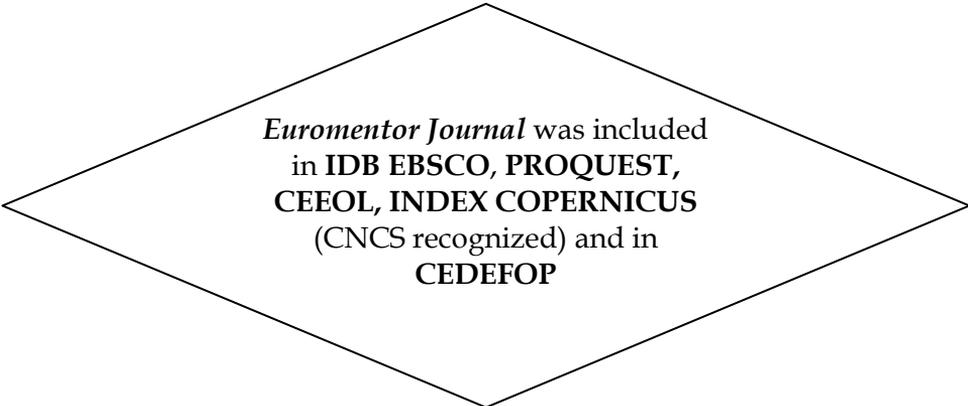


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SOME ASPECTS OF LEADERSHIP IN UNIVERSITY PROGRAM DEVELOPMENT - AND A HYPOTHETICAL CASE OF PIANO TEACHER EDUCATION

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Abstract: *In order to provide appropriate learning experiences for students, and to enhance employability of graduates, universities should make an effort to establish mechanisms that ensure the continuous development of their program offerings in alignment with the requirements of the professional world. Development means change that should be driven by cooperating, visionary and enthusiastic people, who intend to manage dilemmas to resolution, and understand themselves as part of a professional learning community that creates and maintains sustained learning. In university program development, this professional learning community should include teachers, students, professional organizations, governmental organizations, and administrative staff. The complexity of these relations suggests distributed leadership and, at the same time, its coordination. This article highlights these interconnected aspects of leadership in university program development, and illustrates the main ideas with a hypothetical example of piano teacher education.*

Keywords: *higher education, university curriculum development, dilemma management, sustainability, distributed leadership, professional learning community, teacher training, instrumental music teacher education.*

Introduction

Leadership plays an important part in processes of change, however, it might manifest in different expressions, and at different times within

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these processes. As an example for a change process to reflect on, this article focuses on the field of university program development. These reflections about leadership in university program development intend to support further study of piano teacher education programs. Continuous curriculum development is from our point of view necessary to make the teacher training relevant, to increase the value of the professional expertise, economical and otherwise, and last but not least to improve piano student learning and with this the standard of musical practice.

If we understand universities as institutions that prepare for profession, they have to be in contact with the professional world to adapt the preparation towards the need of the professional field. The world changes, professions develop and emerge, and it becomes increasingly urgent to rethink what kind of learning and teaching universities should provide, nurture, and foster in order to comply with the role of professional preparation and expertise development. These reflections should become a continuous effort of all involved, such as teachers, students, administrative staff, governmental organizations, and professional organizations. The following citation persuasively phrases this relation between universities, professional body and curriculum development:

"[The] educational content of programs must be acceptable to the profession, while at the same being deliverable on an ongoing basis by the university department itself. Since the nature of the problems and solutions that professionals seek to deal with change over time, the corollary is that accreditation standards and indeed the content of university programs themselves will require updating on a regular basis over time." (Hurliman, March & Robins, 2013, p.641)

Hurliman, March and Robins (2013) define curriculum development as the wider process of updating the educational experiences that are provided to students. For preparing effective curricula, knowledge and understanding of curriculum development processes are of crucial importance. In this article, some aspects of leadership concerning university program development are highlighted and tentatively explored within a hypothetical case of piano teacher training. These aspects are change, dilemma management, sustainability, and distributed leadership. Although all of these aspects are interconnected and interdependent, they are described here separately in the mentioned succession. Development

means change, change can be the trigger or the result of dilemmas, dilemma management promises sustainability, and sustainability calls for leadership that is not bound to an individual person, i.e. distributed leadership.

Leadership and Change

University program development implies in its terminology the notion of change. Academic education programs have to change, because the disciplinary knowledge develops and requirements in professions alter. However, besides reactive change to 'external' factors, development in academic learning and teaching settings can be motivated by a vision, which can lead to innovation. Although 'innovation' might be a slippery concept and a highly contextualized term (Smith, 2011), it captures the positive energy that lies in the pursuit of a vision that leads to change. This kind of vision should serve a moral purpose (Fullan, 2001), which might, in the context of higher education curriculum, be developing improved teaching practices and student learning experiences in favor of better preparation for the world of work (Hurlimann et al., 2013; English & Steffy, 2005).

As a vision is directed to the future, it holds the quality of uncertainty (Fullan 2001); still, it serves as direction for small steps and goal settings in the process of change. However, even a vision will modify over time due to the experience gained on the way towards it. This uncertainty demands leadership that can distinguish between fads and permanent developments, which then could result in reasonable decisions within important issues in the process of change.

Change takes time, and not only because it arouses emotions in involved parties (Fullan 2001). Change and innovation are highly dependent on the context (Smith, 2011) and therefore have to deal with cumbersomeness. For providing university programs, many agents and stakeholders have to be considered, for example, disciplinary scholars, the professional body, governmental policies, students, and administrative structures. Developing a program successfully requires the coordination of different needs and expectations within certain regulations, a complex feat.

"Change is perhaps the only permanent aspect of an organization" (Kangaslahti, 1991, p. 29). If this is the case, there seems to be a strong need for mechanisms and structures that professionally deal with and eventually facilitate change. Within these mechanisms, leadership plays an

important role by steering the organization in its own context. In his book *Leading in a culture of change* Fullan (2001) describes a framework of leadership: committed members are energetic, enthusiastic, full of hope, and work with a knowledge base of five components (moral purpose, understanding change, relationship building, knowledge creation and sharing, and coherence making) towards their vision in the process of change.

Leadership and Dilemmas

Leading an organization involves finding solutions for problems and managing dilemmas. According to Fullan (2001), leadership is needed for problems that do not have easy answers, which is a common definition of dilemmas. Cardno (2007) defines a dilemma as "*a complex problem characterized by multiple demands or goals, creating difficult options and presenting irreconcilable choices*" (p. 35). She defies the common view that dilemmas cannot be solved but managed, and is convinced "*that it is both possible and imperative for leaders to manage dilemmas to resolution*" (p. 37). This belief indicates the process of change, and as Cardno (2007) describes it, this is a learning process that simultaneously involves "*head, heart and hand*" (p. 33). When approaching a dilemma's resolution, it demands the engagement of knowledge about relevant theories and cognitive reflection (head), the awareness of one's own beliefs and values (heart), and the actions after decisions (hand), all at the same time.

As stated by Cardno (2007), dilemmas include people issues, resources issues and personal issues. A common strategy to approach dilemmas is trying to achieve balance between the involved parties. Cardno takes it further and proposes a curriculum for dilemma management, which encourages an active, even pro-active approach: it is not enough to acknowledge the existence of a dilemma, it also has to be directly confronted, which means for the leader and involved people to leave the comfort zone. Especially from the leaders' perspective it could be said, that if they see a major problem, but do nothing about it, they form part of the problem. Cardno (2007) further suggests learning the skills for productive reasoning ('double-loop learning'), using the skills 'reflection-in-action', and creating a dilemma management culture. In her study (Cardno, 2007) she reports that metaknowledge about leadership dilemmas and dilemma management enhanced the willingness and confidence to confront a dilemma, and mentions that in an ideal case the whole staff of an organization would be equipped with this

metaknowledge, as a first step towards a dilemma management culture.

Fullan (2001) describes the leader's dilemma in a fast changing world as the choice between not acting upon the changes in the environment, and reacting unreasonably fast, which could both have undesirable consequences. The conflict between bottom-up and top-down management constitutes another typical dilemma. Being rigidly organized in one or the other way will sooner or later destroy the activity, effectiveness and power of organizations. Finding a flexible combination between both managerial styles seems to be a likely solution. One possible model of this could be the understanding of organizations as professional learning communities where the idea of distributed leadership reigns. Another particular type of dilemma emerges when organizational needs and the needs of an individual are in conflict. As an example in higher education, it is important for universities to improve teaching and learning practices, however, it is research that attracts higher status and offers individuals academic promotion, not excellent pedagogical practices (Creanor, 2014; Smith, 2011). University program development is located somewhere in this dilemma: without incentives for efforts in regards to improved teaching and learning experiences, it might become difficult for an institution to update their educational programs and continuously provide attractive degree programs.

Leadership and Sustainability

Hargreaves and Fink (2004) define seven principles of sustainable leadership in education. The most essential point is the creation and maintenance of sustaining learning, a learning that sustains itself, that is relevant for the learner, and that is future oriented. Another important point is that sustainable leadership takes care of its successful continuity, which means it prepares for following leadership to secure its success also in the future. Sustainable leadership supports the leadership in others, and sees its distributed leadership as a necessity and a shared responsibility. It considers and acts on issues of social injustice, and develops, rather than exhausts, human and material resources. Sustainable leadership embraces diversity, and if necessary is actively influencing the environment on which it depends to get support.

Fullan (2005) paraphrases sustainable leadership with '*system-thinkers-in-action*'. He defines eight elements of sustainability, which resonate with his framework of leadership (see above; Fullan, 2001). These elements include that the leadership serves the public with a moral purpose, and

acknowledges that its own commitment to change or development within the organization also affects its context and environment with far-reaching consequences. Diverse networks and co-dependent vertical relationships are part of this environment and, they too, influence the development of an organization. Therefore, sustainable improvements can only happen in an environment with a sense of community, within a community of trust, where change is understood as future-directed deep learning on all levels and for all participants.

It is important to emphasize two major aspects for sustainability in educational change; one is concerned with leadership succession, and the other with the establishment of learning communities (Hargreaves & Fink 2004, and Fullan 2001, 2005). Fullan (2005) stresses that we have to get away from thinking and acting in 'reforms', which might be associated with certain leaders; instead, leaders should establish or develop mechanisms that make it possible for the learning community to continuously improve and adapt to the arising needs. "*We must invest and develop institutions, which are 'learning systems', that is to say, systems capable of bringing about their own continuing transformation*" (Fullan, 2005, p. 3). This view suggests, in the context of university program development, that it is worthwhile to establish an understanding of distributed leadership (a shared leadership in space and time), and development processes, which facilitate sustainable change to ensure sustained learning. The following citation captures the sustainability aspect of leadership to the point: "*Leadership is a process not a person*" (Wasonga & Murphy, 2007, p. 25).

Distributed Leadership and Professional Learning Communities

In her theory of dilemma management Cardno (2007) identifies the need for a culture of communication and relatedness to be able to manage issues that predominantly involves people. In addition because sustainable change depends on many participants, Fullan (2001) recommends that organizations, which want to maintain their role, have to become professional learning organizations. The idea of sharing knowledge in productively communicating relationships within diverse networks can be found in the description of co-creating leadership by Wasonga and Murphy (2007, p. 21): "*Co-creating Leadership (CcL) is defined as the proactive and dynamic process of engaging the full use of the organization's pertinent human potential (knowledge and relationships) to design and achieve the organization's vision collectively.*" From this perspective a democratic

understanding of leadership emerges: leaders can 'appear' within these communities, temporarily or in a specific context, because they gain their leadership through trust and support of the community. Co-creating leadership makes it possible to strengthen leaders within organizations for the organization itself.

Dispositions that are required to engage in co-creating efforts in the professional learning community are according to Wasonga and Murphy (2007): collaborating, active listening, cultural anthropology, egalitarianism, patience, humility, trust and trustworthiness, and resilience. Wasonga and Murphy conducted a study of potential future school leaders and identified three main dispositions for successful learning communities. Collaboration is necessary to have access to more ideas and perspectives, which stimulates innovation, and allows for taking ownership of the learning process. Active listening is essential for communicating and developing ideas, for identifying concerns and needs, and for feeling understood and included. Trust and trustworthiness is imperative for a positive atmosphere; most often gained through confidentiality and consistency, it is very vulnerable. All these dispositions have in common that they require at least two parties that engage in the communication approximately on the same level, which leads back to the idea of distributed leadership and professional learning community.

Creanor (2014) transfers a distributive leadership development framework into the context of higher education teaching practices and innovations. For her, the involvement and engagement of staff at all levels is the "*living embodiment of distributed leadership*" (p. 581), which ultimately leads to improvements of student learning experiences and professional development. If professional learning organizations share the vision of ensuring that students learn, educators need to create a culture of collaboration, where exchange of experiences and ideas as well as deep reflection are natural, to promote and support not only student learning, but also their own professional development.

... and a Hypothetical Case of Piano Teacher Education

How would the above-mentioned aspects of leadership manifest in the very specific context of higher education piano teacher training? What could be the driving force of curriculum development, and what could potential dilemmas look like? What would build a professional learning community that aims for sustained learning? – What follows is an attempt to sketch some assumptions in a hypothetical case.

Several factors make the teacher education of instrumental music teachers very different from the teacher education of comprehensive classroom teachers. First of all, it comes from a tradition of artistic master-apprentice relationship, and has a much shorter and weaker presence in academic research. Second, teaching a subject, which is commonly seen as 'additional' and not essential, besides being associated with privileges, might not be perceived as important and therefore not as a serious matter. Third, skills for teaching in a classroom are different than for one-to-one tuition, and last but not least, the professional working environments are differently organized. As much as can be learned from classroom teacher training, there is still ample room for identifying and considering the specific needs for instrumental music teacher training.

In the case of piano teacher training, for example, it might be necessary to consider and reconsider the role of the piano within the cultural context. The adaptation to the cultural development would include revising the content of piano training courses in regards to literature, musical styles, playing technique, or eventually operational contexts, which would be then reflected in the assessment structure. Besides the cultural development, also the technical development of instruments, the use of modern technologies, and developments on the labor market are other reasons to develop instrumental music teacher education programs further. Another factor for driving curriculum development, either externally motivated through governmental policies or the professional body, or institutionally originated through strategies or initiatives, is the improvement of teaching quality (Hurlimann, March & Robins, 2013; Smith, 2011). Especially in instrumental music teacher training, this seems important, because traditionally the emphasis lies in the artistry of playing the instrument, supposing that one can learn best from a good musician.

Within this situation of musical expertise and teaching expertise lies already a conflict with dilemma potential; of course it is important to have high quality skills in playing the instrument one will teach, however, developing high quality teaching skills is equally important to pass on this knowledge for future generations to come. There will always be strong advocates for both skills, and the question might not so much be the supply of the university, but the student teachers' time and capacity limitations, because both skills need plenty of practice and practical experience. A possible solution might be to offer excellent higher education in both skills, and the music education students would have the

possibilities to develop during their studies according to their preferences and capabilities towards a more musician oriented career or more pedagogical career (Carey & Lebler, 2012). Generally, providing flexible choices seems to be an appropriate tool to increase students' responsibility for their own career. However, complex efforts of different experts in various disciplines and administration would be necessary for designing and implementing such flexible degree programs.

Ambitions for standardization and internationalization, and endeavors to create a professional learning community in its local context might concoct another dilemma. Standards might serve the international mobility of students and the general validity of their degree. On the other hand, the unique experience of an individual, well-established and well functioning professional learning community within a tightly woven network of the local environment might be the beginning of new experiences in different contexts, and stimulate further learning, besides the possible option of transitioning more easily from graduation to the professional world in the local context.

The professional learning community of piano teacher training would have to strengthen communication between artistic, scholarly, and pedagogical disciplines. Differently specialized teacher trainers could learn from each other's experiences, for example the piano teacher from the string teacher, the instrumental music teacher from a classroom music teacher, or the special education teacher from an early childhood music teacher. Close relations to the local professional body of piano teachers would facilitate practical experiences for students, enhance the professional development of the guild, and inform the university about developments in "the real world". Good relations to the cultural life in the local context, to various industries (for example, music print and distribution, or instrument development), to international conferences, even to special medical experts or physiotherapists, all have the potential to broaden the knowledge of each and every participant of the professional learning community. These examples stand for horizontal relations, however, it is equally important to foster vertical relations to educational authorities or governmental bodies to ensure long-term funding and support for the educational institution.

A complex network, however, does not ensure by itself the development of sustained learning; it informs all stakeholders, but the productive reflection of ideas and experiences, and the necessary steps that lead to sustainable change, still require a lot of effort and engagement

from all participants. The task of leadership is to establish this productive learning community in a growing network of participants; a huge venture that requires delegating tasks and sharing responsibilities.

Conclusion

Continuous university program development seems necessary to steadily provide excellent and relevant learning experiences for students to be prepared for their life in the professional world. Close cooperation within the institution and with an extended network of experts might inform and support the process if a culture of communication and joined deep reflection is prevalent. Hurlimann, March, and Robins (2013) identified several requisites as facilitators for university curriculum development: the acknowledgement of the need for continuous improvement, a plan that allows the process to be kept on track, the inclusion of divers perspectives, leadership that fosters collegiality, collaboration, and communication, sufficient resources and budget, ownership of program development, and professional accreditation. Identified hindrances, on the other hand, were administrative structures and university governance, lack of time, and lack of incentives for staff involved in the process. It seems that academic and administrative staff have to coordinate their efforts and closely work together in order to be successful in curriculum development. It might be a good idea, as also mentioned by Hurlimann et al. (2013) and Creanor (2014), to assign tasks or even create positions within universities that focus on the coordination of curriculum development processes. After all, modern up-dated curriculums build the bases for quality teaching and learning, which again are amongst the core responsibilities of any university.

REFERENCES

Cardno, C., (2007), Leadership learning: The praxis of dilemma management. *International Studies in Educational Administration*, 35(2), 33-50.

Carey, G., & Lebler, D., (2012), Reforming a Bachelor of Music programme: A case study. *International Journal of Music Education*, 30, 312-327. DOI:10.1177/0255761412459160

Creanor, L., (2014), Raising the profile: an institutional case study of embedding scholarship and innovation through distributive leadership. *Innovations in Education and Teaching International*, 51(6), 573-583. DOI:10.1080/14703297.2013.796716

DuFour, R., (2004), What is a “professional learning community”?. *Educational leadership*, 61(8), 6-11.

English, F.W., & Steffy, B.E., (2005), Curriculum leadership: The administrative survival skill in a test-driven culture and a competitive educational marketplace. *The SAGE handbook of educational leadership*, 407-429. DOI:10.4135/9781412976091.n17

Fullan, M., (2005), *Leadership & sustainability: System thinkers in action*. Corwin Press.

Fullan, M., (2001), *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.

Hargreaves, A., & Fink, D., (2004), The seven principles of sustainable leadership. *Educational leadership*, 61(7), 8-13.

Hurlimann, A., March, A., & Robins, J., (2013), University curriculum development – stuck in a process and how to break free. *Journal of Higher Education Policy and Management*, 35(6), 639-651.

