use it in their work or not (Gall, Gall, and Borg 2007 cited in Ion and Iucu, 2016). Hence, the next three questions investigated student teachers' intentions of using educational theory (see Figure 2) and the results of educational research (see Figure 3) as well as doing research in their (future) professional practice (see Figure 4).
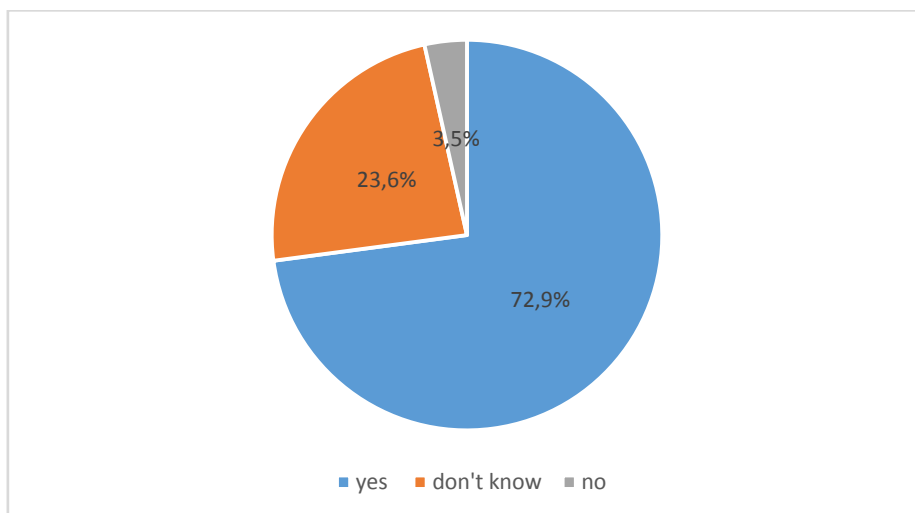
Figure 2. Using educational theory gained during master's studies in (future) professional practice
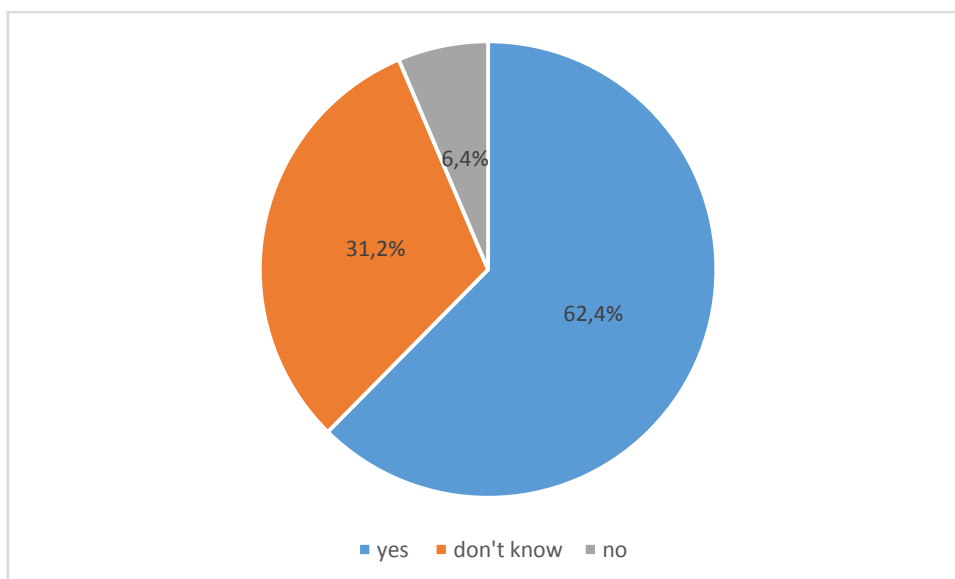
Figure 3. Using the results of educational research gained during master's studies in (future) professional practice
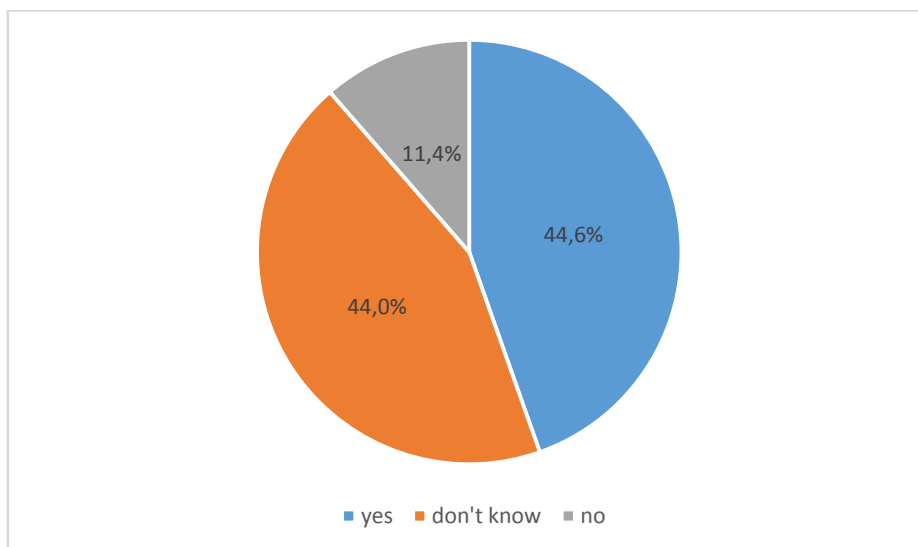
Figure 4. Doing research in (future) professional practice

Data obtained from these three questions showed that 72.9% of the respondents are going to use educational theory gained during their master's studies in their (future) educational workplace settings. Fewer student teachers are going to use the results of educational research gained during their master's programs (62.4%). However, there were also some participants who were not sure about this (23.6%; 31.2%, respectively). Few of the respondents declared that they are not going to use educational theory or results of educational research in their (future) practice (3.5%; 6.4%, respectively). Whereas there were relatively many student teachers who were going to use educational research results in their professional practice, the data presented in Figure 4 indicates that only 44.6% are going to do research in their (future) practice. Nearly half of the questioned student teachers (44.0%), in turn, were not sure about this, and 11.4% are not going to do so.

Discussion

The aim of this study was to explore student teachers' views on the usefulness of master's level education for their future professional practice. Although this data is not representative of student teachers in all the countries considered (as convenience sampling was used), the views of these 343 student teachers can contribute to national

and (to some extent) to European debate around the usefulness of teacher education at the master's level.

The results of this study showed that the student teachers in our sample had quite positive views on the appropriateness and usefulness of master's education for teacher' professional practice. They argued that master's studies help obtain deep professional knowledge and skills, and enhance personal and professional development. The participants also stressed that this type of teachers' training provides new professional opportunities and possibilities to collaborate and meet new colleagues. This seems to correspond to their motives for choosing Master's studies. The main motives for choosing the Master's program expressed by the student teachers were to gain deeper knowledge and skills in the field of education, along with enhancing personal development and professional development.However, there were also some student teachers who questioned the appropriateness and usefulness this type of education of prospective teachers. Their responses suggest some areas of concern. The student teachers reported the lack of practical experience during master's studies and inadequacy of subjects included in master's curricula to teachers' everyday practice. These responses clearly reveal the tension between teaching practical skills and the theoretical background provided in master's programs in teacher education. Besides, some of thestudent teachers indicated that bachelor's studies are a more relevant form of training for teachers. Hence, it seems that student teachers expected to raise specific learning outcomes during the next stage of their education, not simply to change the name of the program (master's instead of the bachelor's) (Campos, 2010). On the other hand, student teachers stressed that even holding the best quality master's program did not promise that they would be able to apply what they learned because it depends on the school climate, headmasters, and colleagues. This finding is in line with previous studies indicating that teachers are more likely to use knowledge and research if they feel support from their workplace settings (Ion and Iucu, 2016).

The results of our study also revealed that student teachers had quite positive views on the usefulness of educational theory and research-related skills in their (future) educational practice. Many respondents rated their usefulness highly, with the general view that theory and research are important tools in understanding teaching practices, enhancing critical reflection on teaching process, being more confident in the

classrooms setting.However, it should also be noted that some of the surveyed student teachers did not have a clear opinion about the usefulness of the theory and research skills gained during master's level education for their (future) professional practice. This group of respondents stressed the irrelevance of theoretical consideration to teaching practice and even an artificial view of the teaching profession presented in university classes (Sava, 2015). In addition, they claimed that academic papers are written in a difficult language without practical implications. Besides, as was highlighted by some participants, during master's studies they did not develop strategies of transferring theory or research into practice (Ion and Iucu, 2016). The gap between theory and research and educational practice reported by the study participants seems to dominate in the discussion about teachers' training at the master's level (Søjle, 2017; Sava et al., 2014). Therefore, as is suggested by some researchers, universities should make more effort to reduce this gap by providing 'relevant resources and examples from the outset' (Brooks et al. 2012, 365) during the courses or 'integrate research with a coherent and transversal approach along disciplines, rather than as isolated subjects' (Ion and Iucu 2016, 613). This skepticism towards educational theory and research-related skills may weaken student teachers' desire to conduct their own research in their workplace settings. This seems to be confirmed in our study, as the findings show that nearly half of the surveyed student teachers were not sure about doing research in their workplaces.

Conclusions and further research

The results of this study seem to add to positive views in the national and European debate on the appropriateness and usefulness of master's level education for teachers. They are important not just for student teachers considering Master's programs or currently involved in them, but also for politicians, policy-makers, and university staff who believe that the quality of teacher education influences the quality of teaching. Hence, the student teachers' negative view on this type of education should be taken into account by policy makers and university staff members in order to improve or redefine teaching education curricula at the Master's level to better meet (future) teachers' professional goals and expectations. From this research, it is clear that a policy requirement for a Master's degree for teachers implemented in isolation, without addressing other needs and expectations of different school-related

stakeholders, would be insufficient to foster the benefits of advanced academic training for teachers.

As this study is part of a larger research project that is still ongoing, further analysis of these results is needed, including demographics of the sample and views of student teachers from two other countries (Portugal and England) in order to gain more insight on the usefulness of masters' level studies for the teaching profession.

