Abstract:
Dynamic changes in the conditions for the economic and business activity which are currently taking place trigger the need for radical change in management, both in the area of aims and rules of managers’ operations and methods that they are using. If the managers are to transform their role and competencies and make revolution in management to adjust it to those new economic conditions, the challenge raise for the management education. Management educators need relevant innovative teaching methods to support this process. Descriptive methods, based around content should give more space to those giving the opportunity to develop critical thinking and inspiration. Looking for new methods of management development, specialists turned to IT technology, art, neuroscience and the humanities, which all give metaphors and analogies to create innovative modern management strategies and the development of management and leadership skills. Overall objectives of the presented material are twofold: first - to describe theoretical framework concerning existing theories for innovative teaching methodologies with the focus for the ideas of "multidisciplinary approach" and the use of analogy as innovative method; second - to develop propositions for the practical applications and shaping effective education programs on the basis of executed test program.

Keywords: analogy, competence, education, learning, method
1. INTRODUCTION

Many concepts regarding management development issues at the beginning of the 21st century refer to the phenomenon of radical change which is described as universal and widespread. Lucas argues that as species we have reached a turning point of development and change that is happening at a speedy rate affects rules of evolution as humans (Lucas 2009). Adler indicates the rise of “extremely competitive nature of the global economy” and points the occurrence of “dramatic changes taking place in society, the economy and technology” (Adler, 2006). This change rouses the need to rely on other than linear thinking and specialist domains strategies (Rabasso, 2011).

Parallel to the discussion on the global economic restructuring and most probable transition to the next economic era, there is also a discussion on the quality of management. Realising the significant impact of business actions in the interconnected global economy, there is a call for greater responsibility and greater moral obligations from managers (Smith, 2007). Thus much of the research on management and leadership education improvement is driven by the discussion on the expected balance between efficiency of organizational operations and the need of more commitment and responsibility for sustainable growth of the global economy.

The main aim of this article is to present the process of innovative analogical learning methodology of managerial and leadership transversal competencies development transfer, and adaptation of this methodology to national conditions of Cyprus, Poland and Romania.

The following focal issues were formulated:

- the new developments in the teaching theories regarding management development with the focus on the use of interdisciplinary approach based on analogical learning,
- lessons that can be drawn from the experience of analogical methodology transfer.

2. ANALOGICAL LEARNING - INNOVATION IN TRANSVERSAL MANAGERIAL COMPETENCE DEVELOPMENT

The major challenge that is seen for the current management and in the coming decade is to create innovation (Hamel, 2006). The challenge of innovation relates much wider than the mainstream management practice. It requires a merger and not a separation of economy from culture, ethics, environment, politics (Gagliardi & Czarniawska, 2006). One condition of the ability to face this challenge is education and the formal business education is what is much criticized in the subject literature.

Much of critique of formal management education points its focus on functions and their theoretical and descriptive teaching (Tung, 2006). Current challenges for business world require innovation and such important trigger of innovation as critical thinking is not valued at most of management educational programs (Rabasso, 2011; Baker & Baker, 2012). The challenge for management education is to prepare managers capable to handle increasingly complex and ever changing world. There is a requirement to educate on how to adopt interdisciplinary approach and develop competency to merge knowledge from different disciplines. To be innovative one must search for new principles and Hamel sees analogies as one of the major elements of management innovation (Hamel 2006). As management of the new century has to look for innovative approaches it is a reason why it turns to the areas previously considered not so relevant to the business world. The contribution of Social and Human Sciences or Fine Arts is seen as requirement for the education of future managers and leaders that will engage in globally responsible actions (Rabasso, 2011). They all can be source of analogies that are the essential component for management innovator (Hamel, 2006).

History for example is rich of knowledge that can be used as analogy. As Smith advises, studying historical records “we can discover similarities to our time and learn to identify and understand where and why there is divergence (Smith 2007)”. Smith describes that using history as a source can contribute to the development of critical and reflective thinking skills. Analysing history, especially management history can contribute to the better understanding of the modern world.