DOI:10.1080/1360080X.2013.844665

Kangaslahti, J., (1991), *Pedagoginen ohjaus- ja seurantaprosessi koulun kehittämisen tukena*. Turun yliopiston kasvatustieteen tiedekunta. Julkaisusarja B:33.

Smith, K., (2011), Cultivating innovative learning and teaching cultures: a question of garden design. *Teaching in Higher Education*, 16(4), 427-438. DOI:10.1080/13562517.2011.560374

Wasonga, T.A., & Murphy, J.F., (2007), Co-creating leadership dispositions. *International Studies in Educational Administration*, 35(2), 20-31.

MANAGEMENT AND LEADERSHIP IN THE ACADEMIC EDUCATIONAL PRAXIS IN ROMANIA

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Abstract: *Our article starts from the idea that the university of the future in Romania needs innovative, radical and consistent changes claimed by the dynamics of the knowledge society by promoting some performing management and leadership strategies in keeping with the European and international standards; a modern university is a school that innovates permanently; a flexible university which keeps meeting the needs of the current society and those of the "mega-knowledge" society which is to follow. The challenge of the modern higher education institutions involves the manager's objective perspective along with the bright visions and commitment of the wise leader.*

Keywords: *university, educational management, leadership, quality, education, scientific research.*

At European and international level we assist at a number of interesting initiatives as to the quality of education, part of them intended to draw the directions towards which the educational and professional training systems and/or subsystems are supposed to evolve in the following years. Not few of these directions are established by consensus at the level of European and international level and will be taken into account for the design and leadership of the national system of management and quality assurance.

The quality assuring policy in the educational field is a complex process and, therefore, in order to be successful it needs to be integrated with the institutional culture of the organization and materialized in and by means of adequate strategies, specific to the management and leadership process. This statement is extremely important because the

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higher education institutions must have a clear and well-shaped institutional culture, in other words a prominent identity in the field of specific and total quality management. Quality Management (QM) and, more recently, Total Quality Management (TQM) is the peak areas of education management¹, new platforms of setting up the organization and management of the organizations interested in quality, in the participation of all its members to the organization's success and satisfaction of its stakeholders. From this perspective, the universities have a more important role than to grant and consecrate social statuses for their graduates and for the members of the academic community, also contributing to shaping individual personalities, strengthening skills and professions, improving and codifying knowledge, creating cultural artifacts. All these lead to individual emancipation and increasing competitiveness in the societies in which they operate.

The university is: a place of learning, teaching and of other processes with cognitive effects; a complex of scientific, cultural, artistic and sporting activities; a space in which the foundations of the future and the social status of graduates are configured and redefined; a reference pillar of the integrative type approach: the triangle university, public administration, community made up of economic and social actors.

Higher Education Management in Romania

Quality assurance in higher education and academic research in Romania is a fundamental task of the Ministry of National Education. In performing this task, the Ministry of Education collaborates with the Romanian Agency for Quality Assurance (ARACIS), other agencies listed in the European Register of Quality Assurance in higher education and the National Council of Scientific Research in Higher Education, the Romanian National Council for the Attestation of Academic Titles, University Diplomas and Certificates and the Council of University Ethics, as required by law. In exercising its powers, the Ministry of Education cooperates with the National Council of Rectors and, where appropriate, with professional and representative national and international scientific authorities and associations, branch trade union federations and legally constituted student federation nationwide. The current Executive Unit for

¹ *The origins and development of educational management as distinct subject au were researched by Hughes (1985), Hughes and Bush (1991), Bush (1999), Bolam (2004). Everything started in the USA in the first half of last century.*

Financing Higher Education and University Scientific Research (UEFISCSU) is a public institution subordinated to the Ministry of National Education with the mission to promote quality and leadership for higher education, research, development and innovation.

The national higher education system comprises a network of approximately 140 institutions of higher education and postgraduate (56 state, 27 private accredited, 26 temporary approved), (one university to 100,000 people of working age), institutions of various types, levels and forms of organization of educational and research activities. Higher education studies can be pursued and completed in educational and research institutions. These may be either universities or institutes, academies or conservatories. Higher education institutions are established by law. In general, each higher education institution, according to its dimensions, can be organized into sub-units such as faculties, departments, research units and production units.²

The strategic direction of a university is ensured by the Senate, even though the operational direction belongs to the Board. The Senate Office includes: the Rector, vice-rectors, deans, vice-deans, department heads. The Rector is also the President of the Senate, and the Senate Office. Universities generally have a decentralized structure, academic, administrative and financial management at the level of faculties, research units and the operational departments.

The most comprehensive framework for university opening and cooperation is the Bologna process. Bologna Declaration, on 19 June 1999, contains the following six actions: An easily '**readable**' and **comparable academic scoring system**, including putting into practice the diploma supplement (a document accompanying the diploma that facilitates the recognition of academic and professional qualifications); **A system based on two cycles**: a first cycle (Bachelor's Degree) useful for the labor market with a minimum duration of 3 years and the second cycle (Master's Degree) to deepen the knowledge acquired during the first cycle; **A system of accumulation and transfer of credits** (ECTS type already used xcu Erasmus); **Mobility of students, professors and researchers**; Cooperation to ensure the quality of academic study programs; **The European dimension of higher education**. The process envisages the

² Dumitru Miron, G. Stănculescu, Ruxandra Ciulu, Carmen Pop, Magdalena Platis, in *Higher Education Institutions as Organizations. Strategic Management*, Online Publishing House, ISBN: 9780973-0-11685, Bucharest, 2011, p.26.

convergence of higher education systems in Europe towards a more transparent system and placement of diversified national systems in a common framework with three cycles: Bachelor's Degree/Master's Degree/Doctor's Degree.

How should the university of the future look like?

The answer to this question is not a simple one. We believe that, at Romanian university level, we would like to be taken into consideration some strategic directions that could lead us, into a manageable timeframe, towards: *a university that is constantly innovating; a flexible university that meets the needs of the current society but also those of the "mega-knowledge" one that will follow; a university that is able to train students how to handle the great quantity of knowledge and for whom the meaning of the word knowledge should become "the knowledge that exists and which I can access easily whenever I need it"; a university that promotes partnerships and dynamic civics.*³ A very deep dilemma is the one related to the type of professional training and the teaching support for this process. A professional training for the future is targeted to learning how to learn throughout life and not to the mere accumulation of programs with unnecessary knowledge or to the individualization required by the competition, which the educational system offers, but to the spiritual, autonomous and responsible development, to group learning, teamwork, to be performing in groups, in other words "competitions".

The modern pedagogy of knowledge means to teach students to know how to manage knowledge and make use of them as long as it is necessary. In short, an **interactive pedagogy** to generate living, entrepreneurial spirits, for the globalized civilization of "mega-knowledge".

Universities are increasingly becoming important players in the knowledge society, because they provide cognitive skills and knowledge adapted to companies and society's needs. Thus, each university should prepare to adjust to the change processes based on a lucid analysis of the results, of the economic and political context in which it evolves, of the regional demand to which it is exposed, taking into account the international trends and developments in higher education. In other words, it must adjust its own strategy, in terms of mission and its evolution, in an environment of an increasing complexity.

³ Ibidem, p.27.

In Romanian universities, the implementation of some structures of strategic type planning type has operated, more often than not, in parallel with modern management processes. Although the Romanian universities have begun to be concerned about a better coordination between these processes of managerial nature, we assist at the loss of some information, which places them further in a blurred area when designing development programs, assessing their progress and adopting the main decisions about the change processes.

Our university managers' ability to optimize performances and to put into practice ambitious strategy is affected by the lack of relevant information, reliable and timely obtained. But beyond all these, the following question arises: how it is possible not to have top universities at European and world level, when our youngsters are required by major universities around the world, when we have professors in almost all fields of knowledge who perform in Europe and America? We have exceptional professors, bright young people who honor this country where they are studying but we lack a school to form real leaders capable of managing the resources of this country, in this case, the greatest wealth of a nation, which is the capital of intelligence. We feel it necessary to mention in this context a warning of the great British philosopher J.S. Mill who argues that: "A state which prefers a higher administrative skill to the spiritual expansion and elevation of the individuals, a state which diminishes its people will notice that it is not possible to do great things with small people"⁴.

It is certain that Romania's chance in this moment is education. It differentiates us as individuals and as nations. Investing in education means investing in the future.⁵ This requires a rethinking of education overall, especially of university education as to the identification, discovery and application of an appropriate selection system, members of the teaching staff and students alike. It is obvious that it is becoming ever more urgent to coordinate strategic actions so as to achieve synergy at all levels of the functional architecture of universities between performance management, resource allocation, minimizing threats and quality assurance of educational scientific research processes.

⁴ J.S.Mill, *On Freedom*, Humanitas Publishing House, Bucharest, 1994, p.91.

⁵ Jukka Kangaslahti, *Investment in Education, Investment in the Future*, Gospel Light Publishing House, Bucharest, 2012

Numerous studies have looked at particularly effective people in higher education, trying to isolate the characteristics that contribute to their success. In a survey carried out on 900 rectors, Patrick & Carruthers (1980) identified seven priority areas: communication of the institution strengths to prospective students, their parents and the general public; communication of the institution strengths to the authorities; integration of the program review results with planning and budgeting; allocation and reallocation of resources; encouraging the refreshment of the organization with new staff; implementation of organizational goals through planning and budgeting; accurate estimation of the organization revenues. Another study (Gilly, Fulmer & Reithlingshoffer, 1986)⁶ identified five characteristics of the most efficient rectors: a good cooperation with members of the Senate; demonstrating a strong ambitions to achieve the objectives; maintaining large antennas so as not to miss opportunities; unexpected reactions; demonstrates a sixth sense for opportunities.

In his volume about efficient rectors, Seldin (1988)⁷ highlights three areas where rectors should demonstrate excellence: **administrative and management sector** (academic planning, program planning, decision making, problem solving, use of funds, easiness and human resources); **leadership** (in relation to different audiences, the senate, faculties, students and other heads of institutions); **personal qualities** (integrity, trust, tolerance, tact, persuasion, reliability, flexibility, concern for quality and sensitivity). The development program for leadership skills at Texas A & M University defines the leader based on the following characteristics: mentor of the faculty, university and employees; catalyst for critical thinking and policy support; a person in the service of others, who put in second place his own interest; a visionary, who plans, estimates and acts. The program has identified eight key competences of these leaders that need to be encouraged by developing the curriculum (Donathen & Hiness, 1998)⁸: communication, decision-making; systems use; professional ethics; team development; supervision; planning, teaching and counseling; creativity and innovation.

⁶ Donathen and Hiness, apud. Dumitru Miron, Gabriela Stănciulescu in *Higher Education Institutions as Organizations*, cited works.

⁷ Seldin, P., *Evaluating and Developing Administrative Performance*. San Francisco, CA: Jossey-Bass, 1988.

⁸ Donathen and Hiness, apud. Dumitru Miron, Gabriela Stănciulescu in *Higher Education Institutions as Organizations*, cited works.

There are also opinions (Grumell, Lunch & Devine, 2009)⁹ according to which the qualities for leadership positions such as ambition, spirit of action, commitment and energy are essential to a leadership position. Bush (2011)¹⁰ links leadership to values or purpose, while management is the avatar of implementation or ethnic aspects. Leadership and management are equally important given that universities want to be effective and to achieve their objectives. If a clear vision can be essential in determining the nature and direction of change, of equal importance is to ensure that the implementation of innovations is efficient and the residual functions of the institution of education are carried out effectively, while some elements are subject to change: *"Methods ... [are] as important as knowledge, understanding and values orientation ... Building such a dichotomy between something "pure" called "leadership" and something "impure" called "management", or between values and goals on the one hand, and the methods and skills, on the other hand, it would be a disaster.*¹¹

There is a big difference between leading and managing, but both are important. Organizations that are over managed but under led will lose in the end their spirit or sense of purpose. Poorly managed organizations, but with strong and charismatic leaders may temporarily keep afloat, and later collapse. The challenge of modern higher education institutions involves the objective perspective of the manager, along with flashes of vision and commitment of a wise leader.

CONCLUSIONS

We are too corrupted and demotivated to have a performing management and leadership, even in the academic environment. Then we can only be effective because effective leadership and management are essential to achieve the objectives set for the variety of educational institutions by decision-making factors, particularly by the government that provides funding for state universities, the private ones not having this privilege, although there is a legal framework that can also underpin and support such a policy for private education, for universities which perform in one area or another.

⁹ Grumell, Devine, Lunch, apud. cited works.

¹⁰ Bush, T., *Theories of Educational Leadership & Management*, London: Sage, 2011.

¹¹ Glatter, R. And Kydd, L. "Best practice in educational leadership and management: Can we identify it and learn from it?", *Educational Management and Administration*, 2003, 31(3): 231-44.

Society expects schools, colleges and universities to prepare people able to work in an environment subject to rapid change. Teachers, leaders and managers are the ones who have to raise the bar of educational standards. It is imperative that, as in an increasingly globalized economy, an educated workforce is vital to maintain and increase competitiveness.

The management concept has been doubled or substituted by the leadership language, but the activities carried out by the management staff of educational institutions, both undergraduate and especially in academia, resist such labels. Autonomy is a practice in many countries, expanding the boundaries and dimensions of leadership, providing a greater potential to influence directly or indirectly the results of universities and students. Successful leaders are increasingly focused on learning and deepening their specialization by means of scientific research in teams made of teachers and students alike, through scientific research in academic consortia, the central purpose of higher education institutions. Also, they are under pressure to account for trends of a "results-oriented educational process". As these conjectural pressures amplify, leaders and managers in the education system should make proof of craftsmanship, flexibility and sound knowledge to support the institution they lead.

It is necessary for the decision makers within educational institutions to assimilate the theoretical data, as well as the practical aspects of educational management. Competence involves the ability to translate concepts into successful actions because, in the words of Peter Drucker, "Management means doing things rightly; Leadership means doing the right things".

REFERENCES

Bush, T., (2011), *Theories of Educational Leadership & Management*, London: Sage;

Gilley, J., Fulmer, K., Reithlingshoerfer, S., (1986), *Searching for academic excellence: Twenty colleges and universities on the more and their leaders*, New York, NY: Macmillan;

Glatter, R. And Kydd, L., (2003), "Best practice in educational leadership and management: Can we identify it and learn from it?", *Educational Management and Administration*;

Kangaslahti, Jukka, (2012), *Investment in Education, Investment in the Future*, Gospel Light Publishing House, Bucharest.

Mill, Jh.S., (1994), *On Freedom*, Humanitas Publishing House, Bucharest;

Miron, Dumitru, G. Stamciulescu, Ruxandra Ciulu, Carmen Pop, Magdalena Platis, (2011), *In Higher Education Institutions as Organizations. Strategic Management*, Online Publishing House, ISBN: 9780973-0-11685, Bucharest.

Seldin, P., (1988), *Evaluating and Developing Administrative Performance*. San Francisco, CA: Jossey-Bass.

HUMAN RESOURCES MANAGEMENT IN THE PUBLIC EDUCATIONAL SYSTEM

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Abstract: *A healthy, sustainable economic and social development can be obtained only on the basis of a noble, valuable human capital, affluent in knowledge and skills, but also in moral values. Once established the goal and the means, the only way forward is that of a solid public educational system, supported by the state and society in general. In this paper we will refer to a number of issues related to human resource management in public educational institutions with focus on talent management and morality.*

Keywords: *human capital, sustainable development, public education, talent management, role models, moral values.*

Sustainable development, the stated and nowadays accepted purpose of the economic and social activity is, by definition, an ethical concept. Sustainable development is different from the development seen as mere profit because it stands on a set of strong moral values and principles and it requires respecting specific ethical norms. Building sustainable development is thus equivalent to a moral economic activity, or, more accurately said, to a moral behaviour in the economy (and society). The normative character of sustainable development involves all economic actors: producers, marketers, consumers, investors, policy makers, and their advisers, specialists in various fields, governors of central banks et al. They all “hit the road” with no other baggage but their human capital, and in this case it is not recommended to travel light. Thus, a closer analysis reveals that several other categories of individuals/social categories are involved in sustainable development, as a matter of fact all the members of the society have a part in this desirable plan. Teachers/professors have a vital role in the formation of human capital of young people, who are actually responsible for sustainable development in the medium and long term. The state of the Romanian public educational system as a whole,

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human resources included, must be improved. To emphasise the importance of these matters, we shall quote Dietrich Bonhoeffer who said: "The test of the morality of a society is what it does for its children".¹

By defining and promoting the concept and the aim of sustainable development appears a contradiction in relation to the individualistic, positive, "value-free" classical and neoclassical economic theory: *homo oeconomicus*, more generally speaking the economic actor guided by his economic rationality, who is pursuing his own interest and tries to use resources in order to maximize his utility is now facing a dilemma. How to make profit when things are getting more and more complicated as he has to be social responsible and take care of the environment and scarce resources? He must now consider the three sides of sustainable development - economy, society and environment -, and think of the "good", the well-being of his generation and of future generations. In addition, economic phenomena must be studied in their entire social complexity, as "economic theory, with its myopic focus on self-interest, obscures the fact that preferences are formed not only by material self-interest but also by ethical values, and that market economies require ethical behaviour for efficient functioning."² As Charles K. Wilber emphasizes, "[...] Adam Smith claimed that self-interest leads to the common good if there is sufficient competition; he also, and more importantly, claimed that this is true only if most people in society have internalized a general moral law as a guide for their behaviour."³

The logical conclusion that emerges is the following: individuals must be endowed with a human capital that enables them to be efficient in their economic activity and also to have an ethical behaviour. Ethics nowadays gets increasingly further away from the morality of small communities that used to keep an attentive eye on the behaviour of its members. On the other hand, religion used to impose a moral code. Today there are some major changes of the moral consciousness of the modern individual under

¹ Phillip Hughes (Editor), *Achieving Quality Education for All. Perspectives from the Asia-Pacific Region and Beyond*, Education in the Asia-Pacific Region: Issues, Concerns and Prospects 20, Springer, p. V, 2013.

² Charles K. Wilber, *Ethics and Economic Actors*, Post-Autistic Economics Review, Issue no. 21, 13 September 2003, article 3.