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Analysis of scientific research on test anxiety and other emotions identified in the academic field

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Abstract

The results of studies addressing the impact of emotions on the academic field support that affective states influence the motivational and cognitive processes that are relevant to cognitive performance. More specifically, it has been shown that mood and emotions facilitate congruent memory processes, suggesting that positive affective states can increase motivation in addressing tasks, while negative emotional states can increase motivation to avoid them. In the control- value theory, academic emotions are defined as the emotions directly associated with learning activities or school results. According to this theory, there are four groups of emotions identified: positive activating emotions (e.g. joy, optimism, pride); positive deactivating emotions (relaxation, satisfaction, relief); negative activating emotions (anger, frustration, anxiety, shame); and negative deactivating emotions (boredom, sadness, disappointment, despair). Students' anxiety, especially anxiety manifested in evaluative contexts - is one of the most studied emotions in the academic field, and has been addressed in more than 1,000 studies. Test anxiety is a serious problem for many of the students in gymnasiums and high schools. Even though large-scale studies have seen some decrease, nearly 33% of students experience anxiety over evaluation, and those with high levels of test anxiety don't achieve a very good academic performance. For students with test anxiety, both preparations for an examination and examination itself are causing a high level of worry and discomfort. As a result, affected students fail to meet their potential, and the results of evaluations do not represent them, or their real level of knowledge and learning.

Keywords: academic emotions; control-value theory; test anxiety; academic performance

Studies on academic emotions – literature review

Pekrun and collaborators (2002a) have defined academic emotions as "those emotions experienced in academic contexts that are associated with study and training

activities." Such emotions, for example, relate to the pleasure of learning, the pride of success, or the anxiety about the evaluation. In the past, academic emotions have largely been neglected in the field of educational psychology research, with the exception of test anxiety Pekrun (2005) argued that students' emotions are multiple and much richer in nature than some traditional points of view suggest.

Previous studies classify academic emotions in terms of value/valence and activation (Pekrun, 2000; Pekrun et al., 2002a). Value refers to the extent to which emotions are considered positive or negative. Activation refers to the extent to which emotions are considered to be activating physiologically (e.g., optimism) or deactivating (e.g., relief). Based on these dimensions, there are four groups of emotions identified: positive activating emotions (e.g. joy, optimism, pride); positive deactivating emotions (e.g. relaxation, satisfaction, relief); negative activating emotions (e.g. anger, frustration, anxiety, shame); and negative deactivating emotions (e.g., boredom, sadness, disappointment, hopelessness).

In most of the conditions, it is assumed that positive activating emotions have positive effects on performance (Pekrun et al., 2002a, Pekrun, Goetz, Perry, Kramer, & Hochstadt, 2004), while negative deactivating emotions have negative effects (Pekrun, 2006; Daniels et al., 2009), in contrast, positive deactivating emotions and negative activating emotions are supposed to have ambivalent effects on cognitive motivation and processing (Pekrun, 2006; Ganotice, Datu, & King, 2016).

Linnenbrink (2007) studied how pleasant and unpleasant emotions contribute to the selection by the subjects of how to approach work tasks. She analyzed several laboratory studies concerned about unpleasant emotions and noted that they had led students to address the tasks received with more attention. However, the results obtained by Linnenbrink, Ryan, and Pintrich (1999) demonstrated that unpleasant emotions were negatively correlated with memory functions and learning.

In some of the studies, the results have shown that positive emotions, despite their potential for stimulating creativity, are often maladaptive for performance as a result of inducing unrealistic positive appraisals, thus promoting less analytical processing of information (Aspinwall, 1998 Pekrun et al., 2002b). As detailed in Pekrun's cognitive-motivational model (2006), positive deactivating emotions, such as relaxation or relief, may also have negative effects on performance, while positive

activating emotions, such as pleasure in accomplishing a task should have positive effects. The studies quoted above suggest that pleasure maintains cognitive resources and the focus on tasks; facilitates the processing of relational information; induces intrinsic motivation; and encourages the use of flexible learning strategies and self-regulation, thus exerting a likely positive effect on overall performance across many types of tasks. Instead, positive deactivating emotions such as relaxation and relief can reduce attention on tasks, and also have different effects on motivation by undermining it; but at the same time, it can reinforce it in terms of re-engagement in the tasks.

Emotions such as joy, optimism, and pride have been positively correlated with the interest, effort invested in studying and developing learning materials, and self-regulation of learning, and they support the positive relationship with academic performance (Pekrun et al., 2002a, 2002b, Frenzel, Thrash, Pekrun, & Goetz, 2007; Goetz, Frenzel, Pekrun, Hall, & Lüdtke, 2007; Pekrun, Elliot, & Maier, 2009). The same thing was highlighted by the results that correlated the positive overall affect with the students' cognitive involvement (Linnenbrink, 2007). However, some studies have obtained null relations between positive activating emotions (or affect), and students' personal involvement and their school outcomes (Linnenbrink, 2007, Pekrun, Elliot, & Maier, 2009).

Some studies (e.g. Zeidner, 1998, 2007) have shown that emotions such as anger, anxiety, and shame produce irrelevant thoughts on task, reduce the cognitive resources available, and undermine the intrinsic motivation of students. On the other hand, these emotions can induce motivation to avoid failure and facilitate the use of more rigid learning strategies. By implication, the effects on academic performance depend on the task's complexity, and for this reason, they can be variable, similar to the effects of positive deactivating emotions. More specifically, it has been demonstrated that anxiety affects performance in complex or difficult tasks that require cognitive resources, such as the difficult items of an intelligence test, while performance in mild, less complex and repetitive tasks is not affected (Hembree, 1988; Zeidner, 1998, 2007). According to the experimental results, studies in the field claim that anxiety manifested in the evaluative context correlates negatively with students' academic performance (Hembree, 1988; Zeidner, 1998). In explaining thecorrelative evidence, one must take into account the mutual causal link between emotion and performance. The relationship between anxiety

and the academic results obtained can be caused by the effects of success and failure on the development of test anxiety (Pekrun, 1992b). Moreover, there have been ambiguous results in some studies over the effect of test anxiety on the academic performance, and positive correlations have also been found. More precisely, anxiety is likely to have a negative effect on many students but can facilitate general performance in those who are more flexible and can use it in a productive way, through its motivational energy (Pekrun & Linnenbrink-Garcia, 2012).

Several studies have addressed the effects of negative emotions other than those related to anxiety. Similar to anxiety, the shame of failure also correlated negatively with the student's academic outcomes and was a negative predictor of performance in exams (Pekrun et al., 2004, 2009). Similarly, the anger towards academic activities has correlated negatively with academic performance (Pekrun et al., 2002a, Pekrun, Goetz, Perry, Kramer, & Hochstadt, 2004; Pekrun, Elliot, & Maier, 2009).

Unlike negative activating emotions, studies of boredom and hopelessness (deactivating emotions) have demonstrated that they affect performance by reducing cognitive resources, intrinsic and extrinsic motivation, and favoring superficial information processing (Pekrun et al., 2002a; Pekrun, Elliot, & Maier, 2009).
In conclusion, the results obtained from the studies indicate that students' emotions have major effects on their degree of involvement and academic results. Most often, the effects of emotions such as joy and pleasure to learn are beneficial, compared to the hopelessness and boredom that have been shown to correlate negatively with students' commitment to tasks. The effects of emotions such as anger, anxiety, and shame are more complex, but for most students, they certainly have unfavorable consequences.

The control-value theory of academic emotions

In the control-value theory (Pekrun et al., 2002a), academic emotions are defined as the emotions directly associated with learning activities or school outcomes. School results can be defined as simply as the quality of the activities or their outcomes evaluated in relation to standards of excellence (Heckhausen, 1991). Clearly, most of the emotions involved in learning and evaluating students refer to academic emotions because they are related to behaviors and results that are usually considered according to quality standards by themselves and others.

In few words, the control-value theory specifies that the determinants of emotions experienced in the academic context involve the student's appreciation of the control and the value/valence attributed to learning activities and their outcomes. In other words, the student is experiencing certain academic emotions when he or she feels that has the control over learning activities or their results that are considered to be important for themselves.

Subjective control over learning activities and their outcomes are assumed to depend on causal expectations and cause-effect tasks that involve appraisals of control. Three types of causal expectations are relevant (Pekrun, 1988): expectations of action-control, meaning that a learning activity can be initiated and performed successfully ("self-efficacy expectations", Bandura, 1977 apud Pekrun et al., 2007); action-outcome expectancies, that these activities lead to the results the student wants to achieve; and situation-outcome expectancies, the fact that these results take place in a given situation without an action of their own.

As for the subjective values/valences attributed to activities and results, the theory makes a distinction between intrinsic and extrinsic values. The intrinsic values/valences of activities refer to the appreciation of an activity for what it implies and signifies, even if it does not produce relevant results. The extrinsic values/valences refer to the instrumental utility of activities to produce results, and the manner in which they can, in turn, generate additional results (Heckhausen, 1991).

Past research on emotions encountered in the academic world has mostly focused on emotions related to the outcomes (Table 1). Examples of emotions related to the outcomes are joy and pride experienced by students when academic goals are attained, and frustration and shame when their efforts fail. The differentiation between the emotions involved in the academic context is accomplished in accordance with the object upon which the academic emotion is focused. In addition, academic emotions can be grouped according to their valence (positive vs. negative or pleasant vs. unpleasant), and the degree of activation involved (emotions that activate vs. deactivate). With these three dimensions, academic emotions can be organized into a three-dimensional taxonomy (Table 1; Pekrun et al., 2002a).

Table 1 The three-dimensional taxonomy of academic emotions (Pekrun et al., 2002a)

Object	Positive / pleasant emotion		Negative / unpleasant emotion	
	Activating	Deactivating	Activating	Deactivating
Activity focus	Enjoyment	Relaxation	Anger Frustration	Boredom
Outcome focus	Joy Hope Pride Gratitude	Contentment Relief	Anxiety Shame Anger	Sadness Disappointment Hopelessness

It is assumed that the appraisals about ongoing academic activities, as well as the history and future outcomes, are of prime importance in this respect. This key element of the theory states that individuals experience specific academic emotions when they feel they have or not the control on academic activities and their results that are important to themselves, which implies that appraisals of control and values are the determinants of these emotions (Pekrun et al., 2007). (Pekrun et al., 2007).

If this is true, then the individual antecedents should primarily affect these emotions by influencing appraisals related to control and value. Examples of such antecedents are individual academic goals, as well as academic control and appraisals of the value. However, theory recognizes that emotions are also influenced by noncognitive factors, including genetic and physiological predispositions related to temperament. Regarding the determinants of social backgrounds, or, rather, from the socio-historical context, the theory assumes that factors that influence individual appraisals of value and control should affect the academic emotions of the individual.

Brief review of test anxiety concept

The Diagnostic and Statistical Manual IV defines the concept of test anxiety as being primarily an individual's concern with regard to negative assessment (DSM-IV:

American Psychiatric Association (APA), 1994) and falls under the category of "social phobias ".

Other authors (Sarason, 1980; Spielberger & Vagg, 1995) define test anxiety as the predisposition of an individual to react through a state of excessive concern, intrusive thoughts, mental disorganization, tension, and physiological activation at the moment that the person is exposed to an evaluative situation. Some of the consequences of the assessment that students perceive to be threatening are: getting much lower scores on tests, experimenting shame, and the fact that they might disappoint some important people around them (Pekrun, Goetz, Frenzel, Barchfeld & Perry, 2011; Zeidner, 2007).

Several theoretical models have been developed regarding the concept of anxiety towards evaluation: the drive model (Mandler & Sarason, 1952), the cognitive-attentional models (Sarason, 1972; Wine, 1971; Carver & Scheier, 1984), the self-worth model (Covington, 1992), and the transactional model (Spielberger & Vagg, 1995), but we can't say that there is only one explanatory model that takes all factors into account in their complexity, or is consistent with all the research from this field (Zeidner, 1998).

At the beginning of the research on the concept of "test anxiety", the construct was considered to be unidimensional and was measured by scales such as the Test Anxiety Questionnaire (Mandler &Sarason,1952). Subsequently, field research has demonstrated that there are at least two dimensions present in measuring anxiety over evaluation.

Liebert and Morris (1967) have shown that "worry" and "emotionality" are present in measuring test anxiety and are two different components. The Worry component refers to intrusive thoughts, self-disapproving rumination, and other distractors types of the thinking process associated with testing. The cognitive component of test anxiety is the most commonly found factor associated with declines in performance (Hembree, 1988). In addition to the evidence available through traditional correlation studies and meta-analyses, it was confirmed that cognitive test anxiety has the closest connection to performance. The Emotionality component refers to body responses that are associated with anxiety (increased heart rate, headaches, sweating, etc.) (Cassady, 2004a). The Test Anxiety Scale (Sarason, 1978) and Test Anxiety

Inventory (Spielberger et al., 1980) are two of the most popular tools that have been developed in close connection with these two dimensions of test anxiety concept.

Most analyses on the structure of test anxiety have demonstrated the existence of two distinct factors: the emotionality dimension and cognitive anxiety dimension (Everson, Millsap, & Rodriguez, 1991; Hembree, 1988). Somewhat, there have been some attempts to establish additional factors, based on the idea that segmentation of test anxiety concept will lead to a better understanding of its effects on performance (e.g. Sarason, 1984, Covington, 1985, Schwarzer & Quast, 1985, Cassady & Johnson, 2002).

The impact of test anxiety on academic performance

The main interest in the field research of test anxiety was its relationship with performance. The results of numerous studies have shown that high levels of test anxiety correlate negatively with IQ, academic skills, academic results at reading, English, mathematics, natural sciences, foreign languages, psychology; problem-solving strategies, memory and school grades (Hembree, 1988). These effects have been identified in both, young students (third grade) and high school students. Most studies support the fact that the main factor associated with these decreases in performance is the cognitive component of test anxiety that affects students' performance during examinations (Hembree, 1988; Sapp, Durand, & Farrell, 1995).

Hembree (1988) conducted a meta-analysis using 562 studies on test anxiety and its influence on academic performance among American school students and university students and demonstrated through obtained results that there was a negative correlation between them at all levels of schooling. In the Seipp meta-analysis (1991) made using 126 studies, the negative relationship between test anxiety and academic performance is also supported. Schwarzer (1990) combined the results of the two meta-analyses of Hembree (1988) and Seipp (1991) and obtained the same negative correlation (r = -.21) between test anxiety and performance.

Even though there are studies examining the association between test anxiety and academic results, longitudinal studies focusing on the reciprocal effects of the two variables are in a small number (Seel, 2012). Most studies have shown negative correlations between test anxiety and academic outcomes (Cassady & Johnson, 2002; Smith & Smith, 2002; Nicholson, 2009).

Other results indicate that anxiety interferes with performance in many different assessment situations. Hill (1972) has conducted ananalysis of studies that demonstrate how anxiety influences performance in a wide variety of experimental tasks. Generally, these studies indicate that when anxious students perform tasks under pressure, they do less well than children with low levels of anxiety. For example, Stevenson and Odom (1965 apud Hill & Wigfield, 1984) showed that students with a high level of test anxiety did less well than those with low levels of anxiety in a task related to certain concepts learned because the anxiety experienced interferes with their ability to remember those concepts. Also, students with a high-level of test anxiety do less well in comparison with those whose level is lower when they are asked to perform tasks more quickly (Sarason et al., 1960 apud Hill & Wigfield, 1984), or when the task is presented as a skill test (McCoy, 1965). Other studies have shown that students who are affected by test anxiety tend to work with great caution in most situations (Ruebush, 1963 apud Hill & Wigfield, 1984) and perform tasks less well when an adult observer is present (Cox, 1968). Low anxious students are less affected by these types of manipulations. However, in some situations, students with a high level of anxiety can achieve better performances than the least anxious, and this situation can be encountered when tasks are introduced in a non-evaluative manner (McCoy, 1965).

Conclusions

Numerous studies to capture the relationship between anxiety and academic performance support the hypothesis that there is a negative influence between the two components, and more precisely that a high level of test anxiety affects the results of the students, and these, in turn, will intensify the anxiety manifested in the future tasks. In conclusion, correlations between test anxiety and academic results can be explained by mutual causality (Seel, 2012). This is underlined by longitudinal studies in this field suggesting that test anxiety and student learning outcomes are in fact linked through a mutual causality throughout the school years (Meece et al., 1990, Pekrun, 1992).

As regards the research on emotions experienced in the academic context, Pekrun (Pekrun et al., 2002a) performs a classification according to the object on which the academic emotion is focused. Thus, academic emotions can be grouped according to their valence (positive vs. negative or pleasant vs. unpleasant), and the degree of

activation involved (emotions that activate vs. deactivate). With these three dimensions, academic emotions can be organized into positive activating emotions (such as joy, optimism, pride); positive deactivating emotions (relaxation, satisfaction, relaxation); negative activating emotions (anger, frustration, anxiety, shame);and negative deactivating emotions (boredom, sadness, disappointment, hopelessness). Positive emotions such as joy, enthusiasm (positive activating emotions) are supposed to have positive effects on performance, while negative deactivating emotions have negative effects. In terms of positive deactivating and negative activating emotions is supposed to have ambivalent effects on motivation and cognitive processing. Even if there were attempts in their wider individual research, anxiety is still the most studied emotion in the academic context, with specialists in the educational field being particularly concerned about its negative effect on students' performance and well-being. According to the control-value theory (Pekrun et al., 2002a), the determinants of emotions experienced in the academic context imply the appreciations that students make about the control and the value/valence attributed to learning activities and their outcomes. In other words, the student is experiencing certain academic emotions when he or she feels that they have control over learning activities or their results that are considered important for themselves. Thus, in order to try to explain the causality of the anxiety manifested in the academic context, the two components of the theory (the control and the value) will be used, which emphasizes that anxiety occurs when the value attributed to the results is high, but there is no perceived control, which implies that success and failure are uncertain, and the subject's attention is directed to the possibility of experiencing a failure.

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How new media has enabled the harnessing of implicit learning

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Abstract:

The term of implicit learning is still subject to controversy. "At least a dozen different definitions have been offered in the field" (Frensch & Rünger, 2003 p.13). While some scholars consider it downright inexistent (see Chun & Jiang, 1998), many others are trying to identify how we seem to acquire knowledge in absence of conscious awareness. Since it manifests in complex environments where patterns can be intuitively observed and interiorized by the learner, various forms of new media and particularly digital games seem to be the best method of investigating its efficiency. This paper aims to demonstrate how strategic use of new media, combined with digital games can facilitate the emergence of unconscious knowledge acquisition and how some of the knowledge acquired in such manner is better stored in memory and translated into skill.

Keywords: implicit learning, explicit learning, new media, big G games**.**

We are all implicit learners and this becomes more obvious when looking at how we acquired our basic skills: We've learned to walk, talk, eat and later on even climb stairs and swing, mostly without being told on how these skills work. We are successfully exploiting laws of physics long before we know they even exist, let alone how they work. Skiers, swimmers, weightlifters and other athletes have their whole careers revolving around laws of physics they can't define or make calculations on. Nonetheless, they seem to have a thorough understanding of how these work. We learn pretty early on that submerging an object in water displaces it, and that its mass, shape, and material will determine how much water it displaces, whether the object will float or sink and all that knowledge is stored in meaningful ways way before we know anything of physics as a field of knowledge.

But let us assume that we get instructed or we explicitly explore how these laws work when we experiment with the world around us. Still, there are many sets of rules we learn and understand at various levels without paying too much attention to them or explicitly exploring their mechanics, partly because we cannot safely do it, and partly

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because there is simply no need to. A good example would be human interaction, and in a broader sense, the social environment. For instance, by the time we reach teenage years we know that the opposite sex represents a potential mate, and we start interacting with it in a way we never did before. Flirting, starting and ending conversations, behaving in a group and earning member status, its internal and external dynamics, relating to several groups in various contexts, etc. All the undoubtedly valuable skills derived from social activities are acquired implicitly. Some do better some do worse based on talent, personality, character, experience etc. Nonetheless, aside from general rules uncovered by social psychologists which can be found in handbooks, nobody is teaching us how to do it, and even if we examine events, we map our own rules according to the associations we have the talent and wits to make. And since our social challenges are deeply tied to our personal characteristics and context, general rules or the shared experience of others will be of little to no help.

Moreover, we almost never explicitly experiment freely with our social life since it is either dangerous – failure can result in damage or loss of friends, groups, status etc. – or impossible – you don't get to replay and practice your social experience in that particular context ever again. What we do instead is assume outcomes and try, to the best of our abilities, to observe and confirm or infirm our hypothesis. While this might be defined as explicit learning since we intentionally investigate events or people, the basis for the emergence of the hypotheses are rather merely the result of instantiated, incidental observation, thus not explicitly learned. Most of us simply *go with the flow*, have a *gut feeling* without further examining and rather *just knowing* how things will turn out.