³ Ibidem, referring to Adam Smith, *Theory of Moral Sentiments* (London: Henry Bohn, 1861); A.W. Coats, ed., *The Classical Economists and Economic Policy* (London: Methuen, 1971); and Jerry Evensky, *Ethics and the Invisible Hand*, Journal of Economic Perspectives, Vol. 7, No. 2 (Spring 1993), pp. 197-205.

the social pressures of globalization, consumerism and individualism. "On the other hand, it rises a plurality of applied ethics - from business to media etc. - that end up actually in simple deontology, without any reflexivity founding." This beginning of the century "is marked by serious existential anxieties structured by the frailty and/or absence of meaning; the erosion of the traditional symbolic horizons and the universalization of the pragmatic mentality, the discredit of the super sensible ideals with metaphysical basis and the axiological doubt accompanying irreversible consequences for the humanity of technologies, the collapse of the great ideologies, utopias and globalizing discourses are indications of an "ethical vacuum" - accompanied by foundations crisis and expansion of a depressing individualism. Narcissism, libertinism, hedonism define an identity crisis and the searching of the individual for himself."⁴

Referring to the younger generations that are predominantly subject to the educational process and human capital formation, taking into account social learning and social cognition theory⁵, we ask ourselves to what extent teachers/professors working in the Romanian educational system represent role models to their students. According to social learning theory, which is based on observational learning and modelling, the individual will imitate the observed behaviour if he finds a motivation and by referring to his internal standards. To the extent that the model meets or exceeds the standards of the individual, and depending on the consequences that the potential model's behaviour has, consequences which the individual considers to be desirable or not, he decides to imitate the potential model or not, he accepts that model or not. Thus teachers can be role models to their students if they arouse, on the one hand, their admiration and if students believe, on the other hand, that teachers have a range of intellectual and moral features and a specific behaviour that conduct to a desirable material or moral status.

The following quote is attributed to Rudyard Kipling: "No printed word, nor spoken plea, / Can teach young minds what they should be. / Not all the books on all the shelves, but what the teachers are themselves." As children grow it becomes more and more difficult for a teacher to provide a model for an individual who has already internalized a set of

⁴ Vasile Macoviciuc, *Initiation to Contemporary Philosophy*, Universal Dalsi Publishing House, Bucharest, Bucharest, 1999, p. 672.

⁵ Patricia H. Miller, *Theories of Developmental Psychology*, 5th edition, Worth Publishers, New York, 2011, pp. 223-263.

values as a result of his previous observations and experiences within his family, in various social groups or in the previous educational cycles, influences coming from both educators and from his colleagues and friends. To these are added, with a share deal, the influence of television, movies, the Internet, and video games, present in the lives of children from younger and younger ages. Area of origin and their family belonging to a certain social/professional class also have a strong impact on the values internalized by the young individual. All these factors make the teachers' educational mission difficult, and the difficulty increases as the level of education is more advanced. It can be assumed that young people who were accepted, after passing certain exams, tests/selections, in forms of higher education have internalized a set of values generally considered as part of the "good" category. Unfortunately, no real internalization of moral values is demonstrated, no guarantees of moral behaviour are provided by successful completion of exams that are only testing the possession of some kind of knowledge and skills.

It would be necessary at all levels of education, and we refer mainly to Romania, human resources management to consider attracting and keeping in the educational institutions teachers that are able to transmit quality knowledge and skills to the students, who can guide them in learning, can stimulate creative abilities and desire for knowledge, but can be also human models worthy of imitation.

But, to be possible such measures in schools, high schools, colleges and universities, the first step must be taken at the policy level. The Romanian state must change the wage policy in the education field because, in EU, according to Eurydice report 2013/2014, "the lowest ratio (teachers' minimum statutory salary/GDP per capita) can be observed in Latvia, Lithuania and Romania, where the minimum salary at all education levels corresponds to less than 50 % of per capita GDP."⁶ The GDP per capita is also very low in comparison with the other countries in EU (the Real GDP was in 2013 for Romania 4800 Euros per capita; only Bulgaria had a lower value of the Real GDP in EU in 2013: 3800 Euros per capita⁷), and this also means a small state budget.

⁶ European Commission, 2014, *Teachers' and School Heads' Salaries and Allowances in Europe, 2013/14*, Eurydice Facts & Figures, Education and Training, p. 9, available at http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/salaries.pdf

⁷ Eurostat, 2014, Real GDP per capita, EUR per inhabitant. Retrieved September 3, 2014 from Eurostat database available at

Thus a vicious circle is created – underfunding of education leads to poor results and weak human capital (Human Capital Index was for Romania in 2013 -0.176, the lowest in EU; the HCI for Finland was 1.406, and for Netherlands: 1.161)⁸. Consequently, there is a weak intellectual capital and it is well known that intellectual capital represents the main intangible asset that generates development and growth. How can a country develop in such conditions? How can GDP per capita increase? Better funding education should not and must not be seen as an additional expense to the state budget, as a burden, but as an important investment in the human capital of a nation. And the return on investment would give unexpected results and benefits.

As a matter of fact, the teachers' salaries shouldn't be just higher, but also "market-sensitive, competitive, and performance-based".⁹

Thus, after increasing teachers' salaries at the national level, the mission of the educational institutions should become clearer. An educational human capital management would mean, under these circumstances, mainly a talent management process, and also a management of morality.

Talent management in the public educational institutions

The concept of talent in the management theory and practice has different meanings, among others referring to knowledge and skills needed to efficiently execute certain activities, or to truly special performers who are recognized as such and who require preferential treatment – they know their value, are considered and consider themselves leaders or entitled to choose their leaders and their conditions for work, and sometimes negotiate their staying within the organization.¹⁰

<http://epp.eurostat.ec.europa.eu/tgm/download.do?tab=table&plugin=1&language=en&pcode=tsdec100>

⁸ World Economic Forum, 2013, *The Human Capital Report*. Retrieved September 3, 2014 from

<http://reports.weforum.org/human-capital-index-2013/#=§ion=part-1-%25e2%2580%2593-measuring-human-capital>.

⁹ E. Behrstock, C. Meyer, S. Wraight, M. Bhatt, 2009, *Managing Educator Talent: A Research Based Framework for District and State Policymakers*, Learning Point Associates, Napperville, IL, apud Ellen Behrstock, 2010, *Talent Management in the Private and Educational Sectors: A Literature Review*, Learning Point Associates, Naperville, IL.

¹⁰ Angela Vlădescu, *The Possibility of Implementing Talent Management in the Public Sector*, Management & Marketing. Challenges for the Knowledge Society, Vol. 7, No. 2, 2012, pp. 35-362.

What about talent management in the public educational sector? A higher salary does not automatically mean accession to the public education system of highly qualified individuals with great teaching skills and impeccable moral character. A higher salary can attract quite the opposite - immoral and unqualified individuals, hoping to gain more money with less work (as they would consider and act, although teaching is one of the most challenging profession). Also, in a corrupt society, high wages in educational sector might trigger a series of incorrect interventions and bribery attempts and acts so someone's relatives or friends to become inefficient, but well-paid teachers. So a dangerous Pandora's Box can be opened.

Here begins the true main role of human resources officer. It must be understood that "People - not jobs - are what make organizations go. [...] People matter."¹¹ A primary goal of human resource management must be attracting talented individuals, able to be/become good teachers. Once committed, the institution (again through human resources management) should strive to keep the teacher as an employee, and support him/her for a permanent professional development. While senior employee will gain experience, the quality of his/her work constantly improves. The senior teacher would be also able to support other teachers, new employees, to raise their level of training, and might even represent a role model and an inspiration for them. If a teacher could/should be a role model for his students in terms of desire for knowledge and moral profile, for other (younger/junior) teachers a senior teacher can even be/become a mentor in the profession. It shouldn't be forgotten that an important feature of the human capital, the main part of the intellectual capital of an organization, is that it belongs only to the individual. If an individual decides to leave an organization, aiming a job somewhere else, whether in a public or a private educational institution, or in an economic organization, this means a major loss for the organization left behind. Another important role of the talent management is preventing and reducing these unfavourable situations.

In terms of talent management in higher education, according to some studies, there is a competition between universities to recruit and keep the most competent/talented teachers, but only a few of these institutions have strategies for talent growth and development. Yet, losing talents

¹¹ Patricia K. Zingheim, Jay R. Schuster, *Retaining Scarce, Critical Talent. How the Best Health Care Organizations Do It*, HR Pulse, Fall 2008, p. 39.

implies high replacement costs as the replacement itself is a difficult task (the replacement costs are estimated to represent 30-200% of the lost employee's annual salary) and lost productivity.¹² For retention talents within the universities some strategies are mentioned: "managing people and not retention; having a culture of caring, balanced with a tradition of excellence; never soliciting employee feedback and then ignoring it; keeping an eye on the high performers and rewarding outstanding performance; viewing people management as a strategic management issue, being relentless in pursuit of continuous improvement."¹³

This means that high wages in public educational system have mainly two purposes: to ensure a decent life and a respected social status for those who influence the lives and the development of young people through their work and, ultimately, even the development of the society as a whole. Because education and human capital serve to higher goals than mere economic development. Human development is crucial for the attainment of a high level of culture and civilization in a society. A decent income for a teacher provides him physical, financial and spiritual comfort, necessary for his work and for his permanent professional progress. Thus the teacher will be less tempted to give up teaching career in public education, to engage in private education or in an economic organization. On the other hand, raising the status of the teachers in a society should have a positive influence on the evolution of the social values: people, including younger ones, would consider that the investment in human capital is indeed a good investment as the return on investment (including financial returns) would become obvious in the case of teachers. As a matter of fact, in small communities, that generally have/had other moral values than those specific nowadays to large urban human agglomerations, teachers are/used to be highly respected even if their wages are/were pretty low. But times and social values have changed and new times recall urgent new measures.

Management and morality in the educational institutions

A teacher must be an example of morality for the students. This means an irreproachable behaviour based on fundamental moral values:

¹² Dolly Lavania, Himanshu Sharma, Nidhi Gupta, *Faculty Recruitment and Retention: A Key for Managing Talent in Higher Education*, International Journal of Enterprise Computing and Business Systems, Vol. 1, Issue 2, July 2011.

¹³ Ibidem.

honesty, honour, fairness, respect for other people, for the environment, for the profession, altruism and others. A teacher must always comply with professional ethics by showing impartiality, honesty and fairness in dealing with students, including evaluation of their performance. "Integrity, honesty, trust, fairness, respect, and responsibility should characterize teachers in their relationship with students. Teachers with character deal honestly with students in a trustworthy manner, nurture mutual trust and respect with and among students, treat others respectfully by believing in the inherent dignity of every person, and execute their responsibilities in morally accountable ways."¹⁴

Especially in the primary education cycle, when moral development of the young starts, but also later, when the child can make value judgments, the teacher must be a model that inspires him. The role of educator is established by its very position and the child / young individual will identify in the first place the teacher standing in front of him with the educational process itself and this represents a great responsibility for the teacher, but also for the educational institution.

Consequently moral conduct must be respected without exception, and the organization must establish and permanently improve institutional structures and practices regarding these aspects.

Conclusions

By the very definition of education - all measures applied systematically in order to build and develop the intellectual, moral and physical features to the subjects of the educational process - human capital formation is concerned, the most important asset for the individual, the organization and society.

The curriculum is undoubtedly a matter of utmost importance and the subject of extensive research. In Romania took place after 1989 many reforms and changes regarding the content of the objects and the methods of teaching and learning, all of them meant to improve the educational system. Yet, these measures must be accompanied by a better management of human resources in the public education system, as people are those who actually implement all the designed measures/changes.

¹⁴ Angela Lumpkin, *Teachers as Role Models. Teaching Character and Moral Virtues*, JOPERD, Vol. 79, No. 2, February 2008, pp. 45-49.

Investing in education is the first step to improve the situation and this issue can be resolved only at the policy level. Higher wages for the teachers must be accompanied by a rigorous selection of the educators/professors hired in the public educational sector. But after that, human resources officers must not stop. The management of the human and intellectual capital of the educational institutions is a sensitive and complex issue/task that can be done only keeping in mind the final purpose - a better education for the young generation for a future healthier development of the society. For young individuals to accumulate a quality human capital, there must be, in the first place, teachers endowed with noble human capital (knowledge, skills, moral values), and managers and HR managers able and determined to select and maintain in the public educational organizations top talented employees.

We shouldn't forget that there are right now, in the Romanian educational system, many teachers/professors really gifted, with a great talent for teaching. But their number must be increased as they have a difficult and full of responsibility task, especially as the present society doesn't provide the best role models and social values for our children and young people.

REFERENCES

Behrstock, E., Meyer, C., Wraight, S., Bhatt, M., (2009), *Managing Educator Talent: A Research Based Framework for District and State Policymakers*, Learning Point Associates, Napperville, IL.

Behrstock, Ellen, (2010), *Talent Management in the Private and Educational Sectors: A Literature Review*, Learning Point Associates, Naperville, IL.

Coats, A.W., ed., (1971), *The Classical Economists and Economic Policy*, London, Methuen.

Evensky, Jerry, (1993), *Ethics and the Invisible Hand*, Journal of Economic Perspectives, Vol. 7, No. 2 (Spring 1993), pp. 197-205.

Hughes, Philip, ed., (2013), *Achieving Quality Education for All. Perspectives from the Asia-Pacific Region and Beyond*, Education in the Asia-Pacific Region: Issues, Concerns and Prospects 20, Springer, p. V.

Lavana, Dolly, Sharma, Himanshu, Gupta, Nidhi, (2011), *Faculty Recruitment and Retention: A Key for Managing Talent in Higher Education*, International Journal of Enterprise Computing and Business Systems, Vol. 1, Issue 2, July 2011.

Lumpkin, Angela, (2008), *Teachers as Role Models. Teaching Character and Moral Virtues*, JOPERD, Vol. 79, No. 2, February 2008.

Macoviciuc, Vasile, (1999), *Initiation to Contemporary Philosophy*, Bucharest, Dalsi Publishing House.

Miller, Patricia H., (2011), *Theories of Developmental Psychology*, 5th edition, Worth Publishers, New York.

Smith, Adam, (1861), *Theory of Moral Sentiments*, London, Henry Bohn

Vlădescu, Angela, (2012), *The Possibility of Implementing Talent Management in the Public Sector*, Management & Marketing. Challenges for the Knowledge Society, Vol. 7, No. 2.

Wilber, Charles K., (2003), *Ethics and Economic Actors*, Post-Autistic Economics Review, Issue no. 21, 13 September 2003, article 3.

Zingheim, Patricia K., Schuster, Jay R., (2008), *Retaining Scarce, Critical Talent. How the Best Health Care Organizations Do It*, HR Pulse, Fall 2008.

European Commission, (2014), *Teachers' and School Heads' Salaries and Allowances in Europe, 2013/14*, Eurydice Facts & Figures, Education and Training, available at

http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/salaries.pdf

Eurostat, (2014), Real GDP per capita, EUR per inhabitant. Retrieved September 3, 2014 from Eurostat database available at

<http://epp.eurostat.ec.europa.eu/tgm/download.do?tab=table&plugin=1&language=en&pcode=tsdec100>

World Economic Forum, (2013), *The Human Capital Report*. Retrieved September 3, 2014 from

<http://reports.weforum.org/human-capital-index-2013/#=§ion=part-1-%25e2%2580%2593-measuring-human-capital>.

ASPECTS CONCERNING ROMANIAN SCIENTIFIC RESEARCH FUNDING

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Abstract: *The research, development and innovation (RDI) system existing in Romania is not capable of ensuring the promotion of industrial development due to some of its vulnerabilities. On the other hand, in Romania there is still a technical and material RDI basis created previously to the anticommunist revolution, which is continuously degrading, but also an infant industry of innovation. However, the innovative process was much hampered by the gradual disappearance of human and institutional actors, as well as by the reduction of RDI investment and expenditures.*

Keywords: *research, development, innovation, funding, progress.*

1. The current situation of Romanian scientific research

Currently, in Romania there are three priority research, development and innovation systems (R-D-I): • academic (Romanian Academy and branch academies); • public institutions (subordinated to / coordinated by ministries); • university.

In the current national system of RDI there are some other structures of research, development and innovation: • state owned companies derived from former branch institutes;

• private companies; • private foundations and associations.

The RDI system existing in Romania is not able to ensure the promotion of industrial development, due to its vulnerability, among which the most important factors are:

- extremely low RDI expenditures compared to industrialized countries;

- total or almost total absence of RDI in the business sector, which, in fact, is the main driver of innovation;

- RDI fragmentation in the public sector and insufficient orientation towards the needs of the industrial sector;

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- weakness of RDI institutes financed from public funds;
- excessive priority given, by some of these institutions, to basic research, to the detriment of applicative research, fragmentation of scientific research resulting in the structuring of nonspecific funding means for universities and academic sectors;
- attitude and mentality of researchers from these institutes, which are more concerned with their career prospects than with the needs of the domestic industry;
 - lack of appropriate incentives for RDI;
 - mismanagement of research funds;
 - superficial valorization of RDI results;
 - poor endowment for RDI activities;
 - lack of periodic analysis of the correlation between the real needs of the Romanian society and priority programs as research direction within PNCDI so as to ensure an increased share of priority projects, which will be awarded by public tender and in particular those of community interest (e.g.. water supply, sewage, waste management, air and soil pollution, energy, health);
 - discouragement of invention activities by levying excessive charges in relation to the inventors' income;
 - criteria for assessing the tender of excellence projects inconsistent with the set goal and the options of the branch professional associations;

On the other hand, in Romania there is still a technical and material RDI basis created previously to the anticommunist revolution, which is continuously degrading, but also an infant industry of innovation. However, the innovative process was much hampered by the gradual disappearance of human and institutional actors, as well as by the reduction of RDI investment and expenditures.

In the aftermath of World War II, even though our country joined the divided area of communist Europe, Romania continued the process of industrialization, which brought about a strong support for education at all levels. The national economy required more and more skilled workforce and the network of urban and rural schools, of high schools, technical schools and universities developed. During this period the Romanian education development was accompanied by increased investments and budgetary allocations for education, as it was necessary to increase the number of students and graduates from secondary and higher education.

Thus, the revolution of 1989 found Romania as an industrial state – with average agricultural development. The brutal process of deindustrialization that followed led to the damage of all spheres of activity – social, economic, political, scientific, educational, cultural, etc.

The decapitalisation of the Romanian enterprises, the deindustrialization and disruption of agriculture changed Romania from a net manufacturer into net consumer.

Even if some enterprises were technologically obsolete, most of them were destroyed by carelessness, because Romania did not have an industrial policy and was not interested in supporting the Romanian education either, also destroying what was built in the previous years.

Some foreign investments in the industry, leading to a gain in terms of technology and innovation, did not result in establishing a competitive economy.

Now, Romania is hit by an economic crisis, which is amplified by all these mistakes of the recent past (1990 -2013).

We cannot resort to the arguments of some economists who argue that the alternation industrialization / deindustrialization is a normal process that occurs in countries with developed economies, under the effect of globalization.

In 2000, Romania's GDP was 60 billion euros, while exports amounted to 12 billion. In 2006 the foreign investments were still in "offensive".

In 2008, after a strong expansion of the foreign investments, the GDP had risen to 138 billion euros, but in 2011 it dropped to 125 billion euros, while the budget for education and research accounted for only 3% of GDP.

As far as Romania is concerned, we can speak of a multiple of interrelated crises –of socioeconomic nature, resulting in the further degradation of education, science, culture, industry and agriculture.

What is more, some foreign investors began to close factories in Romania, under the effect of the international crisis. We are currently witnessing a “*second industrialization*”, as some economists argue.

If during the first deindustrialization of the country we “destroyed” education and research, what is going to happen after the second deindustrialization process?