This particular type of knowledge or skill which seems to *just exist*, without us being able to pick up where it came from is what I refer to as implicitly learned.

Working definition:

In absence of a widely-accepted, comprehensive definition of implicit learning, we will refer to it simply as *learning which occurs unconsciously and unintentionally*. This implies that the learning goal is not the acquirement of knowledge or development of a specific skill/set of skills. Since learning occurs whenever we are exposed to environmental stimuli that can be absorbed, in the sense that they either act directly upon one or multiple receptors or manifest their effects in such way that their results

can be perceived, direct action aimed at learning cannot be an intrinsic condition. From this standpoint, we can consider most empirical and experiential learning as implicit since its goal is seldom achieving a certain level of skill or acquiring knowledge but rather solving problems, reaching conclusions, developing a product and so on.

Let us take the example of a traumatic event. It is incidental, rememberedunintentionally, and the resulting trauma is, in fact, an experience we memorized. In most cases though, the triggering events will stay with us and will have an impact on how we behave or conduct our lives from that point on, or until the memory slowly fades. For better or worse, the *knowledge* of the triggering events will stay with us and since we actively use the information to conduct our lives, it falls under what I call here learning.

With this last example, the connections between implicit learning and implicit memory become obvious, and since implicit memory is known to work unconsciously (Lewandowsky, 2014), at least some of the information stored within *must* also be learned unconsciously. I use the term *must*, since the multitude of our needs implies that some must be unconscious, otherwise most cognitive resources would be allocated to satisfy them every couple of seconds. For instance, the needs which are addressed immediately and trigger unconsciously execution: like the sudden change in body pose when the previous becomes uncomfortable or antagonistic poses which relieve pain and are unconsciously executed, that is, without analyzing or investigating how they work and why we feel better or relieved when we execute them, or even realizing we executed them.

Whether or not we learn the poses and use them whenever needed is not even worth investigating, since it is obvious that we do. If implicit learning would not occur in this manner, we would, for instance, have a small accident and hit our knee on the new desk every time we sit down unless we explicitly and actively invest cognitive resources into learning not to – which we don't.

I would argue that implicit learning does exist, and while a comprehensive classification of its forms would shed light on the matter, learning without express intent to do so occurs in so many ways, that it's nearly impossible to deny its existence. It's always been hard to measure *invisible* things, but when trying to measure implicit learning, on top of the fact that we are measuring parameters of the human mind which

are particularly difficult in itself, we are trying to measure something that is invisible even to the conscious mind, until proven otherwise.

The working definition provided implies that the conditions needed for learning to be classified as implicit are:

- The learner has no perceived learning goal, or the learning goal is offset;
- The learner is unaware of – does not perceive – the learned concepts or content;
- The learner is able to make use of the concepts or content learned;
- The learner cannot articulate or explicitly identify what they have learned;

New media and implicit learning:

New media is characterized by interactivity and endless customization that offers immersive consumer experience. From short clips to motion picture, from apps to digital games, new media opens doors that were never there before. Never before in history could we replay and analyze the events on the stage of a theatrical play, unless replayed by the actors which made it another instance altogether. Never before could we immerse in complex simulated environments, test and simulate virtually anything, from the movements of the stars and physics phenomena to macro-social mechanics and emerging markets

In this rich environment, almost any kind of content is only a couple of mouse-click away. And since information and content are customizable, interactive and made to be attractive, learning can and will take place anywhere on the internet since the vast quantity of informational bombardment implies memorization, be it conscious or unconscious. But while memorization can occur unintentionally, so can learning.

Let's start with video material which includes all videos from commercials and short clips to motion pictures and TV series. Remember that annoying commercial which had a song in the background that you couldn't get out of your head for days on end? While the priming effect – widely exploited for marketing purposes – is mainly responsible for the song lingering in your memory (see Minton, Cornwell & Kahle, 2016), what you implicitly learned are the lyrics of the song – if any – of the lead melody at least. Whether or not they will ever be useful depends on the content and/or contexts in which that particular content may be useful. But you are aware of the fact that: a) you

know the song, as in you can recognize it; and b) you memorized its lyrics and/or lead melody – and thus, we cannot classify it as implicit knowledge even though it was learned unconsciously and without intent. Instead, what I want to emphasize is that you may also have implicitly learned the internal rules of how commercial videos are engineered which can be very useful when, say, you want to produce your own material. Definitely, the large array of materials you have seen will come in handy, and when constructing your own clip, you will easily identify which components are missing, like a catchy or annoying song, effects, message and so on. This means you know – without knowing you did – the structure and elements of a video clip and this set of information meet all the requirements to be considered implicit knowledge according to the above-mentioned working definition.

Learning from digital apps works the same way. Structurally, they are but layers on layers of functionality: from operating modes to instances – of the same element, of the environment, of the rules set, options, etc. – interconnected by complex sets of rules and conditions. This much is obvious to the digital native – but how? They hardly learn about it, especially at the ages they start using them. Yet, these rules are clear to them, and even in the absence of the notion, based only on its corresponding abstract representation, they are classified and mapped, in other words, mentally operated on.

Most digital natives will know the algorithms required in order to boot up and play a game or navigate the internet on a computer, use smartphones or tablets and even some apps, and better yet, even type relevant words on a keyboard to fill in a search query, long before they've learned how to read (see Miller & Warschauer, 2014). Seldom had any parent or peer instructed them on how computers work, how the inner rules of the operating system require them to launch an application and navigate through the main menu before being able to reach the content they were searching for, turn up or down the sound or luminescence. And even more seldom had any of them experienced to see how the operating system actually works. Incidentally, through exposure, they *picked up* these rules as they went: they are definitely unaware they've learned them, unable to articulate them, most certainly never made a goal out of learning how they work, but still, know how to use them in order to satisfy their needs.

Sometimes, the satisfaction of user needs may require investigation and explicit inquiry on how to obtain the desired outcome, like the tuning of luminescence or sound

for instance, and that may well be considered explicit learning. Still, the generalization that derives from that instance where a particular icon with a particular symbol, placed under a particular panel of options, is still unconscious, since normality is set on the spot, at first instance, without the knowledge of the user. When faced with the same need but in some other software, the user will search for the option since he knows such option exists and *assumesby default* that this option must exist in other software as well. Like most things though, at very young ages, using digital devices and witnessing the effects of options are accidental or pure exploratory.

Obviously, this line of argumentation is correct as long as we don't consider a child's intrinsic curiosity in itself an explicit endeavor in learning which would make learning – of virtually everything – and not the satisfaction of needs – in this case, curiosity – the very goal of the child's behavior.

Most software developers when advertising their products highlight the *user-friendly* and/or *intuitive* user interface. Since implicit learning is based on intuition which in turn is based on familiarity with patterns, a more intuitive user interface only means it facilitates learning and habituation without further explanations, faster. By now, familiarity relates obviously more to other software and their user interfaces rather than reality. But menus are still simulating drawers in a cabinet, and many options still use sliders, radio buttons and other virtual elements which relate to representations of real things from the real world which we are exposed to in our everyday life.

Digital games are similar to digital apps but they hide implicit knowledge at a much deeper level and can develop full competencies, that is, with content acquisition, development of skills and shaping of attitudes. However, from this standpoint, at this level of generalization, there are two types of digital games (Gee, 2011): the *Big G games* and *Small G games*. And while both can develop full-blown competencies, the kind of competencies they develop, their depth and complexity are different by a large margin.

For instance, Pinball and Tetris can both be considered digital games since they are digital applications operable through a digital terminal, are intrinsically interactive – which means they require sustained input in order to work and offer feedback – and are meant to entertain. However, they cannot be compared to complex strategy or tactical

games, RPGs (role play games), FPSs (first person shooter games) or MMOs (massively multiplayer, online games).

While small G games can only develop or train some skills like reflexes, eye-hand coordination and some strategic handling of momentum – in Pinball – or visual-spatial orientation, strategic placement of primitive shapes and thinking under pressure – for Tetris – big G games develop a much wider set of skills, they include content and stimulate attitudes simultaneously.

One may say that strategic games are all about strategy, and that is correct. It's just that the more complex ones are never *only* about strategy and even if they were, strategy comes in many different shapes and sizes: one must strategize economy, production, population, expansion, military tactics, and strategy, etc., and all these come at least in two sizes: micro and macro-management. Each of these skills is needed to interact in complex ways with a vast variety of content: units, buildings, geography and various other elements, and each of these have characteristics, parameters, and functionality. In addition, the content must be set in a world which will serve as a context. This additionally implies the existence of history, characters, and events, which ensure the purpose of the player's action and drive. All of the content interacts through complex mechanics, where sets of rules become interdependent and conditioned by either the player or the game environment.

Just like skills, various attitudes – as components of any competence – can be developed by gaming experience: ignorance, rashness or thoughtlessness, laziness and lack of perseverance or superficially interpretation of information tend to be taxing, and when it comes to games that involve multiple players, the variety of attitudes that can be learned are as many as they are in any environment where multiple individuals have common and/or conflicting goals.

Big G games as virtually cleverly simulated worlds in which the player is an actor, an entity, or even both, in various instances. But while the above-mentioned skills and content are virtually the second level of interaction, the first level of interaction is the actual user interaction: the user's input skill which has to be learned in order to efficiently operate in the game world. Only after acquiring the necessary input skills can a user immerse into the world, explore and play and sometimes even exploit the game rules.

I would argue that most of the above-mentioned skills and content are learned implicitly since the goal of the learner is basically to have fun. It is true that in the case of digital games, having fun is somewhat the same as learning, but it is only so in the sense that when watching a movie, one wants to *learn* what happened to a character or what will happen next. Still, hardly anyone would classify watching a movie as a learning experience, even though that's what it virtually is. And this mismatch between what *learning* means when comparing explicit learning with implicit learning is caused by the perception of the learner. For as long as learning is passive, not perceived as learning, it feels effortless, and explicit learning rarely feels so.