If, along with the country's economic development, before 1990s, more funds for the construction of housing, schools, hospitals, sewers, drinking water supply etc. were allocated, all these gradually contributing to the urbanization of many localities, the deindustrialization

phenomenon also affected the habitat component, and today many of the old buildings have been dismantled. One can see the ruins of the former industrial sites almost everywhere.

Deindustrialization has led to a higher school dropout rate, as well as to increasing rates of crime and delinquency.

Most EU states are undergoing a process of deindustrialization, but in these developed states industry has reached maturity. For these states, deindustrialization, as technological sophistication, is necessary to quit declining industries and relocate some productive activities in emerging countries such as Romania.

As for our country, we need to think seriously about stimulating a process of re-industrialization, through proper funding of scientific research for the recovery of the country.

Who should do it? Unfortunately, all the ministers in the period 1990-2014, who led and are leading education and research, proved to be incompetent and act in bad faith.

2. Scientific research funding programs

Within the National Plan for RDI 2007 – 2013, Romania carries out the Programs:

'Human Resources' Program

PURPOSE: Human Resources with a view to increasing the number of researchers, improving their performance, attracting in Romania the researchers from outside the country and increasing the attractiveness of research careers.

'IDEAS' Program

PURPOSE: Obtaining state-of-the-art scientific and technological results, consistent with the European ones reflected by increasing the visibility and international recognition of Romanian research.

'Partnership' Program

PURPOSE: Creating conditions for a better cooperation between the various research, development and innovation entities, companies and / or public administration units in order to solve the problems identified.

'Innovation' Program

PURPOSE: Increased capacity for innovation, technological development and assimilation in production of the research results in

order to improve the competitiveness of the national economy and increase the quality of life.

'Capacities' Program

PURPOSE: To develop the national capacities for research and integrate the Romanian RDI system within the international scientific environment.

3. Major deficiencies in evaluating, financing and implementing research projects

The recent publication of the results of the project competition *Partnerships 2013* (<http://uefiscdi.gov.ro/articole/3757/Rezultate-preliminare-PCCA-2013.html>) made us analyze to what extent the old deficiencies in evaluating, financing and implementing scientific research projects have worsen.

• Project evaluation process

The main problem of the projects proposed for evaluation is that of providing an intellectual agenda that is inconsistent with the needs of the national economy.

In addition, the technical errors and incorrect statements were frequently noticed within the evaluation of applications for funding in recent competitions, questioning the assessors' quality, some of them being likely to discredit at international level the jurisdiction of the Romanian authorities with responsibilities in the field of research and, in general, the research sector in Romania.

• Lack of transparency in the evaluators' selection process

The lack of a database with expert evaluators at national level is likely to generate suspicions about the evaluation process and the accuracy of the evaluators' selection. By comparison, the names of expert evaluators who assist the European Commission or other agencies that manage funds for research in the implementation of the program *Horizon 2020 Framework Programme* need to be published, along with with their area of expertise, at least once a year on the website of these funding agencies .

The selection criteria applicable at Community level require a high level of expertise, a considerable and appropriate range of skills, a balance between the academic environment and the research institutions, equal treatment, an equitable geographical distribution, rotation of experts, etc.

Also, as recommended by the Global Research Council (scientific organization internationally recognized) “*the assessors should be selected on the basis of clear criteria*”. Unfortunately, an inadequate implementation of the above mentioned criteria at national level can be noticed.

Furthermore, there is no certainty that the evaluators comply with clear rules of conduct, including, among other things, the respect for confidentiality in relation to other evaluators or project managers, fair evaluation of projects, conflicts of interest avoidance, assessment of projects with coordinators or partners from the same institution.

Therefore, from the information we have, we can infer that in the evaluation process there were situations where, after the project managers had received the individual assessment (final statement), they were informed that one of the evaluators was in conflict of interest. Such situations raise serious concerns about the evaluators’ fulfillment of the compulsory reporting of conflict of interest, as well as about the proper functioning of the existing electronic system, which should have identified and reported such situations.

It is unclear whether measures were taken to prevent the recurrence of some situations such as those mentioned above and the punishment of the respective assessors.

• **Evaluation grid and adjacent assessments**

To the best of our knowledge, based on the information we have, the evaluation factors used by the evaluators in assessing the projects submitted under the “*Partnerships*” program were applied differently. For example, there were instances where, although in the CV template attached to the funding application there was no recommendation of stating the impact factors such the Hirsh index, some evaluators downgraded a proposal based on the Hirsh index of the project manager, which shows their inadequate training concerning the assessment process.

Furthermore, the evaluation methodology does not specify either how the rapporteurs forming the evaluation panels are selected or their qualifications.

Given that the project evaluation is performed by different experts, with different assessment scales, it is necessary to attach greater attention to the accurate comparison of individual assessments. Moreover, based on the information we have, it appears that in several projects already assessed there were differences of 30-40 points or more between individual evaluations.

- **Failure to comply with the deadlines set by the competition calendar**

Unfortunately, it has been found that the deadlines set initially in the competition calendar were not observed. This finding is based on the following:

- almost a year's delay after the completion of the evaluation process up to the designation of the projects selected for funding under the program "Human Resources" and "Ideas". The specific dynamics in the biomedical domain, for example, makes ideas which seem promising at a certain moment "lose the start" in the international competition because of these unacceptably long delays;
- successive deadline amendment for the submission of the projects, which indicates serious organizational shortcomings and potential sources of inaccuracy. For example, a competition deadline set for the date of 24/05/2013 was amended by successive notes of the National Authority for Scientific Research, for the dates of 07/06/2013 (changes made on 17.15.2013), 17.06.2013 (changes made on 06.05.2013) and respectively 21/06/2013 (changes made on 6/14/2013). The failure to comply with the deadline for the submission of the projects creates disruption and uncertainty for research groups and inequities regarding the proposals completed and submitted prior to this deadline amendment for projects submission.

This creates an unjustified competitive advantage for the benefit of the proposals submitted after deadlines amendment for submission.

- **Projects Funding**

The deficiencies mentioned above result in the infringement of the predictability principles, and the continuity of funding as well as under-funding of the scientific research sector.

In addition, the abusive reduction of the amounts allocated to projects after signing the contracts has been found.

4. The need for a new policy on public funding of research projects

In order to support a real revival of the country's development, we must define the areas where Romania can and wants to be competitive by exploiting its internal resources.

In these areas, we need to finance only large, innovative and integrated projects, which also involve the Romanian education and research, in order to eliminate the current system, which divides funding on small issues, irrelevant in economic terms.

The involvement of universities and research institutes in these “**major projects**” develop their relationship with the real economy for the benefit of the development and the creation of new jobs, for a highly skilled and innovative human resource.

These “projects” may contribute to the development of domestic production and export growth.

REFERENCES

Năstase, I., Gabriel, (April-June 2014), *A New Vision of Scientific Research, Technological Development and Innovation at the Turn of the Century*, Strategic Universe Publishing House, year V, no. 2 (18).

Năstase, I., Gabriel, (April-June 2014), *Funding Romanian Scientific Research – an Empty Shell*, Strategic Universe Publishing House, year V, no. 2 (18).

VECTORISING TEXTUAL EDUCATION BASED ON THE PRINCIPLE OF RETELLISATION

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Abstract: *Starting with the postmodern idea according to which the whole of reality is but a text, and the reader "writes" the text through reading it, the present article analyses in a synthetic way the role played by the promotion of the principle of retellisation in both learning in general and text approach in education in particular. Since the reading student expects to find in the denotative text his own daily experience and one of the patterns which model his existence, it is through the retelling interpretation that the student may try to construct a relationship between the world of the text and his own real world. In this context, cut outs of text comprehension are in fact an immersion into connections and meanings, into the perpetual interactions between the various realities that surround the human being.*

Keywords: *retellisation, network, text, textual education, reality.*

In order to fulfil the demands of modern education, it needs to be conceived and implemented in the scientific, technical and informational spirit of society, in the spirit of cultural and civilised values, of research, invention and creativity, of humanism and respect for rights and liberties. Such desiderata as deepening the formative character of education through organising and directing information so as to create and develop learning skills and attitudes that would be favourable for learning performances must become realities instead. The purpose of the various actions of educational influencing is that of promoting both internal and social development through the accumulation of statuses. The main objectives are to perceive things in a wide and comprehensive manner, to analyse in depth, to assume risks, to think of the human being.

Nowadays the importance of virtual institutions is increasingly highlighted when concerning the development of European society and within the European trends based on the intensive exploitation of

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networks. The latter have been developed in order to hasten the transmission of know-how and to facilitate technological transfers.

The network as a structure has a great importance for the text as such, and studying this phenomenon in parallel with the text involves searching for the meaning of its referential nature – the connection between signs and reality. The student will be trained to penetrate the peculiarities of this structure, to understand the logical disposition of its fundamental constituents.

Every element of the text is a factor of particularity, compared to the other elements. It is recorded by a certain *figure of relation*, which the student is expected to perceive. *The “capturing” of the structure of reality by the text* occurs through a condensation of the world in the contents that need to be understood in order for the reader to understand the reference. We must also note that contemporary education promotes widely the postmodern idea according to which *reality itself is but a text*, and its lecture produces another text. *Through lecture the reading student writes the text* by giving it a specific meaning. Thus the stress moves from the author unto the reader.

It is unanimously acknowledged that an educational establishment generates culture. Culture, in turn, constitutes a *relationship* between whatever the human being has produced, produces and will produce throughout his continuous activities. The need for quality in today’s education becomes especially important in the context of postmodern education, which perceives education as a means for facilitating students’ proactive creation through the establishment of various relations between the elements of reality. No longer, E. Stan argues, do we look for certitude; instead, we explore to no end, and each student identifies a different side of reality – one as justified as the others, but different nevertheless.¹

It is important to find an answer to the question on how to ensure a quality educational product and what is the significance of this action for education in general. In this particular analytical framework, the educational product may be defined as the result of a process of relations and interactions between educational factors, which satisfies certain standards considered to be adequate for the sociocultural and economic imperatives of the time. As providers of certain educational services, educational institutions involve various entities that are structured, in the totality of interactions, in a formatively defining network, thus responding

¹ Stan, E., *PostmodernPedagogy*, Iași, The European Institute, 2004, p. 41.

to the *principle of retellisation* in constructivist learning. Apart from being useful, this product is also original and qualitative, which means that not only does it satisfy a number of features to a pre-established degree, but also surpasses them.²

Education is in permanent search for itineraries to follow and principles to rally to, which it could identify with. In this respect, the forming of a student's thinking through his own devices becomes a factor of crucial importance. The emergence of student's knowledge through independent thinking becomes analogous with the *concept of retellisation* and refers to the relational genesis – which is frequently spontaneous and intuitive – of knowledge and meanings. As knowledge is being built, various cognitive networks become superimposed, and the student must concentrate on a certain network not so much in the process of increasing the mass of knowledge, but especially in order to differentiate and clarify different cognitive schemes. Learning, therefore, does not mean a mere accumulation of knowledge, but also an extension of *informative* structures and *networks*.

Thus, formulating a *principle of retellisation*, especially in the process of learning, may have a defining impact on vectorising the quality of educational results. Being a reference principle for constructivist learning, it allows us to represent knowledge in the shape of connections with other phenomena, concepts, notions, information, which explores and underlines the method through which knowledge is gained.

Retellisation involves the establishment of a mental order in the shape of diversified networks. One of the most well-known retellisation techniques is the *mind map* devised by L. Ciompi. It is a copy of mental networks and contains both abstract and empirical knowledge and affective logic, thus possessing a wide potential for action. Mind maps reflect the constructs of an already existent reality, serving as *premises for learning*. Mind maps are based on various experiences and information sources, which constitute empirical or theoretical networks. In fact, the mind map illustrates the way in which reality was constructed by the student, the manner in which he has created relations between his theoretical and empirical knowledge. It is very significant that the mind map indicates not just the student's knowledge, but also his non-knowledge.³

² Popescu, S., Brătianu, C., *The Guide of Quality Assurance in Higher Education*, Bucharest, University Publishing House, 2004, p. 14.

³ Siebert, H., *Constructivist Pedagogy*, Iași, The European Institute, 2007, p. 171.

Naturally, the student will not pay attention to everything that surrounds him. This is a normal protection mechanism. However, if the student only watches and perceives what fits his ideas and personal interests, this becomes an obstacle in the way to learning. Reality is largely dependent on the fact of being observed, every time from a different point of view. It may be seen through several pairs of spectacles, so to say, and from different perspectives. In this case, there is a useful instrument to help “switch” the spectacles, called *the technique of network structuring*. Thus encouraging and exercising changes of perspective and perspective intersections becomes an educational opportunity in the context of quality control.

Through retellisation, knowledge is represented as connections with other phenomena, as diagrams, as relations between concepts, notions, information, a fact that underlines the value of the means of gaining knowledge rather than the sheer volume of information. These relations may cross each other, resulting in a possible tapestry of semantic connections, which suggests even more meanings. Presenting typological relations between objects, elements, phenomena, and forms leads to the development of schemes, outlines, points of reference, keywords, anchoring ideas, representations, graphs etc. Hence the possibility to use numerous techniques for creativity development and imagination based on various combinations and recombinations.

The advantage of retellisation is the fact that it allows information to be processed rapidly, it possesses rigorous organisation and, in a certain framework of possible knowledge combinations, it allows operating with real knowledge.⁴ The networks employed in retellisation represent a *connectionist modelling* in which information becomes relevant due to the connections between network elements, through the nodes resulting from interactions, which impart meanings.

Therefore, there are indications of a “recharging” of reality and a remaking of the educational process based on the *principle of retellisation as a force for the quality of education*. The connection between education and reality reaches the highest level with the disappearance of annoying ambiguities, to be replaced by the calming ones. It is then that learning sparkles alive, and reality becomes eloquent. This is the effect that retellisation creates, and *it confers the student’s life coherence and significance*.

⁴ Joița, E., *Cognitive education. Fundamentals. Methodology*, Iași, Polirom Publishing House, 2002, p. 72.

It is natural in this case that the vectorisation of quality be directly dependent upon the deepening of the process through which the student's personality is being formed, based on the complete exploration of the principle of retellisation, starting with its scientific and applicative value.

The current stage of research in the field of retellisation, the latter being interpreted in a relation of dichotomy with the science of education, facilitates the emergence of a derivative field (minus the minimising connotation), which would produce a certain structural order in text analysis and interpretation.

The action of ordering and conceptually defining retellisation gives us the chance to create a generalisation concerning the textual problem, by penetrating the significance of changes in the field and making full use of the respective acquisitions.

It has been established through interpretative analysis that a network is the representation of relations (economic, social, personal etc.) between phenomena, events, entities, subjects, institutions etc., which, unlike features and properties, are context-dependent. Network analysis is an extremely powerful tool for the understanding and explanation of phenomena. The network may take various shapes due to metamorphoses in space and time.

One defining aspect in specifying the concept of network and retellisation is taken from IT, through the idea of network topology (structure), the relating of topology examples to text (bus, ring, star, combined), and the idea of content nodes.

Network thinking, as a borrowed concept, becomes one of the latest types of human thinking, which involves thinking based on the various relations established between entities.

One important concept in uncovering the specifics of retellisation is that of *form*. Being derived from Latin, this word has inherited a complex polisemy. The main idea highlights elements and content as correlatives of form. Based on the presented ideas, the following *rule* was formulated: *a text is never a mere gathering – it is always a certain gathering, a certain ordering of parts.*

It was found that one of the essential conditions for the efficient achievement of the educational process is the creation of relationships within the educational group (as mutual discovery, communication, influence). This has allowed the relating of retellisation to this micromodel of factor interaction. In this context, a meaningful phenomenon is the application of the method of learning through teaching, in which the class

is seen as a neural network, the teacher as a fulfiller of neural networks, while the students are “neurons”.

Network placement involves organising certain elements in the shape of networks, in which an important part is played by nodes and arches, which tie together, logically and functionally, the connected elements. By analogy, the following *thesis* was created: *The mind map, as an instrument of text approach, may be represented in various structures, containing both thought operations and a visual analyser, through the graphic representation of information.* In this case, schemes are employed to improve comprehension, and nodes and semantic relations are being noted expressly.

The role of networks (connectionist, of characteristics, operators, semantic networks, cognitive schemes, interactive networks) is a special one, as they are created from simple processing elements and measured connections between these elements.

The neural approach to the network under the cognitive aspect, as acknowledged under three distinct paradigms – symbolic (the real cognitive system), subsymbolic (the theoretic system), and neural (the aggregation system) – highlights one of the most important distinctions, that between *levels of analysis* and *levels of aggregation*: the same (cognitive) process may be analysed from several perspectives, but it cannot be identified at several aggregation levels. It follows therefore that in an explanatory demarche we need to specify the level of analysis, the level of aggregation, and the aim of the explanation.

Therefore, one of the current directions for schools becomes the necessity of forming the student’s *system thinking*, through which the student understands the totality of elements and phenomena surrounding him and has the ability to better influence whatever he wishes to change. In approaching the student’s cognitive system we can mention the defining role of representation and computation. Representations are symbolic structures with combined syntax and semantics, while computations summarise the rules that allow individual manipulations with symbols.

In this way, through synthesis, the idea was reached that, since information networks need to be built, the educational process needs to:

- Promote the student’s *operative intelligence* and *imaginative visualisation*;
- Develop the student’s structural imagination as the capacity to combine and recombine data from experience;

- Configure information gnoseologically, order meanings, identify and interpret meanings at a higher level;
- Select the information that had been explored in the educational process, based on the *practical needs* of the student, who needs to be taught to *relate the phenomena of reality between them, to be structurally daring, to explore new ways of seeing the reality*;
- To empower *spiritual activity* through the possibility of organising a network of ideas, by ordering arguments and involving operative cognition.

These components are the defining factors in the formulation of a *new principle in learning* – that of *retellisation* as a principle of reference in constructivist learning. The principle of retellisation thus allows us to represent information in the shape of relations and connections, stimulating the formation of system thinking and network thinking of the student through his own means. The educational advantages of retellisation consist in the possibility of active learning through the establishment of connections, understanding of relations, building of knowledge, exploring of personal experience.

In this way, while attempting to specify the text from an educational perspective, we find that postmodernism begins to delegitimise the text by claiming that the text is plural, wide open, allows an infinite number of interpretations and cannot legitimise just one specific reading (E. Stan⁵, M. Constantinescu⁶); the interpretations are alternatives that may even not harmonise with each other (I. Tschirova, E. Goncharova⁷); the interpreter must denote an existential engagement, the production of an original meaning.

Of the three reference plans or dimensions (text syntax, text pragmatics, text semantics), we derive a differentiated attitude in the formation of the student as a “beneficiary” of the text, as a participant in an informative act. We support therefore the idea that it is not advisable to isolate one of the dimensions of the text in the educational process, which is unfortunately currently happening in textual education. A problem researchers note is that of the *denotative text*, when its contents are a

⁵ Stan, E., *op.cit.*

⁶ Constantinescu, M., *Post/postmodernism. The Culture of Divertisement*, the Encyclopedic Universe Publishing House, Bucharest, 2001.

⁷ Tschirova, I., Goncharova, E. *Mnogomernost' teksta: ponimanie i interpretatsiia* [The Multidimensionality of the Text: Comprehension and Interpretation]. Moscow: OOO Kniznyi Dom, 2007.

phenomenon of reality, and the *designating text*, in which the contents are a mental reality (I. Plămădeală⁸).

We can also note the massive irradiation of the linguistic sign of the text in text theory, in which it thus becomes a supersign, a structure for communicating something, which leads to the obtainment of a functional culture by the student, the formation of certain attitudes and spiritual capacities, the development of the ability to place the text where it should be – within the equation of the communicative act in a dynamic reality. A glance over the critical “scene” suggests that the situation changes in textual education when we begin to talk about a *real text*, i.e. the text that gratifies, satisfies, fills, confers euphoria, a text coming from culture and connected to a comfortable reading practice. The real text never ceases to be produced, and neither does it ever cease to be connected to its origins.

The *constructivist approach* promotes the idea that the author only offers us a working sketch, and it is the reader who needs to provide the materials and establish the structures (the materials are the reader’s experiences and aspirations). The formation of the *reading student who produces meanings*, a student who would read the text as if he has already read it once, who understands the world uncovered by the text is one of the basic tasks of textual education. We find that the first reading of the text is based on the expectation of pleasure, while the second one is based upon critical (self-) conscience, and the text is conceived as a network that converts its component structures into variants of one single representation (M. Corniș-Pop)⁹.

We need to mention that the arguments in favour of the concept of *protext* include the problematics of pronominalisation and the *method of text linguistics from a semiotic-syntactic perspective*, developed by H. Plett¹⁰, which involves a number of operations, such as unravelling the text in numbered sentences, structuring the text in a scheme, methodologising the text, as well as protextualisation, which implies working for the text rather than on the text. The text is expressed through events rather than words, and the language of events, with its syntax, conveys the meaning (I. Pânzaru¹¹).

⁸ Plămădeală, I., *The Work of Literature as a Text. Introduction into Textual Science*, Chișinău, International Prut Publishing House, 2002.

⁹ Corniș-Pop, M., *Hermeneutic Temptation and Critical Rewriting*, Bucharest, the Romanian Cultural Foundation Publishing House, 2000.

¹⁰ Plett, H.F., *Textual Science and Textual Analysis*, Bucharest, Universe Publishing House, 1983.

¹¹ Pânzaru, I., *Practices of Text Interpretation*, Iași, Polirom Publishing House, 1999.

We find, therefore, that the pedagogical coordinates of linguistic and literary education understand the *text as a probing utensil that integrates educational activities in reaching curricular goals*. The incontestable value of a quality text as a means of didactic communication makes the text the educational “protagonist” in charge with facilitating the pedagogical relationship between *me (the student)* and *reality (the world)*. The latter needs to be re-dimensioned from the perspective of students’ cognitive and attitudinal formation; today’s students have the advantage of being able to manoeuvre and navigate through the informational field of a diversified space.

In this context, the didactic valuing of the text under the aspect of *network-type learning* offers definite educational advantages by structuring a cognitive network as a pertinent pedagogical produce, which is theoretically and praxeologically based on the principles of veracity, processuality and cognitive utility, in relation to the student as the beneficiary thereof, who accedes through the text the reality of life and aims for optimal social inclusion.

Textual education, as a dimension of general education, implies educating the student by applying in educational practice various types of text. These texts, when used in the educational process, are meant to support the students in their search for responses to the challenges of today, to the question on how can the student build self-appreciation and form himself, being informed as well as formed on the basis of this type of text.

Involving the text in the educational process is a challenge, in the opinion of certain specialists, as it focuses attention on approach, comprehension, exploration of the “unsubstantial” information; others believe that it leads to the solving of problems, complex real situations from the students’ own lives.

As seen from the perspective of textual education, the analysis of denotative contents needs to be approached as a product of the reflexive activity of relating their contents to the real environment. The educational consequences of the denotative text materialise in the formation of students’ *observation skills*. It is through such texts that the student accesses better the reality of life.

The denotative text may be read, like any other text, in two ways, as described by R. Barthes: the first one is fast, ignoring language games – it goes quickly, avoiding boredom; the second one avoids nothing, weighs, keeps to the text, and denotes application and impetus, surprising the

feuilletage of meanings. The latter type of lecture is appropriate for the modernist text, and not least a denotative text, which needs to be read not in gulps, but in sips of rediscovering one's own life. And in order to not get lost in non-meanings, the readers of the denotative text need to be "aristocrats of lecture", perhaps even to a greater extent than for a designating text.¹²

It is a known fact that in order for a text to be considered a successful product, it is not enough, also according to A. Şerbănescu, for it to only contain interesting ideas.¹³ Its reception by the student depends, to a great extent, on the author's skill to organise his ideas so as to make them clear. Even very interesting, good, original, unusual ideas tend to get lost in a muddled text, which the reader is unable to follow through the author's fault. What appears to be clear and perfect to the author might seem entangled to the reading student. The true value of a text emerges from the comparison the reading student makes between his own mental scheme and the scheme presented by the author. *The reading student expects to find in the denotative text his own everyday experience and one of the patterns that model his existence*. Therefore, by applying retelling interpretation the student can attempt to use his knowledge, in order to *relate the world of the text to the real world*.

Thus, analysing the role of the text in the development of the student's integral personality, we can detect several common elements that represent its construction: the student, as a text-carrier, is a creator; in the messagistic relation with the text the student brings into the middle of learning a great variety of meanings; understanding the message of the text follows a personalised scheme; the student needs to be situated beyond the usual conventions, needing to prove to the text that he "accepts" it; before assuming the status of an advised, presumptive, empiric reader, the student needs to be taught to extract fundamental ideas, as well as dominating motives and themes from a presented textual field, to formulate them briefly, in his own writing style, through persuasive conceptual nodes, constructing thus an area of comprehension and understanding.

If we try to stand on several departure points when *conceptualising retellisation*, so that such a position allows us to bring together in a subtle relationship various entities of visualisation, then one of the questions we

¹² Barthes, R., 2006, *The Pleasure of the Text*, Cartier Publishing House, p. 14.

¹³ Şerbănescu, A., 2001, *How to Write a Text*, Iaşi, Polirom Publishing House, p. 135.

can ask ourselves concerns its status, for it is supposed to possess a real, concrete existence as a well-highlighted “mediator” of the relationing phenomenon.

This specification of retellisation is being ensured, first of all, by the fact that the cutting-out of understanding is a fact of penetration into connections and meanings, into the perpetual interactions between the various realities that surround the human being in general and the student in particular. Obviously, the text, of any kind, can also be written into this reality. After all, in our view, the action of “filling-out” the spaces *in* and *between* texts is an act of merely offering the text to the student, without forcing him to anything – and, on the contrary, creating for him all the conditions in a methodological combination of cutting-out portions of reality, as a *choice*.

As E. Joița mentions, any knowledge or learning is constructed individually or in a group. The reality can be approached from several perspectives, and real existence is their main source. Real life is the text, and learning is its interpretation.¹⁴

What we have said so far concerning the relation *retellisation vs text* leads us to the idea that in the paradigm of postmodern education the pedagogical concepts find plural approaches and differentiated contextualisations. When it is related to a pedagogical value whose reality and utility may not be doubted, the competence receives the generic role of being an outcome (see the pedagogical term *generic competence*), a standard of measure for theoretic and pragmatic acquisitions or a *perpetuum mobile* which, through certain psycho-cognitive structures, of adjacent competences, would put in action new energies, giving a plus of formative value to the pedagogic act it itself and thus stimulating the formation and development in students of a basic protextual position, i.e. a sum of capabilities, skills, dexterities concerning work with the text and its exploration.

After analysing these phenomena and starting with the idea that the text is a system of signs, we can assert that text retellisation is a *syntax of the text*. Its construction elements are the textonemes and, *just as we construct the syntactic structure of a sentence, we may construct the syntactic structure of the text (the network of the text), with the only difference that here the elements are not words or sentences, but phrases.*

¹⁴ Joița, E., *Constructivist Teaching – an Alternative*. Fundaments. Strategies , Bucharest, Aramis, 2006, p. 47.

In this context, we need to underline the necessity of finding a point of reference that would annul the “antagonism” between the reality of existence and educational reality. The educational axis is being transferred in the text domain from the text as such (ontology) to the student (epistemology) and a superior plan is being discovered, one that is close to reality and superior to a non/reality, which Kant has called transcendental.

Although it might seem superfluous to specify also the denotation of the principle, which is a topic highlighted often enough, today this issue is in the situation of being approached based on documentation related to the network. In this way, the principle of retellisation can assert its right to existence and individuality, being different from what exists.

Being a theoretical and practical domain of study, textual didactics are, through the principle of retellisation, a fundament for the educational process, its organisation and development. In short, the principle of retellisation offers the possibility of exiting into the reality seen as a whole.

Starting from the philosophical idea according to which we need to seek a principle in the basic notions and the vast domain of the specific, of the given, of experience, in what is being lived unanimously, we can say that the principle of retellisation appears therefore to be the fundament of a conditioned discovery (the ideatic nodes of the text) and of lived values, and respects several basic conditions. This principle is:

- Lacking “suppositions”; dominating, because it possesses a certain interior evidence¹⁵;
- Is not an attributed dogma, but modern evidence in the concept of education;
- Provides the “satisfaction” of originality;
- Supports the necessity for explaining, evidencing, understanding the facts of the world (from within the world); positive explanation provides the chance of understanding facts or data;
- Represents a predetermination based on the thinking ordering spirit;
- Has an evident character.

Therefore, the principle of retellisation is the result of “respecting” the fact that the world is organised through relationships and connections, not at will.

¹⁵ Florian, M., *Experience as a Philosophical Principle Reconstruction*, Bucharest, Gramar Publishing House, 2002, p. 111.

Thus, pedagogical science does not bow to the facts, does not gather ideas randomly, but instead represents an expression of creative thinking, which directs educational action without descending into affirmations devoid of nuancing, and only counts on wide and deep reasoning.

As a result, *the principle of retellisation is a regulating norm that involves the graphical transposition of a text (information) of the network type, as an instrument of core-extracting, specification, concentration, restricting of content in favour of rigour, and which facilitates the understanding of the text (information)*. This principle can act as a prescriptive norm with a more reduced generalising character.

If we refer to research at student level, we find that the significance of their additions concerns a great diversity of aspects. For example:

In the students' opinion, the text treasures: *a reality endowed with magic and creativity; the principle and essence of society; the world from the perspective of the good, as well as people's vices; the value of our existence in the world; the core values of the world* (the students were focusing essentially on the close connection between text and reality, alternating in giving priority to one or the other).

In order to produce a text, the students believe we need: *to have something to say; to possess rational thinking; cooperation between feeling and rasion; special skills; a special rendition of the simple*. What we would like to highlight here is the fact that, while the student's thinking is directed towards the text that needs to be created, there is also ongoing a parallel process, and namely a reflection on why is a text being written, to whom is it addressed, what does it mean to say, how is it going to be understood.

Of course, we do not claim that the students fail to understand what constitutes the mystery of a text; we merely wish to point out that the possibility of bringing onto the scene of students' thinking some alternative visions becomes a strong educational factor. As the students have found, the mystery of every text consists in *the charm of its message; the author's competency in creating the image of a soul; the capacity of penetrating beyond the reader's thinking; the transposing of the soul on the page; the logical network; the idea, the philosophical concept that is reflected in the mirror of the words*. Departing from this starting point, the students try to outline an incontestable value of the text, namely one that is being preserved – that of transcending beyond the thinking of the text reader.

The text as a construct is, in the students' vision: *a factor of improvement; the root of the human spirit; a soul that aspires to be discovered; the compass of reality; the pyramid of imagination; the oxygen of the author; the key*

to the future; the lid on fantasy; the vector of wisdom; the graph of perfection; the needle and thread of spiritual development; the basis of spirituality etc. Even from these few answers we can sense the diversity of opinions, which the students denote, since they perceive the text through its construction as a “key” that unlocks the future, as a pyramid that puts in motion imagination, spirituality etc. It is in this framework that we most frequently attest the fact that the text is being constituted as a text, in the students’ opinion, precisely based on all the connections of meaning, put together, starting from the fact of a network structure, which is pertinent to textuality.

Therefore, our conclusions concerning the development of a conceptual framework for retellisation represent a complex approach, and what we have shown is valid, to a greater or lesser extent, for the following areas of reference: (a) the text for the sake of text (the discipline as such); b) the text for other texts (the practice of the language in general); c) the text for other school disciplines (education); d) the text for life (the student’s personality).

REFERENCES

- Barthes, R., (2006), *The Pleasure of the Text*, Bucharest, Cartier.
- Constantinescu, M., (2001), *Post/postmodernism: The Culture of Divertisement*, Bucharest: Enciclopedic Univers.
- Corniș-Pop, M., (2000), *Hermeneutic Temptation and Critical Rewriting*, București, Fundația Culturală Română.
- Florian, M., (2002), *Experience as a Principle of Philosophical Reconstruction*, Bucharest, Gramar.
- Joița, E., (2006), *Constructivist Teaching – an Alternative. Fundaments. Strategies*, Bucharest, Aramis.
- Joița, E., (2002), *Cognitive Education. Fundaments. Methodology*, Iași, Polirom.
- Pânzaru, I., (1999), *Practices of Text Interpretation*, Iași, Polirom.
- Plămădeală, I., (2002), *The Work of Literature as a Text. Introduction into Textual Science*, Chișinău, Prut Internațional.
- Plett, H.F., (1983), *Textual Science and Textual Analysis*, Bucharest, Univers.
- Popescu, S., Brătianu, C., (2004), *A Guide for Quality Control in Higher Education*, Bucharest, Ed. Universității.

- Siebert, H., (2001), *Pedagogie constructivistă* [Constructivist Pedagogy], Iași, Institutul European.
- Stan, E., (2004), *Postmodern Pedagogy*, Iași, Institutul European.
- Șerbănescu, A., (2001), *How to Write a Text*, Iași, Polirom.
- Tschirova, I., Goncharova, E., (2007), *The Multidimensionality of the Text: Comprehension and Interpretation*. Moscow: OOO Knijnyi Dom.

AN ATTEMPT AT DEFINING AND SKETCHING A TAXONOMY OF MODERN SCIENCE AND CONTEMPORARY SCIENTIFIC DISCIPLINES

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Abstract: *In the central section of the article are described the beginnings of taxonomy in the universe of science, as well as its rigorous subsequent development, so as to emphasize the role of three moments, books and personalities of major impact, not forgetting then to describe the development directions and the content of some modern solutions for a classification of sciences and scientific disciplines in the contemporary world of taxonomy, pedagogy and scientific research. A few final remarks stress the significance of creative endeavour in trying to adapt to an increasingly more dynamic and multiplying reality, due to requirements to delineate and classify in a more and more intense manner, not only in botany or biology, but also in some domains that are abstract in point of referentiality, but adaptive by adjusting to reality or harmonization of living together, such as the fields of education and human research.*

Keywords: *science; discipline; taxonomy; Biglan, Bloom, Harrow, Krathwohl taxonomy;*

I. Introduction

Science and the various scientific disciplines have been, and still are, landmarks in the evolution of human knowledge, which emphasize the importance of education, and scientific research in general, as factors of real progress of humanity. To order the new sciences and scientific

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disciplines, the multiplication of which, over the last hundred years, has been unprecedented, taxonomy is increasingly striving to adapt to the world of knowledge, multiplied exponentially. The old taxonomic criteria used to include both the existence of articulated, validating and significantly discriminating criteria, from the existence of a systematic body of knowledge in books published and works with direct reference, to concepts and specific variables, particular methods, derived theories, from the existence of consensus among scientists, including pedagogy and didactics, to individual knowledge, the didactics of a given discipline, as well as the existence of researchers in the applied domain of those sciences, an area which is being studied by students and PhD students, the existence of a language and a specialist literature and a number of scientific communities promoting the visions and objectives of those sciences and disciplines, etc.

II. An attempt at defining science and scientific disciplines from a modern perspective

The present paper starts with a brief conceptualization of modern science, focusing on four major elements, or else four key variables; the first is a specific reality, the second is an own methodology based on distinctive methods, to which is added a third one, described by means of a special theory, which is the result of a characteristic language, investigation and laws, along with a fourth variable, delimited by characteristic and distinctive models, a last variable which is being expanded in an ever more ample manner as far as its importance in modern science or contemporary is concerned. These four main elements of a science can be equated with the four cardinal elements of the nature, philosophy, mythology, which gradually turned into religion: a) earth, defined as reality, or the specific object of study of science, and reconsidered as a support for human nature's material, and also spiritual survival; b) water, or concepts and relationships between variables combined in a specific language, and overlapping in the clarity of the own theory of science; c) air, or the methods that ensure the methodological breathing of knowledge of reality; d) fire, which burns everything that is useless, outdated, ill-grounded, in the research of any science, from its methods to its theories, becoming a series of models that dazzlingly or meteorically lighten the sphere of the science under analysis, validating or invalidating theories, adjusting or leaving out methods, etc. (Săvoiu, 2012).

A scientific discipline, in its essential capacity as a primary unit usable for the internal differentiation of sciences in the processes of knowledge, education and research, is an invention of nineteenth-century society, having at times the claim of a conceptual paradigm.

The concept of discipline, and later on, the concept of specialty, have been in use for a relatively long time (more than one century) in point of semantics, defining a single term for a complex action or process of ordering of knowledge for the purpose of educating or training in various educational entities, from schools to universities and academies. A scientific discipline implies a social and cognitive unity of knowledge production in the field of a science (Stichweh, 2001), and may be equated with information that can become acquired knowledge, wisdom, expertise, skills and abilities, projects, issues and queries, challenges, questions, approaches, studies and research areas, which are all associated with certain university or academic milieu, or with well-defined study fields or professional practice spheres. Starting from this assumption, we can take the example of gravity, which, being associated with the academic discipline of physics, becomes a part of the physical discipline, and the analysis of production, distribution and consumption of goods and services could explain how a discipline defined as economics works and interacts. Everything proves not only interesting, but also applicable in reality, with unquestionably much better results, once the gravity theory is applied to the regional economy, or to economic demographics (e.g. John Quincy Stewart's 1947 demographic and social gravity model), all of the above describing the quality of the alliances established between the disciplines in the various forms of modern multi-, trans- and interdisciplinarity.

An academic discipline remains a branch of human understanding, or a body of knowledge given or received by the people trained for that discipline (apprentices, students, graduate students, PhD. students, etc.). An academic discipline that is taught and researched at a university level describes a teaching and research unit as university teaching load, which requires that this teaching should be based on the latest knowledge and recent research acquisitions (for the students), or even involves participating in the processes of scientific knowledge production (PhD. students). The discipline tends to evolve or co-evolve with various systems of professions, and follows closely the limits of modern academic

departments, actually creating and maintaining *disciplinary communities*¹.