When playing a Big G game, just like when watching a movie, the player's drive is oriented towards the next goal – usually the mission objective or quest at hand. Unlike movies, digital games add layer upon layer of drives, acting as pull factors for the player to continue playing. The missions or quests reveal new locations, characters, interactions; usually unfold multiple story-lines coating the main storyline, give rewards upon completion which add to the complexity of the game: either new abilities or equipment for the hero, new units or structures for the commander to work with etc. Uncovering the story goes hand-in-hand with the development of the character the user is projecting his identity on, which enables, even more,combinations and open up more possibilities. In all ways, a cleverly designed game has an optimal learning curve for the target audience, and it is usually relatively late in the progression of the game that the user needs to explicitly learn anything – by searching the internet which may feel like researching and may be less fun.

Mostgamesdesignrevolves around a system that introduces new information – even the basics – in a way that renders learning effortless and makes it fun, most times cleverly integrated into the story in form of a quest or mission. And while the player is explicitly told what to do in this manner, the skills players need for the completion of the task at hand were introduced before, in other ways which seemed meaningful.

As the player progresses, tasks start requiring better-polished skills and are more complex. But since the previously learned skills' iteration has been ensured by game design, by the time they become complex, the user's ability to use them appropriately is proportionally developed, and even if previous strategies fail at certain points – which

are again intended by game design – the player has enough understanding of the game world by now to know they need to change tactics and experiment.

Considering the content approached by today's digital games: from history (see Crusader Kings series, Total War series and Age of Empires series) and fiction/culture (see The Witcher series, Mass Effect series, Dragon Age series) to philosophy (see Bioshock series, Soma, The Talos Principle), the informational acquisition contained is far from useless or non-transferable, especially since the emergence characteristic to digital games is deeper and more personal than that of motion pictures or other types of media. The player projected on the character stands to lose or win, make choices, act according to own feelings and alter the course of events.

Digital games and other types of media can be successfully molded into instructional designs. By careful planning, strategic recommendation of media intake – specific clips, motion pictures and digital games – and with the educator acting merely as a mediator, delivering short lectures binding the skills and knowledge implicitly acquired by the learner, abilities, and competencies can be developed, complex concepts can be acquired, and even attitudes can be stimulated.

Harnessing new media's implicit learning potential

A mixed investigative study conducted on 271 high-school Romanian students from four high-schools of both genders, aged 16-18 following a two-month formative intervention plan using short video clips, commercial digital games and artistic motion pictures shows higher post-intervention scores in digital literacy (Scor DS/RDS) and critical thinking (Scor GC/RGC) for the experimental group in comparison with the control group as shown in figure 1.

Figure 1 – Test Scores (RDS/RGC represent post-intervention testing session scores)
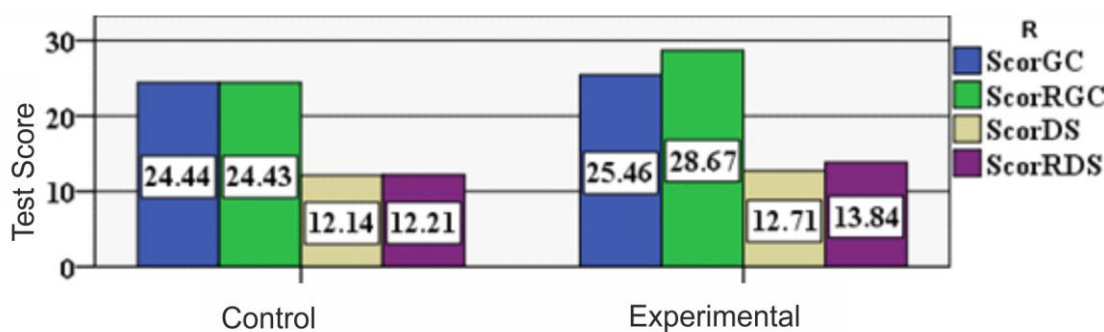
The participation variable is strongly correlated with the retest scores for both critical thinking r=.43, p<.01 and digital literacy r=.22, p<.01 tests as shown in Table 1.

Table 1 – Correlations between participation and the second instance of testing

		Participated	ScorRGC	ScorRDS
	Pearson Correlation	1	**,430****	**,227****
Participated	Sig. (2-tailed)		,000	,000
	N	271	271	271

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

The formative intervention consisted of a simple online group on a social media website. On this group, various media materials were strategically posted by the educator and discussions regarding them were stimulated.

Digital media was strategically selected to tackle subjects of interest to the pupils at the time in such way as to not directly target the skills that were aimed at developing. This allows for a greater flexibility in selecting media content according to the pupils' needs of information, interests or affinities while the educator is pursuing his own formative agenda.

The program was implemented for two months, and the educator has acted only as a moderator, posting comments and short teasers, challenges and eventually, explanations on why that media was selected and what it was meant to do. This tactic of delayed explanation was used to create learning experiences that worked as epiphanies or what I would call *eureka* experiences. Attending the program, consuming the media or participating in conversations was never mandatory. After the end of the experiment, the participants were asked to fill in a feedback form on how they felt about the intervention program. All participants reported they felt *going on the platform was a waste of time or stole their free time* were eliminated from study results, since the aim of the intervention was to harness implicit learning, thus effortless, unperceived, unconscious learning, virtually simulating spontaneous media intake which occurs naturally among high-school aged students.

The study was aimed at innovating simple and accessible ways in which educators can stimulate the acquiring of knowledge without increasing the perceived workload of

the students. The resulting formative program is a flexible instructional model that can be used by educators to form a vast variety of competencies for which relevant – both useful in addressing the target skills or content and enjoyable by the educator – media material can be identified.

Since homework is considered particularly unpleasant by most students, proper implementation of such programs by either an educator or group of educators could reduce or even eliminate student perceived home workload while actually learning more, and potentially increase educator's performance, since more time can be allocated to discuss concepts and develop transferable skills in class, instead of delivering content or iterating exercises.

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Comparative theoretical approaches of developmental disorders to normal and disabled children

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Abstract:

Developmental disorders are a complex concept relevant to the multidisciplinary approach of children with special educational needs. The person with a developmental disorder is affected both by integrity - the complete somatic and psychological structure and functionality – and the ability to be a psycho-biological wholeness, the two aspects being in close interdependence. Developmental disorders are inherent in children with disabilities, but can also occur under the conditions of a normal intellect, for example, in the form of learning disabilities. In both situations, developmental disorders lead to increased learning and adapting to school requirements difficulties, imposing the implementation of a system of services appropriate to the individual needs of children with developmental disabilities that satisfactorily support the global integration effort.

Keywords: Developmental disorders, disability, special educational requirements, learning disabilities

Human development means the gradual formation of the individual as a personality, a complex process based on bio-morphological growth, psycho-functional maturation and socialization, in the plan of adaptation (Radu Gh.,1998, p. 34). By development, in general, is meant a complex process of transition from lower to superior, from simple to complex, from old to new, through a succession of stages, each stage representing a more or less rigid functional unit, with its own specific qualities. The transition from one stage to another implies both quantitative accumulations and qualitative leaps, which are in a reciprocal conditioning.

The notion of developmental disorder was defined for the first time in 1974 by Achenbach in the volume called Developmental Psychopathology and constitutes a complex concept because it represents the interface of two not by far simple processes, of mental development and maturation, on the one hand, and the one of constitution and a flawed evolution on the other.

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By means of developmental disorders, we understand all those deviations from the normal physical and mental development pathway that clearly and continually impinges upon the child's physical and social interactions with the environment.

Developmental disorders are associated with "a wide range of disorders characteristic of childhood and the structures of the existential environment" (DV Popovici, 2000, p. 59) Moreover, with regard to the causes that lead to developmental disorders, "it should be made a clear distinction between the intrinsic factors, which are related to the deficiencies of the subject in question and to the characteristics of the environment, including learning experiences "(Gh. Radu, 1999, p. 75).

Developmental disorders are inherent to any complex deficiency or disability, generating a stable unadaptability, ie, a disability state. However, the child is a developing being and can be confronted with imbalances that can lead to crises that can even lead to regress. On the other hand, the child is a developing human being, the symptoms observed at a given time may change or even disappear quickly. Therefore, we can talk about the disorder only when the child has a fairly stable symptomatology.

In the Manual of Diagnosis and Statistical of Mental Disorders (DSM 5) and International Classification of Diseases (ICD-10) in the developmental disorder category are described:

1.   Intellectual disability - Mental functioning significantly below average (QI about 70 or less), starting before 18 years, and through concomitant deficits or deterioration in adaptive functioning (DSM 5)

2.   Specific developmental disabilities related to school abilities (reading, writing, arithmetic abilities): dyslexia, dysgraphia, dyscalculia (ICD 10, DSM5)

3.   Communication disorders - characterized by speech or language difficulties: specific speech articulation disorders, expressive or responsive language acquisition disorders, stuttering (DSM 5, ICD 10)

4.   Pervasive developmental disorders - autism spectrum disorders: Infantile autism, Rett syndrome, childhood disintegration disorder, and Asperger syndrome (DSM 5, ICD 10)

5.   Attention Deficit Hyperactivity Disorder (ADHD) - includes hyperactivity / attention deficit disorder characterized by notable hyperactivity-impulsivity symptoms (DSM 5)

Intellectual disability

Gheorghe Radu (2000) shows that "mental deficiency refers to the phenomenon of organic damage and/or functional impairment of the central nervous system, with negative consequences on the process of mental maturation, development in different aspects, to the individual concerned."

The American Association for Intellectual and Developmental Disabilities (AAIDD) defines it as such (2016): "Intellectual disability is characterized by a significant limitation of the ability to develop adaptive behavior of conceptual, social, and practical skills. Disability occurs from the age of fewer than 18 years."

The most common classification of mental deficiency is based on the measurement of the intelligence coefficient by tests, the coefficient of psychological development, the assessment of the possibilities of adaptation and integration, the elaboration of the communicative behaviors and the relation with the others.

Characteristics:

- are deficient in analysis and synthesis

- have slow thinking, with a barrier of thinking or lapses, even moments of mental void

- narrowing of the perceptual field, difficult orientation in space, reduced intuitive capacities to establish the relationship between objects, thinking is not creative but reproductive

- Children have difficulty in acquiring writing and reading and mathematical calculation

- Most of them have a motor hyperactivity, are unstable, shy, emotional, inhibited

- solve the imposed tasks only up to a certain level of complexity and abstraction

- they often face school failures that can be the basis of tense and contradictory feelings that generate behavioral disturbances

- they present a socio-emotional immaturity, difficulties in relation to others, constant functionality of unpredictable and unmotivated relationships

Language/communication disorders

They appear on the background of a normal level of intellectual development and are more common in the very young age students but in the absence of adequate therapy, they persist in the years to come. Language disorders are also present in children with some form of mental retardation and their severity and resistance to speech therapy are more pronounced.