A discipline is distinguished by the specific actions it favours, by the way it characterizes, classifies, specializes, its preference for certain scales, and even the manner in which it distributes values along a scale, the manner in which it standardizes and ranks entities and individual units, in a mutual relationship with one another, and when necessary, by the way in which it disqualifies and invalidates².

Sciences and their first attempt at classification, or the first taxonomic attempt, became early reality with Plato, apparently as simple glances at the world, as speculation or differentiated contemplations (although sciences and theorizing as contemplative life appear to have been revived with Pythagoras too), structured by a double approach, through *techné* or science (essentialized by *Demiurgos* in craftsmanship) and *episteme* or knowledge, in its meaning as the main activity of the first moving principle, greatly amplified by Aristotle in the point of structure. Eventually, the antiquity concept of science was diluted into the broadest sense of ancient spirituality and culture to fully enter the concept of *soul* with Plotinus, where even activity and *praxis* are just a degraded form of contemplation.

Theoretical science, in the sense that it was attributed by ancient Greece, a much broader meaning than today's sense, was meant to bring happiness to fellow humans, and through it man could be closer to divinity (creation being its main result, and that creative character itself delimited it from everything else) – a creation that degenerated into a separate activity with Plotinus. Ancient science turned to account and emphasized *logos* or analytical (rational) explanation, included and explained *nomos*, commonly perceived as a convention (or law), integrated the paradigm or the model, validated assumptions, and once having become a virtue of knowledge by definition with Socrates, would continue its civilizing surge, up to purification with Plotinus.

The opposition between science and scientific discipline applied in practice benefited, in ancient times, by the same Hellenic roots, and Aristotle was among the first who made a clear distinction between *theoretical* and *practicalwisdom*, generating a long process of discrimination

¹ Pierce, S.J., *Subject areas, disciplines and the concept of authority*. Library and Information Science Research, 1991, 13, 21-35.

² Foucault, M., *Discipline and punish: The birth of the prison*. Trans. Alan Sheridan. New York: Vintage, 1977.

and early taxonomization of sciences (*episteme's*), as *techné* (applied science), nuanced by *poietike* (productive knowledge) or *practike* (practical science) and *theoretike* (theoretical knowledge), opposed to all shades and gradations presented previously.

Modern science classified sciences, by Roger Penrose, in *The Emperor's New Mind, Concerning computers, Minds, and the Law of Physics*, more than two decades ago (Penrose, 1989), in a manner that was simultaneously Aristotelian and Platonic, into only four classes: *superb sciences*, *useful sciences*, *tentative sciences*, and *misguided* (misdirected) sciences, reminding very much of the ancient taxonomy. The greater part of the sciences evolve prudently, yet upwards, struggling to get into the class of the useful ones, and a small, very small part of them have already positioned themselves in the hierarchy of superb sciences (and physical theory is an example of success through systematic changing its theory, in the spirit of constant generalization and expansion).

Albert Einstein developed, in his writings *Opening speech at the Prussian Academy of Sciences* in 1914, and *On the method of theoretical physics* in 1934, the condition for a science to become superb, the value being inferred from his predictions, singling out the case of physics without resorting to alliances, thus anticipating Penrose's classification.

The development of such a science can be phased as: a) formulating the basic concepts and principles of a new physical theory (the product of creativity or the activity of imagination creative, which is not driven by any rule, but only by facts, observations, experiments, etc., and cannot be practically learned), and b) formulating all the consequences that can be derived from them (being driven exclusively by logical rules and regulations, and being learnable at any time). A superb science is *unifying*, automatically or by definition, bringing together an extremely large number of facts, observations and experiments, and hence its maximum value of knowledge in the world of scientific research (e.g. physics, which goes beyond the ability and unifying capacity of even logic or mathematics).

Although the nature and purpose of sciences in general are the subject of epistemology, and history and the science of sciences belongs to scientology, science classification defines a separate science usually called taxonomy, which is however in a steep dynamics, faced with a body of sciences that exceeds 1,000, according to recent surveys by UNESCO, and a set of sub-corpora of more than 9,000 scientific disciplines, as they are inventoried by bibliometric research and the classification requirements of libraries worldwide.

Scientific truth, faith in this truth and its permanent justification are the main issues approached by epistemology, along with the ways to effectively produce scientific knowledge, no less than a certain characteristic skepticism in relation to the degree to which the theoretical goals can be achieved, and the stated objectives can be attained in practice. Unlike scientific history, whose interest lies within the boundaries of science history, the taxonomy of sciences and scientific disciplines is trying to solve a problem of structuring that appears as increasingly difficult in the face of the tendencies towards ever growing multiplication in the world of contemporary sciences and scientific disciplines.

Our contemporary world is extremely complex and education is becoming increasingly important. In this context, the epistemological evolution of pedagogy as a science enables the possibility to study the educational problematics from various perspectives. *Pedagogy* derives from the Greek words *pais*, *paidos* i.e. child and *agoge* which signifies training. Thus, the first importance of pedagogy should be remarked by its training/guiding role in the development of an individual/child. The course taken by pedagogy from its empirical/pre-scientific stage to becoming an educational science has been a relatively slow one, yet rich in scientific structuring and restructuring. Nowadays, pedagogy is a science, an epistemological structure open to new reasoning, interpretations, theories, models etc.

The nature of pedagogy as a science is defined through these essential elements:

- pedagogy has its inherent sphere of study, that is the education;
- pedagogy relies on specific methods of research/investigation in studying the education;
- pedagogy holds a certain type of conceptualization, i.e. a body of theories, laws, paradigms, principles, theoretical and practical knowledge.

The complexity of the educational realities, as well as its dynamics lead to the strong affirmation that pedagogy is the integrative science of education, being axiological-regulatory and holding theoretical-explanatory and practical-applicative aspects, establishing itself as a science as well as an art which studies the theory and the practice of education. The term art has been included here in order to stress the value of the creative side of the pedagogical science since it includes the adaptation and differentiation of the laws, theories and pedagogical paradigms to practical situations in education and ways to approach the child/individual as a bio-psycho-socio-cultural entity.

III. A thousand years of history of the taxonomy of sciences and scientific disciplines, or from the first taxonomy by Ikhwan al-Safa' to Biglan's taxonomy

Taxonomy has been, and remains, the science and practice of classifying things, concept, plants and animals, and even sciences and the scientific disciplines derived from them. Taxonomy, as a major component of systematics, includes or aggregates, in a unique manner, description and identification, as well as nomenclature and classification, and finally all of them together (Simpson, 2010). Etymologically, *taxonomy* is derived from the Greek word *taxa*, and it detailed the eight levels in classical botany or zoology (domain, kingdom, phylum, class, order, family, genus and species), which were then multiplied to 14 levels in modern biology (rank, division, subdivision, class, subclass, super-order, order, suborder, infra-order, super-family, family, subfamily, tribe and subtribe).

Sciences' taxonomy keeps pace with the present and draws upon the wealth of knowledge accumulated throughout its history as the sciences' classification, and one brief presentation can find many important personalities, but can't offer a complete image without three major scientists. The first is Ikhwan al-Safa', a high-ranked man of learning from the Shi'a community, who are believed to have lived in Basra in Iraq, in the course of the 20th century and has described in *Epistles of the Brethren of Purity (Rasa'illkhwan a-Safa)* two systems of scientific classification: "the first taxonomy being one of a hierarchical nature, defined by the arrangement of the 52 epistles in the manuscript and their sequence, which contains a higher level of esotericism, and the second was set out by the detailed content of *Epistle VII*", and the second coming from his unique work consisting of approximately fifty-two epistles or *rasa'il* (De Callataÿ, Godefroid, The Institute of Ismaili Studies, 2003).

The two classifications are in fact two lists with significant differences and certain discrepancies from each other indicating or bearing witness to a historical process of re-writing and re-elaboration. The author Ikhwan al-Safa' seems to be the first who defined the necessity and outlined the utility of the classification of sciences, mentioning the "*kinds of sciences and the species of those kinds, in such a way that this can be an indication of their objects to those who study the science and in such a way that those people can be rightly guided towards what they are looking at*" (the second half of his VIIth Epistle). His second system of sciences could be considered a first taxonomy that indicated three kinds of sciences namely: a) the *propaedeutic* sciences (the sciences of training and education which have been set up mainly for the

quest of subsistence and for the goodness of the living in this world, and which are of nine kinds: 1) writing and reading; 2) language and grammar; 3) calculation and operations; 4) poetic and prosody; 5) auguries and auspices, and the like; 6) magic, talismans, alchemy, tricks and the like; 7) professions and crafts; 8) sale and purchase, trades, cultivation and breeding; 9) biographies and histories); b) the religious and conventional sciences (the sciences which have been set up for the healing of the souls and for the quest of the hereafter, are of six kinds: 1) science of revelation; 2) science of interpretation; 3) narratives and reports; 4) jurisprudence, norms and laws; 5) recollection, exhortations, asceticism and mysticism; 6) interpretation of dreams) and c) the philosophical and real sciences (four different species of sciences: 1) mathematics; 2) logic; 3) natural sciences; 4) metaphysics). Ikhwan al-Safa' had developed the division of the philosophical sciences as subspecies level (like e.g. mathematics subspecies arithmetic, geometry, astronomy and music) and this underlines the value of his taxonomy, as it appears like a synthesis in Table 1 entitled *The general classification of the sciences according to Epistle VII, from Epistles of the Brethren of Purity, presented in a special Appendix* by Godefroid De Callataÿ, from Institute of Ismaili Studies, in 2003.

The second personality in taxonomy's history remains Charles Sanders Peirce, who elaborates the first modern classification of the sciences during the first two or three years of the 20th century's beginnings (Peirce, 1902), inspired both by Linnaean hierarchic (D-K-P-C-O-F-G-S) but especially by the biological *taxa* of Louis Agassiz, republished much later (Agassiz, 1962). As philosopher, Charles Sanders Peirce divided science into *science of discovery* (mathematics, which draws necessary conclusions about hypothetical objects; *cenoscopy* or *philosophy*, which details positive phenomena in general, such as confront a person at every waking moment; *idioscopy* or *the special sciences*, which describe special classes of positive phenomena, and settling theoretical issues by special experiences or experiments), *science of review*, and *practical science*. Peirce used four levels: classes, subclasses, orders, and other *taxa* (suborders, families, etc.).

Mathematics was divided in: a). mathematics of logic; b) mathematics of discrete series; c) mathematics of continua and pseudocontinua. Cenoscopy or philosophy used: a) phenomenology; b) normative science; c) metaphysics. Idioscopy or the special sciences include a) nomological or general classificatory; b) descriptive nomological psychics, or psychology; c) classificatory psychics, or ethnology; d) descriptive psychics, or history

(Peirce, 1903). The third personality is Anthony Biglan and his memorable scheme of the classification system for scientific disciplines or sciences, based on their differences in preferred research methodologies, the components of those methodologies, and the paradigms underlying them, their application status, and the relation with living systems (Biglan, 1973; Biglan, 1975).

The psychologist Anthony Biglan has explained some of the differences between scientific disciplines or sciences using three major criteria: a) Thomas Kuhn's paradigm (this criterion most generally divides scientific disciplines or sciences into *hard* or *paradigmatic* and *soft* or non-paradigmatic, which also points at the divide between *natural sciences* and *humanities/social sciences*); b) the degree of practicality (the status of being or not being applicable distinguishes between scientific disciplines or sciences *pure* or primarily theoretical (e.g. physics) and simply *applied* (e.g. engineering)); c) the implicit relationship with living systems (this criterion divides scientific disciplines or sciences in *living systems* (e.g. agriculture) and *non-living systems* (e.g. geology)).

The Biglan's³ taxonomy of scientific disciplines or sciences thus combines the three criteria, giving finally the epistemological and the cultural dimension to all of these and thus this triple stratified classification based on criteria of *hard/soft*, *living systems/non-living systems* and *pure/applied* categories distinguishes all of the scientific disciplines or sciences, this classification being inspired by a modern and holistic⁴ approach and less by a classical one (see Table 1)

	<i>Hard</i>		<i>Soft</i>	
	<i>Living systems</i>	<i>Non-living systems</i>	<i>Living systems</i>	<i>Non-living systems</i>
<i>Pure</i>	Biology, Genetics, Physiology, etc.	Physics, Mathematics, Chemistry, Geology, etc.	Psychology, Sociology, Political Science, etc	Philosophy, History, Economics, etc.

³ Biglan, A., *The Characteristics of Subject Matter in Different Academic Areas*. Journal of Applied Psychology, 57(3), 195-203; Biglan, A. (1973). Relationship Between Subject Matter Characteristics and the Structure and Output of University Departments. Journ, 1975.

⁴ Goel, S., (2010), Well Rounded Curriculum-An Insight from Biglan's classification of disciplines, Retrieved [2013.06.18] from

<http://goelsan.wordpress.com/2010/07/27/biglans-classification-of-disciplines/>

<i>Applied</i>	Agriculture, Medicine Psychiatry, etc.,	Engineering Computer Science, etc.	Nursing, Education, Conservation, etc.	Architecture, Law, Arts, Dance, Music, etc
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Table 1. Biglan's science and scientific disciplines taxonomy (Goel, 2010).

The slow progression of pedagogy as an educational science to the systems of educational sciences (the ensemble of disciplines which study the situations, the facts and the educational processes) advanced to the configuration of a consistent system of educational sciences. In this perspective, both an internal and an external diversification of Pedagogy has been created. The internal diversification of pedagogy lead to the apparition of Pedagogy's fundamentals (basis) as well as to the establishment of the theories and methodologies of the curriculum, training and evaluation. The external diversification highlights the diversity of Pedagogy's relation with other scientific fields from an educational perspective. The taxonomy of educational sciences reveals itself through a series of illustrations which intend to be as comprehensive as possible.

Such an illustration/taxonomy has been proposed by Gaston Mialaret⁵ who determined three landmarks:

- sciences which expose the general and local conditions of the educational institution (the history of education, education's sociology, compared pedagogy, school demography, etc.);
- sciences which illustrate the relation of pedagogy with the educational act per se (educational psychology, communication sciences, didactics of various disciplines, the methodology and technology of teaching, evaluation science);
- sciences dedicated to reflection and evolution (the philosophy of education, the theory of models).

Elena Joita (1999) contributed with a different systematization /taxonomy of the educational sciences:

- objectives based pedagogical sciences (fundamental pedagogical sciences, functional pedagogical sciences);
- methodological pedagogical sciences;
- interdisciplinary pedagogical sciences.

⁵ Mialaret G., *Les sciences de l'éducation*, Presses Universitaires de France, Paris, 1976.

Originating from the perspective of educational objectives, a number of other taxonomies developed, among which we can point up Bloom's, Krathwool's as well as Harrow and Simpson's taxonomies.

Bloom's taxonomy⁶ refers to the cognitive sphere, focusing on six categories of behaviors:

- knowledge/information acquisition;
- comprehension/understanding of the information;
- application/ the ability to convert the information into practice;
- analysis/ the capacity to identify components using principles of organization;
- synthesis/ the capacity of producing something new;
- evaluation/ the process of critical thinking.

Krathwohl's taxonomy describes five behavioral categories emerged from the affective sphere:

- reception/ the subject is willing to receive information,
- answer/ the subject wishes to master the information so that he can explain them,
- assessment/the frequently and constantly manifested components in the subject's behavior are related to the internalization of a set of values,
- conceptualization (organization)/ the subject becomes able to organize values into a well established system, to differentiate them and place them into a hierarchy;
- characterization/ the values start to regulate the subject's behavior, by defining him.

Harrow's taxonomy⁷ identifies six behavioral categories belonging to the psychomotor sphere:

- perception/ the subject is familiarized with the action or the skill they are about to learn;
- disposition/ the starting phase of preparation necessary in order to achieve the action - it represents the fundamental basis of the mental model that anticipates the action;
- the simple answer/ represents the action itself through imitation of the given model;

⁶ Bloom B.S., Engelhart M.D, Krathwohl D.R, 1956, *Taxonomy of Educational Objectives. A Cognitive Domain*, McKay, New York.

⁷ Harrow, A.J., *A Taxonomy of the Psychomotor Domain. A Guide for Developing Behavioral Objectives*, McKay, 1970, New York.

- automatisisation/the repetition, exercising the motor actions which define the ability;
- complex reaction/ the development of complex motor actions, and defining a personal style;
- non verbal communication/ at this level, there is a continuum of expressivity (aesthetical movements).

G. de Landsheere harmonised the objectives' taxonomy with the hierarchy of learning types for a better understanding of how the educational objectives adapt to the hierarchy of learning types. Synthetically, it can be illustrated thus:

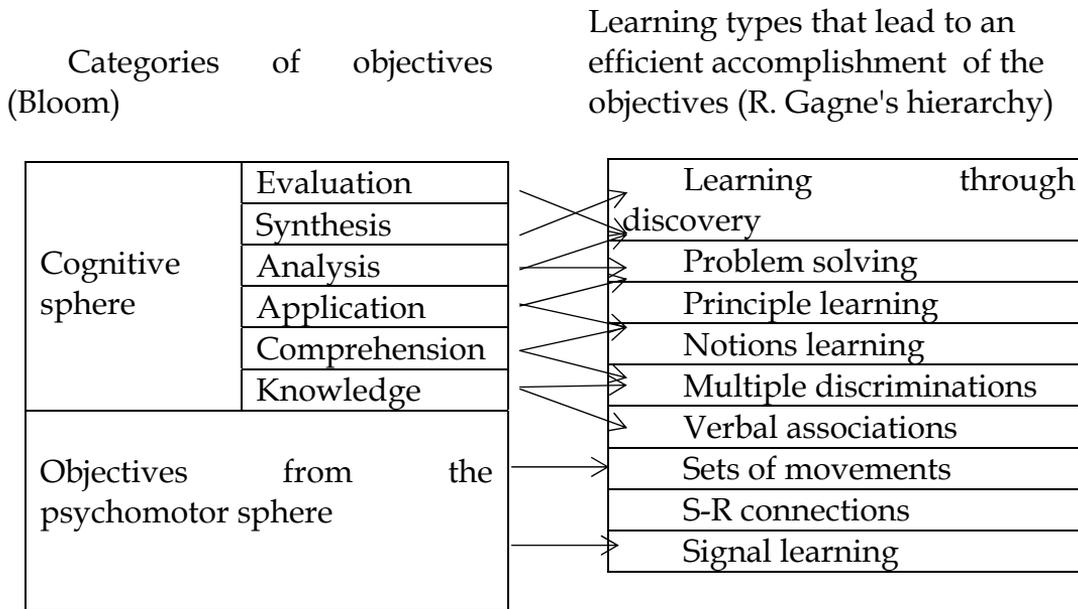


Table 2. Illustration of the correspondence between the taxonomy of objectives and the hierarchy of learning types (G. de Landsheere)

IV. Conclusions

Classical taxonomy was deterministic in essence, defining a simple and coherent model of understanding, representing and explaining the surrounding reality, through structuring and ranking, by means of rigorously determined processes, according to clear principles and positive, sure events. Modern taxonomy of sciences and disciplines must constantly adapt itself, thus becoming probabilistic, like the universe of

knowledge, of modern educational thinking and research in order to be able to keep up with this multiplying present and the exponential future of a rocketing number of sciences and scientific disciplines.

Probably a new ethics is also required in the universe of emerging sciences or scientific disciplines, which can serve to pacify the inter-scientific, or inter-disciplinary and trans-scientific or trans-disciplinary conflicts, and the taxonomy of sciences or scientific disciplines, in the sense the authors attributed to this term, should be more than a mere intersection of concepts and instruments, methods and models of a pedagogical or didactic origin, becoming virtually a new history of thought, knowledge and prediction in the universe of knowledge of a both generalized and particular nature, which is specific to humanity.

REFERENCES

Agassiz, L., (1962), *Essay on Classification*. After London edition of 1859, Edited by Edward Lurie: The Belknap Press of Harvard University Press, Cambridge, Massachusetts.

Becher, T., (1981), Towards a Definition of Disciplinary Cultures', *Studies in Higher Education*, 6(2), 109-122.

Becher, T., (1987), *The Disciplinary Shaping of the Profession*. In *The Academic Profession: National, Disciplinary, and Institutional Settings*, ed. Burton R. Clark. Berkeley: University of California Press.

Becher, T., (1989), *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of the Disciplines*. Bury St. Edmunds, Eng.: Society for Research into Higher Education, Open University Press.

Becher, T., (1994), The Significance of Disciplinary Differences. *Studies in Higher Education*, 19(2).

Biglan, A., (1973), Relationship Between Subject Matter Characteristics and the Structure and Output of University Departments. *Journal of Applied Psychology*, 57(3), 204-213.

Biglan, A., (1975), The Characteristics of Subject Matter in Different Academic Areas. *Journal of Applied Psychology*, 57(3), 195-203.

Braxton, J., & Hargens, L., (1996), Variation among academic disciplines: Analytical frameworks and research. In J. Smart (Ed.), *Higher education: Handbook of Research and Theory*, vol. 11(pp. 1-46). New York, NY: Agathon Press.

De Callatay, G., (2003), *The Classification of the Sciences according to the Rasa'illkhwān al-Safa'*. Université Catholique de Louvain, Institut

Orientaliste, Faculté de Philosophie et Lettres, Louvain-la-Neuve. Retrieved [2013.06.19] from

http://www.iis.ac.uk/SiteAssets/pdf/rasail_ikhwan

Flonta, M., (1981), An introductory study and notes on Popper, K.R. *Logik der Forshung*. Tübingen: Mohr C.B. (Paul Siebeck). Ed. Științifică și enciclopedică, Bucharest.

Foucault, M., (1977), *Discipline and punish: The birth of the prison*. Trans. Alan Sheridan. New York: Vintage.

Foucault, M., (1970), *The Order of Things: An Archaeology of the Human Sciences*, A translation of *Les Mots et les choses*, Vintage Books, A Division of Random House, Inc., New York.

Gadamer, H.G., (1993), *Hermeneutik II: Wahrheit und Methode*, Tübingen: J.C.B. Mohr und Paul Siebeck.

Glänzel, W., Schubert, A., (2003), A new classification scheme of science fields. *Scientometrics*, 56 (3), 357–367.

Goel, S., (2010), *Well Rounded Curriculum-An Insight from Biglan's classification of disciplines*, Retrieved [2013.06.18] from

<http://goelsan.wordpress.com/2010/07/27/biglans-classification-of-disciplines/>

Gould, S., (1987), *Time's Arrow, Time's Cycle: Myth and Metaphor in the Discovery of Geological Time*. Cambridge, MA: Harvard University Press. pp. 120-122.

Harden, R., (1998), Integrated teaching - what do we mean? A proposed taxonomy. *Medical Education*, 32, 216–217.

Harden, R., Davis, M.H., (1998), The continuum of problem-based learning. *Medical Teacher*, 20(4), 317-322.

Huggan, G., (2002), Mixing Disciplines: The Anxiety of Interdisciplinarity. *Postcolonial Studies*, 5(3), 256-313.

Lattuca LR., (2001), *Creating Interdisciplinarity: Research and Teaching among College and University Faculty*. Nashville, TN: Vanderbilt University Press.

Lattuca, L.R., Terenzini, P.T., Harper, B.J., & Yin, A.C., (2010), Academic Environments in Detail: Holland's Theory at the Subdiscipline Level. *Research in Higher Education*, 51 (1), 21

OECD/Statistical Office of the European Communities, Luxembourg (2005). *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data*, 3rd Edition, (2007), *The Measurement of Scientific and Technological Activities*, OECD Publishing. doi: 10.1787/9789264013100-en

OECD, (2002), *Frascati Manual 2002: Proposed Standard Practice for Surveys on Research and Experimental Development, The Measurement of Scientific and Technological Activities*, OECD Publishing. doi: 10.1787/9789264199040-en

Pierce, S.J., (1991), Subject areas, disciplines and the concept of authority. *Library and Information Science Research*, 13, 21-35.

Popper, K.R., (1973), *Logik der Forshung*. Tübingen: Mohr C.B. (Paul Siebeck).

Revised Field of Science and Technology (Fos) Classification in The Frascati Manual (2007), Retrieved [2013.06.06] from

<http://www.oecd.org/science/inno/38235147.pdf>

Schommer-Aikins, M., Duell, O.K. and Barker S., (2003), Epistemological Beliefs Across Domains Using Biglan's Classification of Academic Disciplines, *Research in Higher Education*, 44(3), 352-353.

Simpson, M. G., (2010), *Plant Systematics* (2nd ed.). Elsevier, London: Academic Press.

Stichweh, R., (2001), *Scientific Disciplines, History of*, in: Smelser, N. J. & Baltes, P.B. (eds.). *International Encyclopaedia of the Social and Behavioral Sciences*. Oxford: Elsevier Science

THE PSYCHOSOCIOLOGICAL ASSESSEMENT OF PERSONNEL

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Abstract: *This paper focuses on description of some personnel selection techniques and procedures. The personnel selection aim to provide instruments for estimating the probable performance of people to a specific job. The objective of job analysis is to collect systematic information on a specific job. Personnel selection procedure should be appropriate with targeted job. The main objective of the job interview is to determine the extent in which a candidate possesses the knowledge/aptitudes/abilities required to perform properly the tasks/requirements imposed by occupation of a specific post. The aim is, therefore, to identify the appropriate person to occupy a particular job.*

Keywords: *Personnel selection, job analysis, competency analysis, unstructured and structured job interview.*

I. The personnel selection

The personnel selection refers to job analysis, the problem of matching between the occupied job and the person, equal opportunities and diversity, the specific competencies and employee flexibility. At the core of psycho-sociological procedures of selection are two fundamental principles. The first principle asserts that there are individual differences between people, regarding skills, abilities and other individual traits. Hence it follows that people are not suitable for all kinds of jobs, and that those procedures are effective who tries to match people with jobs. The second principle is considering the idea that future behavior is, to a certain extent, predictable. Accordingly, the future performance in carrying out the work can be estimated.

At a general level, the personnel selection and various methods of assessment - interviews, psychometric tests etc. - aim to provide instruments for estimating the probable performance of people to a specific job. The starting point is the job analysis, which refers to the job

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description, specifications for persons concerned and a competence model. Regarding the decision to apply for a certain job, if a potential candidate has some information on that target job, then he will trigger a psychological process, namely self-selection, or appraisal of the extent to which his own abilities and competencies match that required to job occupancy.

Another important notice is that the results of personnel selection are not only used when they are applied, but later, for example as regards the design of training plan, of individual development activities and plans. Job analysis involves a detailed description of the tasks and responsibilities of the job concerned, as well as the specific behaviors required of the person who wants to occupy that job. Such an analysis may recommend which personality traits are desirable, what kind of previous experience is required, and the technical skills or even the level/degree of intelligence. The next step is to identify the selection methods and techniques. Principally, it will examine the accuracy of the selection procedure, the most appropriate manner to find competent people for each job in part.

The objective of job analysis is to collect systematic information on a specific job, respectively what kind of work is carry out, what are the conditions of work (good or bad), what kind of equipment is used, the position of the job within the broader organization, what are the risks or the responsibilities etc. in order to be functional, must be operated the distinction between analysis procedures oriented towards job and those employee/personnel oriented. Procedures oriented toward jobs (or task centered) take into account the job itself, the description focusing on the job objectives and work results, the relationship between these, the resources and equipment used etc. On the other hand, procedures oriented toward employee/personnel (person-centered) describe the psychological characteristics or those relating to adequate job behavior, communication, the ability to rational analysis and decision making. Summarizing, the purposes of job analyses are (adapted from Rogelberg, 2007)¹:

- A description of the nature of the job.
- A classification of jobs into clusters of related jobs.
- A system of selection, "in which the job analysis is used to describe

¹ Rogelberg, S. G. (eds.), *Encyclopedia of industrial and organizational psychology*. SAGE Publications, Inc. Thousand Oaks, California, U.S.A., 2006.

the knowledge, skills, abilities, and other characteristics needed for successful task performance”.

- A system of performance appraisal, in which the job analysis means to highlight the specific job tasks and behaviors.

- An evaluation of every job's worth.

- A jobs design whose aim is “to make them more interesting or efficient to perform”.

- A training programs that identify the tasks which employees must be able to perform.

The objective of classical psycho-sociological assessment was to identify the particular tasks and responsibilities of a specific job. The solution was represented by competency analysis, which was used to highlight the evaluation criteria of an individual.

A competency is defined as being composed of those behavior features and patterns that an employee must required holding in order to perform his work tasks in a most efficient way. Competence aims, therefore, several plans: intellectual, specifically knowledge; abilities; behavior etc. the ultimate objective of competence analysis is to provide a model of competence, which synthetically includes those competences in relation to a job. This shall cover both behaviors about what should be done, as well as about what shouldn't be done. It is also recommendable that a competency should not be formulated at the highest level of generality. For example, a competency that refers to a person's communicative ability may be desirable in that he or she can communicate more efficiently and convincingly with customers or shareholders, but - in a different context - may consider that a person communicate to hierarchical superiors only what they want to hear, obediently and unrelated with reality. On the other hand, competences that describe behaviors that refers to what shouldn't be done must refer both issues that relate to full and in a more efficient manner achieving of job tasks, as well as issues of socialization, of interaction with colleagues and clients. In this sense, it perceived as being negative behaviors the exclusive pursuit of achieving only personal goals, inability to work in a team, or duplicitous attitude - humble towards managers and tyrannical in relation to subordinates.

Again, in terms of leadership, the competency perspective attempted to identify those characteristics that distinguished a leader from the other ordinary people. In the literature dedicated to leadership have been identified seven such categories of competencies, which are enumerated

and described in the following table (adapted from McShane, Glinow, 2008)²:

Leadership trait	Description
Leadership motivation	Decisions that leaders they take directly influence the others, therefore they must the power; but it is a “socialized power” because, in this case, the power is related to social responsibility and to achieve the team/ department/ organization goals.
Self-confidence	The leader is convinced that possesses those skills and abilities needed to be a true leader, and is oriented to achieve objectives.
Integrity	<i>Authentic leadership</i> – this is the phrase which refers to the leader’s sincerity and the capacity to “translate words into deeds’. The researches shows that honesty is a very important characteristic of a leader, especially in terms of others trust.
Emotional intelligence	Empathy is a psychological trait that should not be missing from the internal structure of a leader. The leader must have “the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in themselves and others”.
Drive	The leader must be constantly oriented to achieve the objectives of the organization and also he must have the ability to focus the others in terms of achieving those objectives. The leader must be always action oriented; “drive for result” is unquestionably one of the most important competencies of a leader.
Intelligence	The leader’s intelligence has in view its ability to understand, analyze and evaluate certain situations that he faces, and the ability to analyze

² McShane S. L., Glinow, M. A. V. (2008), *Organizational behavior: emerging realities for the workplace revolution* (4th ed.). McGraw-Hill/ Irwin, New York, U.S.A.

	and interpret the huge number of data and information.
Knowledge of the business	Is absolutely imperative that the leader must know very well the business environment in which he works.

Therefore, the competencies model is considering those behaviors associated with achieving specific performance of a particular job. To be effective, the competencies model must be adapted to the changes, both those internal, and especially of those coming from outside, which intervene: changes in the market, of the consumer preferences, or legal etc. Psychologists and specialists in psycho-sociology of organizations operated the distinction between behavioral signs and samples. They are used differently in job analysis.

One direction for use in the course of the job analysis is based on the used of arguments and insights concerning these psychological characteristics (signs) that are needed to achieve performance on the job. The opposite approach has as its object the tasks specific to job analysis and the design of selection techniques that aim to highlight the representative samples of behavior which are needed to obtain performance.

Personnel selection procedure should therefore be appropriate with targeted job. There are several types:

- The procedure based on trust refers to those methods of personnel selection provided by those companies that are renowned in this field. Most often, this procedure has very high costs, which strengthens the trust of the company who is interested in selecting its own personnel (current or future) in the firm that provides and implements these selection techniques. This procedure, however, presents certain risks, because very high costs are not always the guarantee that a method will give the best results. In fact, the companies that occupies with personnel selection take certain safety measures, so as not to be held responsible in case of failure. But, regardless of this, is a question of evidence the fact that the vast majority of companies cannot afford costs so big with personnel selection requested by a specialized company.

- The procedure based on direct contact is the one in which the company is interested to organize its selection process. In this case, should be considered the connection between job requirements and the knowledge and skills required. In order not to be a failure, in this case the recruitment and selection procedure must determine if general knowledge

or skills are more important. For example, for a chef-post a practical test of culinary abilities is more useful than an I.Q. test.

Regardless of the procedure implemented, it should be noted that any selection process always puts questions related to the degree of certainty in which can be applied a particular proceeding. In other words, the question arises whether a certain method constantly evaluates given that some variables change. If a person scores are fundamentally different following the application of similar tests at a certain difference in time, result that that test is irrelevant.

II. Job interview

Job interview is used very widely, being one of the most frequently practiced techniques in personnel recruitment and selection. He is generally defined as an exchange of information between people who apply for a particular job and employer's representatives. The main objective of the job interview is to determine the extent in which a candidate possesses the knowledge/aptitudes/abilities required to perform properly the tasks/requirements imposed by occupation of a specific post. The aim is, therefore, to identify the appropriate person to occupy a particular job.

There are two fundamental types of job interview:

1. Unstructured interview contains a significant number of contextual questions, which are generated by the answers given by each candidate in part. Accordingly, it differs - sometimes significantly - from one candidate to another, having an open, highly individualized nature. Most often it is not used in pure form, but it has recourse to a combination of unstructured and structured interview.

In the case of unstructured interview there is a tendency to favor younger people with a agreeable physical, that have not weight problems or which are concerned with how it looks: clothing, hairstyle etc. nonverbal behavior also plays a very important role (how to look, how to smile etc.). In addition, in this type of interviews there is a trend to grant a very high degree of importance to the negative responses in relation to the positive ones. So, a negative response may prove decisive as regards the decision that that person be rejected, irrespective of whether that provided a multitude of positive responses in advance. Moreover, some psychosociologists have argued that interviewers are most often rather looking for reasons to reject a candidate than to choose it.

2. Structured interview is based in a great extent on predetermined questions, having a high degree of standardization. This kind of interview is always preceded by the job analysis process, being made up of a set of questions that will be addressed to all candidates; the questions are related with identification of the triad knowledge/aptitudes/abilities, being often accompanied by a quantitative score used to assess each candidate individually.

Depending on the type of questions used, the structured interview can be classified into:

- Situational interview use the critical incident technique, which represents a specific technique of the job analysis within which such and such incidents that distinguished between outstanding and mediocre results related to a specific job are used to generate certain hypothetical situations. It is plausible that the answers given by the candidate in these scenarios describe his future intentions. Each question is linked to one of the triad's dimensions and has a quantitative score. Situational interview therefore proposes a hypothetical situation and calls for the respondent a response regarding what he would do in the given situation. The answer variants are ranked according to their degree of relevance. Here's an example of a situational interview (adapted from Arnold, Silvester, Patterson, Robertson, Cooper, Burnes, 2005)³:

"You must imagine that you're the new coordinator of the Human Resources department in a factory producing furniture and the boiler goes out of order. The temperature in the production hall has decreased significantly and the workers threaten to leave the factory in a few minutes if the problem is not remedied urgently. The representative of Syndicate request an urgent meeting with the general manager of the factory, but this - together with the chairman - participates at a ski competition. The production is lagging behind the program established earlier in the week and the costs of stopping production are enormous. What would you do in this situation?"

We have the following indicators of behavior and associated score points (Poor, Satisfactory, and Excellent).

Poor: Stop the production immediately.

³ Arnold, J., Silvester, J., Patterson, F., Robertson, I., Cooper, C., Burnes, B. *Work psychology: understanding human behavior in the workplace* (4th ed.). Pearson Education Limited, Harlow, England, 2005.

Sent the workers home.

Call the general manager on his mobile phone for advice.

I transmit to the syndicate representative that meeting will have to wait.

Satisfactory: I request that employees together with syndicate representative participate in a public meeting.

Arrange for the technicians to repair the boiler on emergency call-out.

I sent a message to general manager asking him to contact me as soon as ski contest ends.

Excellent: I call on the workers to continue working in the factory, while arranging all portable equipments of supplied heat is immediately put into use in the factory. Ask catering to provide hot drinks for all workers.

I meet to syndicate representative to discuss what he propose to do next and negotiate the situation to be examined again later in the day.

I note in the log the incident occurred and the actions that others want to undertake and leave a note on the general's manager office to discuss when he returns to the office.

- Behavioral interview envisages the past behavior been in relation to the job in question. In this case, through the interview is analyzed what exactly has happened, questions having the purpose to highlight the abilities of a person, and do not its knowledge or aptitudes. In behavioral interview there are questions regarding: interpersonal relationships, organization, planning, motivation, teamwork, conflict resolution, solving tasks within the deadline set, commitment, sustained effort capacity etc. The questions want to disclose the behavior of the interviewed person in the given situation, well as the consequences of that behavior, regardless of whether the person actually was confronted with such a situation.

A situation frequently encountered in the interviews is the error induced by the first impression. The sources of this error are:

- Information about the person applying for a job which is known before the interview.

- The physical appearance of the candidate.

These can sketch an image of the applicant that does not have anything to do with how it will subsequent perform duties.

Another finding of psycho-sociologists is that interviewers tend to select those candidates who have something in common with themselves: similar interests, similar personality traits etc. The notion of employee

engagement refers to emotional and cognitive motivation of employee, their ability to perform specific jobs tasks, the overall understanding of the company vision and the roles that they fulfill in this global vision, as well as the conviction that they made all reasonable efforts to accomplish the tasks involved in their work.