The child with language deficiencies is characterized by the following clinical and psycho-pedagogical aspects (Gherguț, 2005):

- Fragility and instability - is due to factors that disturb the interpersonal relationships of subjects with speech disorders and those with the environment. It can manifest: fear in pronouncing words, isolation, rigidity, inertia in communication;

- Affective-emotional and volitional disorders - can go through prolonged depression;

- Psychomotor excitement - it can be manifested through permanent agitation that occurs depending on age, temperamental features, education and mental development of the person with language deficiencies;

- Internal conflicts - can negatively influence the formation of character and the natural development of psychic processes, especially when language deficiencies persist over time and become chronic;

- Abstaining from presenting ideas and thoughts, even when the subject with speech disorder has reached an advanced level of culture;

- Reducing social relationships - because of the difficulties encountered in communication and the understanding of the message from the interlocutor, especially if the language disorder occurs due to other deficiencies, social integration is very difficult either because of the lack of / poor understanding of verbal language, in the case of hearing deficiencies, or due to the compensating role of the word in the formation of representations, in the case of visual impairments.

Specific learning disorders/dyslexia

Concisely, dyslexia is defined by Emil Verza in the "Logopedia Treaty" as a "syndrome that encompasses all the difficulties child experiences in learning reading in conditions of independence from mental level."

Dyslexia is manifested by the paradoxical, more or less acute, theinability of the child to learn reading correctly. As a matter of fact, the subject fails to bind the grammar symbols, fails to link the sounds heard and the letters written, with constant and repeated confusion between acoustic resembling phonemes, their letters, and graphs. These children usually have a level of intelligence over 75-85; those with a coefficient below 70 are diagnosed as having mental retardation.

In the case of dyslexia we encounter the following typical errors (Verza, 2002):

- The group of reversal difficulties in the sequence of letters: deformations of words as a result of permutations or suppressions of letters, syllables (generally omitted or permutations consonants p, r, s); word deformations due to the suppression of the last letter; additions of letters or words.

- The group of difficulties characterized by omissions/substitutions: omissions of letters, graphic elements, final words syllables, letter substitutions, words or whole rows.

- The group of rapid error difficulties characterized by fragmentary reading, sometimes extremely slow, sometimes precipitated, with many hesitations in reading the words, with long breaks, meaningless reading, and the words are sometimes guessed, sometimes substituted, without logical justification, forgotten, repeated, skipped lines, repeated turns.

- Orthographical error group consisting of symptomatic errors, fake symbols according to transcribed sound, errors in rules, due to visual or auditory confusion, syllable inversions, omissions, superfluous letters additions, anticipation, perseverance, unstructured words in an ensemble.

Specific learning disorders /dysgraphia

Dysgraphia is defined as an inability or difficulty to learn writing by common pedagogical means, expressed either by substitutions, omissions, inversions of letters and syllables, word merges, or disruptions in drawing letters or analytical layout on the page, independent of the mental level or the school history. Dysgraphia is an incapacity of a child with normal language, hearing, mental development to learn correctly and to constantly use writing under normal schooling conditions (pedagogical method, didactic material, school props, etc.).

Dysgraphia is an important learning disorder by writing and is not attributable to mental retardation or sensory, neurological, emotional or economic, cultural or inadequate instruction.

The writing of these children consists of short sentences, poor in expression; the graphic productions of these children are marked by clutter and error, both in drawing letters and in grammatical, syntactic and morphological aspects.

The emergence of specific disorders in the development of graphic expression skills implies:

- Difficulties in visual-motor integration (the child can speak and read, but cannot perform the correct motor operations necessary to draw graphic symbols such as letters or figures)

- The child has difficulty in reviewing (he can read and recognize the words but cannot review the letters and write correctly after the dictation)

- There are shortcomings in the enunciation and syntax (it can copy the graphic symbols correctly but cannot organize them in a rich expression, with communication value)

- The development of the kinesthetic analyzer is delayed, and the child is unable to draw graphic symbols correctly; so it exceeds the line, writes times too high or too small, etc.

Specific learning disorders of mathematical calculus/dyscalculia

Like other learning disorders, this disorder is characterized by an impairment in the development and acquisition of schooling abilities, respectively the arithmetic calculus capacity, an impairment that is severe enough to be observed and become a disturbing factor in aschool activity.

This deficiency cannot be explained by a low level of intelligence, a lack of school education, a visual, auditory or other somatic or psychological disorder; also, in the case of these children, there can be no economic or cultural disadvantage that has led to dyscalculia.

These children present:

- The mathematical calculus capacity, measured by standard tests, is significantly lower in relation to the chronological age of the child, relative to intelligence and appropriate education.

- Difficulties in learning number names, writing them, understanding the concepts of combining and separating, using signs and working with them, have difficulties in understanding the concept of value, have difficulties in aligning the numerals, maintain their order, always make mistakes, have a certain pattern for error, have an inaccuracy of calculation, calculate with much weight in mind, have problems with graphical representation of information.

- They have difficulties performing basic arithmetic operations - adding and subtracting - memorizing numbers, tracking specific steps in counting, counting objects, multiplying, etc. Intentional symptoms include inconsistency in copying numbers, omitting calculation marks, decimals, or symbols when writing the answer. Often dyscalculia is associated with dysgraphia and dyslexia.

Pervasive developmental disorders

Pervasive developmental disorders represent a group of neuropsychiatric disorders characterized by anomalies and deviations in social development, communication, and cognitive development, with onset in the first 5 years of life. These disorders differ from other developmental disorders and specific behavioral features.

In the updated DSM-V version, autism subtypes (autism, Asperger's syndrome, and unspecified pervasive disorders) have been unified in a single diagnosis - Autism Spectrum Disorder.

Before the age of 3 years, there is development impairment in the following areas:

- the function of communicating the receptive or expressive language is affected, the development of social skills is affected by the inability to have emotional reciprocity or attachment

- the child cannot and does not know how to use facial and body messages in expressing emotionality; eye in the eye look, gestures and body posture

- the child cannot acquire the ability to relate to those of the same age, cannot express its interest, joy, share the toys

- socio-emotional reciprocity is poor, the child having bizarre or deviant answers, emotional modulations are inadequate to the context, and integration into the social context is through inappropriate and chaotic communication

- stereotyped and repetitive motor behavior, with hand waving, rotating and moving the whole body, preoccupations with thestereotyped game with parts of objects or with non-functional objects; smells, touches with tongue or listens to the sound of objects

Difficulties people with autism have at the level of social interactions with others are the central problem of this disorder (the main symptom) and also the main diagnostic criterion. Studies show that this deficit is permanent and is encountered irrespective of the person's intellectual level.

Attention Deficit Hyperkinetic Disorder (ADHD)

Attention Deficit Hyperkinetic Syndrome (ADHD) is a child's behavioral disorder, which is manifested by attention deficit and difficulty in carrying out a task.

ADHD is characterized by the early onset, before the age of 7, of a combination of hyperactivity, disorderly behavior and lack of attention:
- the child's inability to maintain his attention, which is easily disrupted by the surrounding   stimuli;
- hyperactivity, leading to inappropriate behavior;

- impulse (affecting brain areas of inhibition) that causes the child to engage in various, even very risky activities, without being able to assess the severity of the risks.

The hyperactive child has a low concentration of attention capacity, difficulty in controlling attention, manifested by behavioral and cognitive impulsivity such as unease

and impatience. These children have no patience, they do not sit still, and they have difficulties in dealing with others. These peculiarities make them always disagree with adults and not be accepted by those of the same age. They have school difficulties due to lack of attention, disorganization of behavior and impulsive style.

Primary and derivate disturbances into developmental process

Due to their anatomic physiological nature, the primary affections are much more resistant to the therapeutic-compensatory intervention and are treated, especially, by medical means. Instead, derived (secondary or tertiary) diseases are less stable, can be corrected, compensated, or even prevented by appropriate psycho-pedagogical measures, particularly through a compensatory learning process initiated in the appropriate time interval.

It is known that specific developmental disorders occur at different levels of the personality structure, any deficiency - named after the level at which the primary defect is present - presenting a certain constellation of derived, more or less pronounced disturbances.

In deaf and children with hearing impairment, primary affection is at the level of the hearing analyzer, which also creates difficulty in adapting because hearing is the basis of oral speech, contributing, alongside view, to orientation in the environment, to controlling the manual activity, etc. Total suppression or partial impairment of the auditory function determines, as a major developmental disturbance, the inability to spontaneously structure verbal language and engage in the ordinary process of communication. The deaf child becomes also dumb. Unserved early in the process of specific therapy, deafness will still lead to a number of delays in the development process, especially in terms of higher cognition - children with hearing deficiencies are often characterized by excessive situational conjecture - but also in terms of emotional relationships, behavior in ordinary collectivity, etc.

Consequences of developmental disruptions in the process of school integration

By synthesizing the above in relation to developmental disorders in children, we can say that these disorders are present:

a) In children with deficiencies - seeing, hearing, mental, physical, etc., in which the developmental disturbances overlap with the organic ones (primaries), especially in the early ontogenesis and in their own way to each deficiency;

b) In some children with normal potential (ie without deficiencies), but developing in poor living and education conditions. In these, developmental disturbances hinder and distort evolution, much worse as they occur earlier.

Both categories of children with developmental disabilities have a number of special needs or requirements in the field of education and social protection, and those with deficiencies in other plans (medical, etc.). In the case of developmental disorders that occur due to deficiencies, it is especially important to detect as early as possible the respective deficiency and the primary disorder that characterizes it.For example, it is very important to realize as early as possible that a young child has a hearing impairment, because if the appropriate measures are not initiated promptly, the specific disturbance in the development process will inevitably arise in the sense of a serious language disorder (secondary) - dumbness - with all its negative consequences in different planes: in terms of emotional reactions, interpersonal and group relationships, learning efficiency, etc.

In the case of this category of deficiencies - as of all others - there are two alternatives:
- either early detection of the deficiency (with its primary condition) and its prevention, prior to the establishment of secondary developmental disorders by initiating appropriate prosthesis, therapy, education, etc.;
- or delay in detecting the deficiency - with its inevitable consequence: the late onset of rehabilitation measures and the establishment of specific developmental disorders, with the aforementioned negative consequences.

The direct consequence is that the early detection of deficiencies as well as of the poor educational environment as well as the prompt initiation of appropriate therapeutic intervention is a prerequisite for integrated schooling for the deficient children. In other words, the integration in the mass school of a deficient child prepares in pre-school, even in the early years of life. On this background, the special role of the family, the kindergarten, and the teacher of the first classes, in ensuring integration, is obvious.

We have tried, in the above, to demonstrate that developmental disorders are inherent in all deficient children if they do not benefit from optimal living conditions and a qualified therapy initiated from their young childhood. We have also reminded that developmental disorders can occur in other children without deficiencies if their socio-familial and sociocultural environment is poor, deficient and therefore non-stimulating.

In both situations, development disorders generate severe learning difficulties, poor adaptation to school exigencies, causing special needs or special educational needs. But while in children with disabilities the requirements are special especially in the field of education and adaptation to the requirements of the school, in the case of deficient children the requirements are special in a much wider perimeter, including in the field of theprosthesis, health care, social, etc.

Developmental disorders have a number of negative consequences in the educational sphere, especially because the contemporary school is a competitive and normative environment by excellence. This leads to the emergence and consolidation of special educational requirements, which impose specialized support outside classroom hours.

It is, therefore, necessary to implement a system of services appropriate to the individual needs of children with developmental disabilities that satisfactorily support the global integration effort. Otherwise, if there is a well-defined and flexible articulate structure, permanently capable of adjusting to the specific conditions not only to each educational unit but also to each student with developmental disabilities, the final result will be a "school for all", an ideal towards which every modern education system tends.

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A follow-up study of implementation of a positive approach of discipline at school and classroom levels

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Abstract.

There is a continuous preoccupation on developing efficient, scientifically and pragmatic-based strategies and techniques in order to improve the educational and therapeutic practices in educational and therapeutic/remedial contexts, The helping and caring professionals are constantly involved in their continuous specialization, by participating in training and courses.

There are insights, there are enthusiasm and optimism, there are motivations, and assuming of personal changes and improvement, there are pledges of improving owns professional practices, for the benefit of those carried out!

But the newly learned methods should be introduced and exercise in the life spaces of the trainee. And then begin the battle between new and familiar, between not yet fully mastered and quite automatized actions/reactions, between commodity of conformity and the efforts and risks of innovation.

In this paper, we want to investigate the factors who promote the change and those who explain the inertia and the resistance to change. Identifying the mechanisms which enhance the acquisition and the implementation of new methods grants efficient professional and institutional evolution and improvement

For this purpose, we will present the assessment of two initiatives of introducing and promoting changes in educational context and in intervention strategies. The follow-up techniques (scales and focus group) reveal the factors that promote the change, and, also, the factors that favor the inertia and the resistance to change.

We assessed the impact of a training on positive discipline and LSCI methods to the teaching and discipline strategies, in a follow-up study of 40 trainees, primary and secondary teachers, from mainstream and special schools.

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Introduction

The school is one key-institution in socializing children. As a social institution, school values are strongly regulated and embedded in social norms and values. A growing number of students have difficulties in adjusting to social and schools' requirements, and these difficulties are expressed in forms of inappropriate behaviors and conflicts. Society and schools are approaching these discipline problems mostly reactively and with punished-based techniques. This practice proved to have no long-term beneficial effects on behavioral modification and on pro-social abilities development (Predescu, M.; Dârjan I.; Tomiță, M., 2014). Even more, this punished-based practice might worsen the situation, generating a keen sense of inadequacy and maladjustment. The main negative side-effects of punishments are resentment, revenge, rebellion, and/or retreat (Nelsen, J., 2010; Nelsen, J. L., & S., G., 2000; Dârjan, I., 2017; Dârjan, I.&Tomiță, M. 2014).

In order to improve schools' climate and procedures for promoting students' academic success and social abilities development, a bunch of innovative, creative and promising new strategies and methods are delivered to the schools and to the teachers through continuous professionalization programs (Seligman, 2009; Fecser, F., 2009; Long, N.J.; Wood, M. M.; Fecser, F.A., 2001)

Despite to scientifically and empirical evidence of the efficacy of these new methods, sometimes the initial enthusiasm and determination (during training) fade away into the comfort and automaticity of traditional, familiar, and well-known old strategies and habits.

One of the main objectives of programs of continuous professionalization should be the development of trainees' devotion and fidelity for the newly acquired knowledge and skills, and the nurture of theirs motivation and strengths to implement them in daily practices.

This is why it is very important to identify the main factors who promote changes and innovation, at individual and organizational levels, and, also, the factors that favor inertia and the resistance to change.

Change in school – motivations and obstacles

The need for change in theorganization and on individual level express the need to continuously develop and refine your strategies and actions, in order to be efficient, fulfilled, and not to become obsolete. The aims and reasons for these adjustments and growth could be diverse, such as acquiring new roles and tasks; material and financial restraints or opportunities, acquisition of new strategies or technology, assuming new missions, shifting the vision or goals; extending the area of interests and influence, etcetera. Changes create ambiguous feelings and might generate oppositional behavioral tendencies. Changes are both opportunities and threats.

In educational institutes, the forces who might request and impose the change are diverse, from governmental decisions to social changes and society's values, the pressure of newly developed technologies, and administrative and personal needs and processes (Yılmaz, D.; Kılıçoğlu, G., 2013).

The most important motives educators become resistant are the sudden and un-announced character of requested change, the excessive grade of uncertainty generated by the change, the sensation of losing control, the discomfort of losing familiar routines and habits, the distrust in the permanent character of the change, the feelings of being told that their previous strategies were wrong, the fear of proving incompetent to learn the new competencies, the ripple (butterfly) effect of disrupting in one domain which will affect all the others, the work overload, the fear of being in the losers' group at the end of the changing process (Rosabeth Moss Kanter, apud. Scott McLeod, 2011; Yılmaz, D.; Kılıçoğlu, G., 2013). Also, the changing process might be negatively affected by insufficient funding and the fatigues that accompany the efforts to change (Scott McLeod, 2011).

It seems that the resistance, due to most of the above motives, is greater from staff part, while the managers' orientation toward change is more optimistic (van Wyk, A.; van der Westhuizen, Ph.C.; van Vuuren, H., 2017). Yet, it is easier to change and to sustain the changes when you are in charge and in control. That is theway the teacher could apply the changes to their classrooms, strategies, and curriculums, but need the management of the school's collaboration in order to change the environment and procedures outside the classroom.

The resistance to change could take different forms: aggressive resistance, passive-aggressive resistance, and passive resistance (Long, J.E.; Long, N.J., Whitson, S., 2009; Janas, M., 1998).

Kotter & Schlesinger (1979, apud. Yılmaz, D.; Kılıçoğlu, G., 2013) consider six methods that can overcome resistance to change in school: education and communication, participation and involvement, facilitation and support, negotiation and agreement, manipulation and co-optation, explicit and implicit coercion.

Aim and method

The aim of this follow-up study is to assess the perception of positive approach implementation on both classroom and school levels. The follow-up is made in schools that invested in training their staff (professors and managers) in Life Space Crisis Intervention and Positive Behavioral Intervention in Schools. We used a Likert type scales in order to measure the perceived positive approach at classroom and school levels.

The participants are 25 teachers from normal (2) and special schools (2) that are spread across levels and specializations. All participants were trained in positive educational approaches of behavioral intervention (LSCI and PBIS). Also, we conducted one focus groups with managers (trained in LSCI and PBIS).

For the purpose of assessment, we built a scale of 22 items, 12 assessing the positive approach at theclassroomlevel, and 10 items assessing the positive approach at theschool level. All items were developed based on the existing literature and theoretical concepts used in positive education.

Results

The strategy of research is to assess both the perception of positive approach at theclassroom and school level and to compare them. Based on the hierarchy of items we conducted focus groups to see what are the main obstacles and favoring factors of implementing theefficientpositive philosophy and approaches at theclassroom and school level. The items of the scale were assessed on a seven point scale, with 1 meaning not at all and 7 meaning always.

The list of items at theclassroom level and the ascending means are presented in table 1.

Table 1: Perceived positive approach at classroom level - Hierarchy of statements (Alpha Cronbach = .929):

Statements	Mean	Std. Deviation
There are clear systems of collecting, storing, and interpretation of the behaviors manifested in the classroom.	3.60	1.190
Physical and spatial organization of the classroom allow theteacher to offer appropriate answers to all students' needs.	3.80	1.225
Between three to five positive behavioral expectations are posted, defined, and taught explicitly.	3.92	.997
In teacher-student exchanges, there are approximatively 6-7 positive interactions to 1 negative interaction ratio.	4.12	.881
The reactions to inappropriate behaviors in the classroom are adequate and systematic.	4.16	.850
The active management and supervision of students' behaviors are used proactively and preventively.	4.20	.913
Pre-correction and rules reaffirmation are frequently used prior to the manifestation of the inappropriate behavior.	4.20	.816
Students feel safe, listened, understood, and respected.	4.32	.852
Classroom' routine and rules are developed with students participation and are predictable for them.	4.36	.757
Specific rewards and strategies are used to acknowledge and outline students' appropriate behaviors.	4.40	.707
Classroom relations (student-student, student-teacher) are cooperative and supportive.	4.44	.712
The teacher uses frequently the opportunities to teach and enhance positive behaviors.	4.48	.770

The analysis of hierarchy of items shows that the most highly rated items are about the actual interaction between social actors as well as routines and rewarding system. The least scored items are about the environmental factors and establishing expectations and formalizing values and norms. This is one of the traits of Romanian authoritarian system of education where teachers usually establish herself the rules of conduct and expectations.

In order to group the statements, we performed a Principal Component Analysis (PCA) with Varimax rotation. The result was a dual factorial structure that explains 73,13% of thevariance (factor 1 – 42.29% of variance, factor 2 – 30.85% of variance).

The rotated component matrix and loadings of the items are presented in table 2.