From the psycho-sociological perspective, the main types of organizational behavior are related to the four factors that influence the voluntary behavior of employees, namely: motivation, ability, role perceptions, and situational factors (M.A.R.S. model of individual behavior and performance).

Finally, we will describe the M.A.R.S. model of individual behavior and performance. The four factors concomitantly work to outline the individual performance, therefore if one of them decreases, then the performance decreases in its turn. For example, a teacher who correctly understand job duties and, among other things, is always punctual (role perception), he has at his disposal advance educational technology (situational factors) and he has the knowledge to use the information (ability) will not perform if he lack the motivation for teaching. Psychologists define employee motivation as representing those specific forces of a person that determine the direction in which she/he engages efforts, the intensity of which manifest a certain behavior. Ability refers both to physical aptitudes/natural talents and those abilities acquired through learning required to perform effectively a task. Role perceptions of employee relates, inter alias, to responsibilities of job tasks and determining in achieving goals. Situational factors includes those conditions that cannot be controlled directly by the employees and that facilitate or constraint their performance. Some situational factors related to the external environment of the organization and are therefore out of control, like the specific economical conditions of a country. Others situational factors, however, such as budget, people involved etc. are under the direct control of the people in the organization.

REFERENCES

Aamodt, M. G., (2010), *Industrial/Organizational Psychology* (6th ed.). Wadsworth, Cengage Learning.

Arnold, J., Silvester, J., Patterson, F., Robertson, I., Cooper, C., Burnes, B., (2005), *Work psychology: understanding human behavior in the workplace* (4th ed.). Pearson Education Limited, Harlow, England.

Bhagat, R.S. & Steers, R.M. (eds.) (2009), *Cambridge Handbook of culture, organizations, and work*. Cambridge, University Press.

Gibson, J.L., & Ivancevich, J.M., & Donnelly, Jr., J.H., (1997), *Organizations: behavior, structure, processes* (9th ed.). Boston, Irwin/McGraw-Hill.

Jex, S.M. & Britt, T.W., (2008), *Organizational psychology: a scientist-practitioner approach* (2nd ed.). Hoboken, New Jersey, John Wiley & Sons, Inc.

McShane S.L., Glinow, M.A.V., (2008), *Organizational behavior: emerging realities for the workplace revolution* (4th ed.). McGraw-Hill/Irwin, New York, U.S.A.

Muchinsky, P. M., (2006), *Psychology Applied to Work: An Introduction to Industrial and Organizational Psychology* (8th ed.). Belmont, Thomson Wadsworth.

Rogelberg, S.G., (eds.) (2006), *Encyclopedia of industrial and organizational psychology*. SAGE Publications, Inc. Thousand Oaks, California, U.S.A.

CIVIL SOCIETY AND THE INTERNET IN ROMANIA

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Abstract: *The advent of the Internet has made a change in civil society. This new technology of information and communication offers free public space where the citizen becomes increasingly stronger by association to groups or organizations that share its views and beliefs. Civil society organizations become stronger when the visibility they have in the mass media helps them to put pressure on the government and local authorities.*

Keywords: *Civil Society, NGOs, Internet, Romania, Politics.*

Civil society and the Internet

The advent of the Internet as a global communications technology has offered opportunities without precedent for the flow and dissemination of ideas within and outside the borders of a state, bringing also the promise of empowering citizens by stimulating the existence of a stronger civil society voice in relation to the state, political elites and private economic interests.¹

From this optimistic view, the Internet encourages freedom and democracy by opening the public sphere, so that the voices of citizens to be heard, and the latter to be able to participate with a computer and the Internet in political decision making.²

There are contrary views, some see the Internet as a threat to democracy, because of its potential to create surveillance modes implemented by the state to establish individual and group behavior.³

Another point of view is that the civil society is controlled by elites through manipulation of socio-cultural processes. Graham (2000) shows how telecommunications are customized to the needs of powerful users

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¹Jodi Dean, Jon W. Anderson, Geert Lovink, *Reformatting Politics: Information Technology and Global Civil Society: Information Technology and Global Civil Society*, Routledge, 2013, p. 83.

²Ibidem.

³Ibidem.

and their spaces, he is convinced that the Internet is a technology that widens the gap between the powerful and the powerless.⁴

Castells (1997) demonstrates the existence of "communes of resistance" which rise from civil society to appropriate information technology and its informational flows for organizing violent responses to what they perceive as injustice in the global capitalist hegemony.⁵

In much of the world, localizing the Internet in tandem with political reform has had three closely linked results: the development of civil society, the creation of civic spaces - both physical space and cyberspaces - for the political engagement of civil society and social mobilization around the formation of collective identity.⁶

Although the concept of civil society has evolved from the earlier writings of John Locke (1690) and G.W.F. Hegel (1967), its use here emphasizes Alexis de Tocqueville's (1969) idea of voluntary association and Antonio Gramsci's concept (1971) of civil society separation from both the state and market economy in the public domain. As argued by Friedmann (1998) the key to the existence of civil society is its degree of autonomy from the state and corporate economy.⁷

Civil society development is interdependent with a second aspect that is often neglected: the location, namely the creation of civic spaces. The term civic space is used here instead of public space to clarify the need for spaces in which civil society can engage in its daily practices.⁸

When seen from a political perspective, the availability of civic spaces is a basic requirement for democratic practices to flourish in any society. Michel Foucault (1979) and Henri Lefebvre (1991) argue that the production of space - especially civic space - is an active dimension of social life and change. In this context, the Internet can be seen as a potential civic space in which civil society can flourish independently from the state and the corporate economy and can also engage in political action.⁹

Relations between society - technology - space revolve around another element, that of forming an identity. Creating identities is a universal human experience and a fundamental source of meaning and social

⁴Ibidem.

⁵Ibidem.

⁶Ibidem., p. 84.

⁷Ibidem.

⁸Ibidem., p. 85.

⁹Ibidem.

power. The formation of collective identities - identities shared between individuals - is a primary driving force in contemporary world history. These collective identities are the sources of resistance to globalization and the rise of network society, which is manifested in the current era by the spread of information technologies, especially the Internet.¹⁰

Manuel Castells (1997) classifies collective identities in three main forms:

1. Legitimizing identities - are created by the dominant institutions of society, especially by the political regimes that control the state apparatus to extend and justify their domination.

2. Resistance identities - are produced by those who are being devalued and stigmatized by the logic of domination.

3. Project identities - go beyond resistance, they try to actively redefine positions in society and to transform power relations in the prevailing social structure.¹¹

The resistance identities play an important role in civil society rebellion against oppressive states and the hegemonic tendencies of global corporate capitalism. These identities are the moral fabric that connects people into communities of „collective resistance against otherwise unbearable oppression“. These initiatives can further develop into projects that seek to change the course of history through the use of collective identities as a power base to overthrow existing regimes or to create alternative communes at the margins of society and territorial spaces.¹²

Fulk and DeSanctis (1995) explain that communications technology and organizational form are interdependent: decentralized technologies shape decentralized organizations. The Internet changes the form of civil society organizations. Earl and Schussman (2003) find that organizations that implement Internet technologies become more decentralized and consultative. Saidel and Cour (2003) show that nonprofit organizations are subject to an internal reorganization when they implement Internet technologies, particularly in terms of tasks and staff in the administrative department.¹³

¹⁰Ibidem.

¹¹Ibidem.

¹²Ibidem., pp. 85 – 86.

¹³Helmut K. Anheier, Stefan Toepler, *International Encyclopedia of Civil Society*, Springer Science & Business Media, 2010, p. 856.

¹⁴Ibidem.

Burt and Taylor (2003) find that NGOs use information technologies in a strategic manner when communicating with other civil society actors, but that such use reflects the values of the respective organizations. Bach and Stark (2002) point out that civil society organizations become communities of knowledge, interacting with one another, with the states in which they operate and the world.¹⁴

Becker and Wehner (2001) argue that the Internet strengthens civil society groups because it gives voice to those who do not have access to mass media. Castells (2006) demonstrates that the Internet is changing civil society because it allows people to share information in an open way, leading to an increased autonomy of the civil society groups.¹⁵

Naughton (2001) warns that commercial intrusion and government control infringe on civil society's use of the Internet and threatens freedom online and outside this virtual space. Castells (1997) demonstrates that the Internet empowers civil society actors independent of their purposes or ideas of progress. Thus, human rights groups and groups supporting and spreading hatred against certain categories of people come to have equal voices online.¹⁶

There are a variety of views, often conflicting, about the importance of the Internet in the development of the current civil society. Howard Rheingold (1995) and other writers saw in the new digital technologies the key to the revival of direct democracy, these technologies would lead to the opening of a decentralized and interactive public space in which citizens will form new social bonds and create new fora for political decision making.¹⁷

Mulgan and Adonis (1994) are among those who argue that the power of the Internet is that it gives people the opportunity to improve and to decrease the current government apparatus as an alternative to replace it entirely. Wu and Weaver (1996) believe that the Internet is dangerous for democracy, reducing the possibility for collective action and eroding social capital and community ties (Etzioni and Etzioni, 1999). Other authors perceived the problematic potential of this new means of communication to reduce both the quality of political debate and discourse (Streck 1999) and government accountability (Wilhelm 2000).¹⁸

¹⁵Ibidem.

¹⁶Ibidem.

¹⁷Sarah Oates, Diana Owen, Rachel K. Gibson, *The Internet and Politics: Citizens, Voters and Activists*, Routledge, 2006, p. 3.

¹⁸Ibidem.

All these theories are based on assumptions, not on something scientifically proven, so researchers tried to analyze the effects of the Internet on the basis of evidence. The results of this research showed that only a minority of the population of the western countries enjoys access to the Internet, and at best it is an affluent minority. The conclusion was that the Internet is not the agent of a glorious revolution nor the apocalypse, but rather an element that reinforces the status quo (Bimber 1998).¹⁹

It is obvious that this new technology enables citizen networks to flourish in such an extent that they even come to dominate the global market forces. Met under various names such as "transnational social movements", "global civil society" or "civil society networks" this type of political activism has become a hope for those who see in it a way of political participation linking individuals at the local level to issues of global concern.²⁰

It is not surprising that thousands of activist groups around the world have established a presence on the Internet. All major non-governmental organizations have websites. Almost all political or social campaigns have their own web page or they are using this means of communication to disseminate the desired information more effectively. As a consequence, the Internet has become so vital for global civil society as telecommunications are to transnational corporations.²¹

There is a strong contemporary trend for civil society organizations to build stronger and more formal transnational networks for international advocacy, propelled by needs and opportunities in a world in the process of globalization. The development of the Internet and information technologies is revolutionizing civil society advocacy (O'Brien 2001) and is facilitating the formation of networks and coalitions (Keck and Sikkink 1998).²²

These modern organizational forms have lowered the costs of advocacy, allowing the entry of new participants and increasing the potential for greater effectiveness, which stimulates competition and offers opportunities, providing new challenges for policy-makers.²³

¹⁹Ibidem.

²⁰David R. Cameron, Janice Gross Stein, *Street Protests and Fantasy Parks: Globalization, Culture, and the State*, UBC Press, 2002, p. 88.

²¹Ibidem.

²²John Clark, *Globalizing Civic Engagement: Civil Society and Transnational Action*, Earthscan, 2012, p. 109.

²³Ibidem.

The term „dot cause” can define any group of citizens that promotes social causes and mobilizes people through its website, being permanently in search of support. Such groups are defined by Keck and Sikkink (1998) as „transnational advocacy networks” composed of those relevant actors working on an important international issue, actors who share common values and discourses, entities who exchange information and services with the purpose of achieving their goal. In social movements these types of groups (dot cause) may be important in mobilizing structures, attracting new support, coordinating collective action and producing and disseminating new concepts.²⁴

New technologies, especially the Internet, can lead to an unprecedented development of the civil society, providing citizens more power, but for this to be achieved it requires a significant spread of these modern means of communication among people.

Below we present the situation in Romania, in the year 2014, regarding public access to information and communication technology.

The access of Romanians to information and communication technology in 2014

The statistical data presented below are taken from the press release of the National Institute of Statistics of Romania no. 283 of 28 November 2014 on public access to information and communication technology in 2014.

In terms of access to the Internet, of all households in Romania more than half (54.4%) have access to the Internet network at home, the majority (70.9%) of them being in the urban area.²⁵

The percentages listed above are not overly small, but not as it should be in a European country member of the European Union and NATO. It is still room for improvement in these outcomes, but we must bear in mind that Romania's population is largely aging, and many of these people do not have the financial means to acquire technologies which enable them to use the Internet.

It was predictable that the majority of those who have Internet access live in urban areas, where the standard of living is higher than the one in

²⁴Ibidem., p. 110.

²⁵The Press Release of the National Institute of Statistics of Romania no. 283 of 28 November 2014 on Public access to information and communication technology in the year 2014, p. 1.

rural areas, and the number of Internet providers is much higher.

At the local level, the Internet connection was more prevalent in households from the Bucharest-Ilfov region (76.7%), followed at a great distance by the regions: West (61.3%), North West (58.3%), South East (51.8%) and Central (50.2%). The lowest share of households with Internet access are found in South Muntenia (46.1%), South West Oltenia (47.1%) and North East (48.3%).²⁶

The regions where the Internet connection is more prevalent are the richest, Bucharest - the capital where the financial resources are accumulated, Ilfov which is in the vicinity of Bucharest, the other regions mentioned here are those where we find big and developed cities: in the West we have Timisoara, Arad, going North West we find Oradea.

Of all persons aged between 16 and 74 years old, the proportion of those who have used at least once the Internet was 61.6%. Of those who currently use this means of information and communication 60.0% use this tool with a daily or almost daily frequency.²⁷

Among men aged 35-44 years old, 52.5% used the Internet daily or almost daily, compared with 54.4% of women in the same age group. In the age group 55-64 years old, the situation is reversed, the difference between men and women regarding Internet use daily or almost daily is 6 percentage points (35.0% women and 41.0% men).²⁸

The percentage of people who used at least once the Internet and those who use it on a daily basis is not very high, but it shows that we have growth potential and we can be optimistic. It is pleasing that in addition to the young people who studied computer in school, the Internet is also used by mature individuals who learn how to use this new means of communication from various reasons. Providing schools with computers for computer classes and including this object of study among those that are compulsory for all students it would be beneficial for both students and society in general.

On a regional level, the share of people who have used the Internet was 80.7% in the Bucharest-Ilfov region and it is the highest percentage in the country. Followed at a long distance by the region West with 70.4% and North East with 62.6%, other regions are represented by percentages

²⁶. Ibidem.

²⁷. Ibidem., p. 2.

²⁸. Ibidem.

below 60%.²⁹

The percentage of the Internet use in the Bucharest-Ilfov region - 80% is satisfactory, such a percentage should be valid for the entire country, but this goal will be achieved only when the standard of living of the population will increase, and with it will increase the level of training.

These figures show clearly that there is a segment of population, mostly resident in the urban area, which is using the Internet very often, people who received some training and who can join civil society organizations to support certain causes in which they are interested.

The relationship of the Romanian civil society with the Internet

A large number of NGOs from Romania are present online with various campaigns, all relevant organizations have their own websites and social media accounts, they are followed by many people seeking information in a particular problem and to get involved in a cause that they consider important.

The Internet has proved its worth when other means of communication refused, for various reasons, to transmit objectively information about a particular topic and presented only a one-sided point of view.

An example in this case is the Save Roşia Montana campaign initiated by Alburnus Maior the association of the locals and owners from Rosia Montana. They resist to the use of cyanide in gold mining, a method very harmful to human health and to the environment.

The Canadian company Roşia Montana Gold Corporation (RMGC) who wants to exploit the Roşia Montana gold has invested a lot of money in favorable media campaigns, lobbying politicians and local authorities. Many politicians supported the immediate start of the exploitation, openly supporting RMGC.

Its commercials in which some poor people were asking the start of the exploitation to have a job were broadcast on most televisions and the ads were published in almost all the newspapers. Shows were made on this subject presenting only the benefits of the exploitation, in which Alburnus Maior was not invited to tell its point of view. The same thing happened with the articles in the press.

When the street protests against the Roşia Montana exploitation began, they were organized by the civil society through social networks

²⁹. Ibidem.

and the Internet, many televisions avoided to transmit images or news on this topic saying that the protesters were thugs.

Why was installed this censorship on most television stations and in many newspapers? The answer is simple: RMGC has bought advertising space in the newspapers and in the audio-visual media, for the broadcasting of its commercials and the publishing of its ads, forcing in this way the mass media to be favorable to them. The mass media could not broadcast the RMGC commercials and publish their ads and at the same time make shows or write articles against the exploitation, because they would have lost their credibility. Another reason is that some television stations and newspapers are close to politicians who support and even lobby for the mining company.

The Internet was a free and uncensored space where the voices of those who campaigned to save Roşia Montana and the Roman galleries in this area have emerged and have widely publicized the arguments for which this historic treasure deserves to be protected for the present and the future generations.

A similar situation of media censorship was in the case of shale gas exploitation through fracking, except that these foreign companies did not invest in media campaigns knowing that they will get all the support of the government and the political class due to the strategic partnership between our country and the country from which they come.

Using the Internet to freely disseminate various information is beneficial, but there are situations where certain political groups that have greater experience in manipulating, use this means of communication to spread false messages in public, and later these messages are internalized and accepted by a part of the population that has a poor civic and political culture.

Another danger is that there are many people who take the online information as true without consulting other sources, making them more susceptible to manipulation from groups that get to control much of the virtual space. These manipulating groups organize street demonstrations over the Internet and they use the threat with chaos and violence to impose their point of view.

Conclusions

The civil society worldwide and the one in Romania have experienced unprecedented growth with the advent of the Internet. This new technology has provided a space for civil society organizations where they

could disseminate information to the public about important issues in various fields - social, political, environmental.

Citizens have become stronger because they have access to important information, which often can be censored by various media channels, and because many of them master the information they choose to get involved in supporting various causes they believe in.

The only problem is that in our country the Internet is not so affordable for everyone as it should be in an EU country and NATO member state in the year 2014. Whether is the absence of the network or the deficiency in the network coverage in certain regions or the lack of training and financial resources of citizens, the Internet is present mainly in urban areas, in rural areas this new technology is a luxury that only a minority can afford.

REFERENCES

David R. Cameron, Janice Gross Stein, (2002), *Street Protests and Fantasy Parks: Globalization, Culture, and the State*, UBC Press.

Helmut K. Anheier, Stefan Toepler, (2010), *International Encyclopedia of Civil Society*, Springer Science & Business Media.

Jodi Dean, Jon W. Anderson, Geert Lovink, (2013), *Reformatting Politics: Information Technology and Global Civil Society: Information Technology and Global Civil Society*, Routledge.

John Clark, (2012), *Globalizing Civic Engagement: Civil Society and Transnational Action*, Earthscan.

Sarah Oates, Diana Owen, Rachel K. Gibson, (2006), *The Internet and Politics: Citizens, Voters and Activists*, Routledge.

The Press Release of the National Institute of Statistics of Romania no. 283 of 28 November 2014 on Public access to information and communication technology in the year 2014.