Tabel 2. Rotated component matrix after three iterations (Varimax Rotation with Kaiser Normalisation)

Statements	Component	
	1	2
Responses /reactions to inappropriate behaviors in the classroom are adequate and consistent.	**.866**	.334
In teacher-student exchanges, there are approximatively 6-7 positive interactions to 1 negative interaction ratio.	**.842**	.245
The active management and supervision of students' behaviors are used proactively and preventively.	**.827**	.359
There are clear systems of collecting, storing, and interpretation of the behaviors manifested in the classroom.	**.791**	-.034
Between three to five positive behavioral expectations are posted, defined, and taught explicitly.	**.684**	.357
Classroom' routine and rules are developed with students participation and are predictable for them.	**.664**	.524
Pre-correction and rules reaffirmation are frequently used prior to the manifestation of the inappropriate behavior.	**.636**	.542
Specific rewards and strategies are used to acknowledge and outline students' appropriate behaviors.	**.616**	.568
Classroom relations (student-student, student-teacher) are cooperative and supportive.	.403	**.799**
The teacher uses frequently the opportunities to teach and enhance positive behaviors.	.526	**.779**
Students feel safe, listened, understood, and respected.	.412	**.759**
Physical and spatial organization of the classroom allow theteacher to offer appropriate answers to all students' needs.	-.076	**.749**

The second component is easier to label as a*relationship,* based on the fact that all the statements are referring not to concrete actions and reactions, but to a general state of relationships. The first component is about the structure and concrete actions of behavioral intervention. If we relate the hierarchy of statements and the component distribution, we could consider that the main barriers are not relational, but technical, based on improper ways to address disruptive behaviors.

When we analyzed the perception of positive approach at school level we found the following hierarchy of statements.

Table 3: Perceived positive approach at school level -Hierarchy of statements (Alpha = .976):

	Mean	Std. Deviation
Systematic selected information is used to periodic reassessment and modification of personalized behavioral plans.	3.52	1.418
There is a unitary system of collecting and registering data on students' behaviors.	3.56	1.158
Active staff supervision and preventing measures for inappropriate behaviors are more frequently used then punishing and reactive ones.	3.64	1.221
The socio-affective environment of the school improved.	3.68	1.030
There are consistent and unitary procedures of educating and reinforcement of desirable behaviors, and of discouraging the undesirable behaviors.	3.76	1.200
There are a unitary understanding and definition of inappropriate behaviors between staff and managers.	3.76	1.165
There is asimilar preoccupation for sustaining the academic progress and the development of social and self-management abilities of the students.	3.80	1.155
Teachers-students relationships are based on mutual respect, cooperation, and behavioral support actively modeled by the adults.	3.80	1.155
Students feel cared for, protected, and happy in theschool environment.	3.84	1.106
There have been developed positive contacts with families, favorable to active implication and participation of families in educating and disciplining thestudent.	3.84	1.143

Again, the technical aspects of implementing a positive approach to discipline at school level are more difficult than establishing a positive environment.

When we compared the classroom and school approaches, teachers found more easy to implement a positive approach at classroom level that at school level (t(24)=2.69, p=.013).

When asked to reflect on that, the managers agreed that implementing a school wide approach to discipline is harder, due to the fact that there is a great variety of understanding of the issue among teachers. Also, it is difficult to implement standardized models of intervention.

On the other hand, the managers agreed that reflecting on discipline at organization level is usefuland that a common understanding would be a practical way to introduce a new approachto the organizational culture.

Discussions

The results of this research suggest that the main changes, in terms of attitudes, reaction, and strategies are at the classroom level, compared with those manifested at the entire school level. The obvious explanation of this fact is that the teachers trained in positive psychology principles, and LSCI Method are more comfortable to design and sustain changes in therange of their own control, which is their classroom, their students, and, of course, their beliefs, attitudes, and behaviors. The teacher has more autonomy and control over his/her own classroom, students, and didactical and disciplinary strategies.

At theschool level, the change depends on many instances and needs more time to become a reality. The changes of beliefs, attitudes, and strategies at whole school level request either a critical mass of people which sustain them (bottom-up pressure) or the implication and the decision of the school manager or a higher instance (ex., governmental decision/state law, etc.) (top-down pressure).

Conclusions

The changes in schools could go big, earth quaking-like. Usually, these type of changes is generated by top-down decisions. Even though these changes are compulsory, they may proof inefficient, as they raise more and stronger resistances.

But, sometimes, especially in educational contexts, little changes could build-up into a revolutionary movement, if they reach a critical mass or a significant point.

By critical mass we mean the situation in which the vast majority of a school, educational institution agree, and adhere to the same principles of educating and disciplining students, share the same concepts about students, education, and interventions, and use a unitary interventional procedure (Sugai, .2002).

A critical point could be represented by positive results, data that prove the efficiency of these modified approaches. This is the role of action research/research in

action (RIT) (Marzano, R. J., 2003; O'Donoghue, T., Punch, K. (Eds.), 2003; Epstein, J. L& co., 2002; Stringer, E. T., 2008).

For sure, in order to become a rule, the bottom-up changes in beliefs, attitudes, and approaches have to be accepted, sustained and reinforced by the higher stances, or they will be forced to conform to the formally accepted philosophies and strategies. In thecase of relevant data that sustain the efficiency, and, hence, the necessity of these changes, they have to generate similar modifications in top-down policies.

The powerful, positive effects of proactive and preventive discipline should represent the main argument in sustaining the necessity of changing the disciplinary strategies to policy-makers, administrators, teachers, and parents.

The efforts in developing children resilience should take into account the professional training of educators, as agents of social development of the children (Dârjan, I.; Luştrea, A.; Predescu, M., 2016).

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Book Review. Gerrit de MOOR's *The sacred sanction* (2016, Mauretania Publishing, Wetteren, Belgium)

By Mihai Predescu

The reward and punishment system is so deeply embedded in modern educational system that we rarely reflect on it. The book of Mr. Gerrit de Moor brings a new perspective in a field that is so researched that new ways of understanding seems improbable.

The central idea of education, according to Mr. de Moor, is to fulfill the natural need of connectedness, a need that not only defines us as humans, but it is also essential for a good social functioning.

Punishment always disrupts the connectedness, because it is imposed to each person by a higher authority in an arbitrary manner. The individual feel helpless, treated unfairly and without control. Or, the way the adult respond to the disruptive behavior is to restore the connectedness with others, not to engage in a cycle of punishment and misbehaviors.

In contrast, sanctioning an unwanted behavior has a positive effect due to the fact that it allows the children to learn new, more appropriate behaviors, and, in the same time, is strengthening the relations between the child and the adult in working relationships.

The book is structure in two parts. The first part is a historical analysis of punishment from philosophical, educational and ethical point of view. The second part, more technical, presents effective ways of sanctioning unwanted behavior using a range of techniques from positive education, life space crisis intervention and positive behavioral intervention.

The book is easy to read, accessible to both teachers and parents.

The value of the book is undeniable. It offers a solution of managing disruptive behaviors in a humanistic, positive manner, based on a clear set of values, with clear guidelines.

Recommendation for authors

The recommendations below are meant to clarify the expected quality of the journal and its articles.

The authors can send the electronic version, Microsoft Word (.doc), of articles at resjournal@uvt.ro

The sent papersshall be submitted under apeer-review process. The scientifical criteria used by them will be also published. If the article does not respect the technical criteria it will not be included in the peer-review process.

Every article sent to the Editorial Board of the Journal of Educational Sciences in order to be published must not have been sent to other editorial boards or published in any other context.

Editing criteria:
1. The accepted publishing languages are English, Romanian.
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 2010b 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 shall be followed by the keywords section of a total of 5 keywords. The abstract and the keywords section shall sum a total of 800 characters; The abstract and keywords shall be written both in Romanian and English.
6. Each abbreviation shall be explained only at first use.
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8. At least 30% of the references must include papers published in the last five years.

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Online article
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The references are not numbered

Peer-review process

The articles must be sent two months before the publication.

The manuscripts must be edited according to the journal's standards and directions.

The article itself (title, abstract, text, figures, tables, references, etc.) must be sent in one whole document (Word Microsoft Office format) at the following e-mail address: resjournal@uvt.ro, before the deadline.

The papers are selected by a national and international commission of experts with afeasible background in the interest domains of the journal.

During the peer-review process, two referents independently evaluate the scientific quality of the same proposed for publication paper. The journal uses a blind peer-review system.

The results of the peer-review activity shall be transmitted in a period of maximum 60 days from the receiving of the article.

SCIENTIFIC EVALUATION CRITERIA FOR THE JOURNAL OF EDUCATIONAL SCIENCES ARTICLES

CRITERIA	1	2	3	0*
A. Scientific merit of the paper				
A.1. The importance and the actuality of the discussed topic, as well as the relevance of the discussed question upon the research are made.				
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 discussed field on national/international level.				
A.3 The argument and basis of the discussed problem are well clarified and defined (e.g. conceptual clarifications, separating the aspects which shall not be discussed); the central idea of the article is very well drawn.				
B. Potential contributions to developing scientific knowledge				
B.1 The research question is adequately answered, raising conclusions related to the theoretical basis presented in the article and the shared new ideas.				
B. 2 The type and the authenticity level is achieved by the references.				
B.3 The set of conclusions represents a synthesis built on a personal interpretation of the prior exposed results, with references to further developments on the discussed subject (e.g. open questions to research).				
C. Argumentative procedure				
C.1. The research design is correct, the hypotheses are relevant, the methods and empirical investigation instruments are transparent and the interpretation of data is credible.				
C.2 The affirmations are sustained by credible data from research or current theoretical elaborations.				
D. Structure and presentation of the article				
D.1. A logic sequence/connection (the ideas are logically linked together, the transit from an idea to the other is easy to follow, the order in which the parts of the paper are discussed is inherently correct.				
D.2 The used language is coherent, grammatically correct, meeting the scientific standards of expression and argumentation.				
D.3 The imposed structure of the paper is respected: abstract of approximately 800 characters, relevant key-words, and correct quotations.				

EVALUATOR'S CONCLUSIONS:

☐ I recommend the publishing of the article

☐ I recommend the publishing of the article after revise of the author

☐ I do not recommend the publishing of the article

Final comments♣:

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* Note: the evaluation scale of meeting the criteria presents itself as follows: 1 – done; 2 – partialy done (requires further revise or annexation); 3- not done, does not fulfill the criterion; 0 – not the case, does not apply.

♣Please provide explanations regarding the reasons for rejecting the article or list (on a separate sheet)with the concrete revision requirements.