The literature is rich in examples on how increasing number of organizations, in the last decade of XX century, turned on to social science and arts to improve their management and leadership (Tung,
Theories on innovative methodologies in management development, building on the advantages and benefits of Humanities refer most of all to the use of analogy for learning. Analogy is then defined as "the relationship between two objects based on the similarity of their internal structure or similarity of relations within the compared elements" (Nęcka, Orzechowski, Szymura, 2006). When we use analogy, we compare something with something congenial (Hawkins, 2004). The basis of analogy is to ascertain the similarity of relations between elements of different domains (Biela, 1989). Analogical learning is based on the principle of two sets of information which are compared by learners in order to understand one of them better (Houde, 2007). The set that is the foundation for understanding is called "the basic" and the second one that is the comparison set of information is called "the analog". The comparison of “the base” and “the analog” involves their surface and the deep structure. The relations occurring in one domain are used to solve problems in the other domain. The experience that is already gained is used to cope in the new situation.

Phenomenon of analogy plays an important role in various cognitive areas of human activity. It is a basis of inventions, and new scientific theories. Analogies are considered to be a strong intervention that enriches cognitive functioning of humans. As the academic debate on the presence of Humanities in management and management development progressed and the signs of this return were observed in practice, more developed models of the use of analogy in management development appeared in the literature. Houde presents the concept of analogically situated experiences (ASE) and puts it as innovative pedagogical method (Houde, 2007). Taylor and Ladkin analyse the use of arts-based methods in managerial development (Taylor & Ladkin, 2009). Baker & Baker identified three broad characteristics of art education that they advise to be included into business development curricula with the intention to stimulate participants creativity (Baker & Baker, 2012).

Those recent models take notice to some key factors that are influential for creating effective learning environment and give implications to practical applications. The use of “analogy” based methodology for the transversal management competences gives best results when participants are put in a novel, simulated context, drawn from other than management (or specialist, technical) domains, with keeping maximum possible realism of the analogy. Learning from analogies requires abstract thinking and because of those perceptual abilities the group that can benefit most from this methodology as participants on a training are more developed as managers or specialist position employees, that have already developed this capacity and have deeper, intuitive knowledge on their business. Training environment is another factor that influences the effects of learning from “analogy”. The important features of this environment include: acceptance of uncertainty, the maximum use of non-formal didactic methods and promotion of self-directed learning based on collaborative, peer-group learning. Because of the interdisciplinary kind of learning it is suggested to involve multiple professors from management and “analog” domains in the process. Arrangement for sufficient time and space for learning is necessary, best connected with the location of a training event giving isolation from daily work environment. Focus and time should be given to a learning process not immediate results but at the end consolidation with the workplace and changes that need to happen in this workplace is vital.

3. ANALOGICAL LEARNING METHODOLOGY – CASE OF THE IMPLEMENTATION AND ADAPTATION

Study on the implementation of the concept of analogical learning was an essential element of the LEarning from Analogies Project done as Leonardo Da Vinci Programme. LEAN Project assumed the adaptation and transfer of methodology based on the use of “analogy”, offered by ISTUD Foundation (Italy) to three country partner organizations: Eurosucceess Consulting and Nicosia Chamber of Commerce and Industry (Cyprus), OIC Poland Foundation (Poland) and The Centre for Promoting Lifelong Learning – CPIP (Romania). This project proceeded in main stages of:
national training needs analysis in Cyprus, Poland and Romania,
development of a set of training sessions adapted to local conditions and improved through
the recognition of recent theoretical and operational models on the use of "analogy",
pilot testing with the participation of trained local facilitators and the evaluation of the follow up
feedback results.

Training needs analysis was done as questionnaire survey with a selected sample of small and
medium size, preferably family run companies (20 per each transferee country). This process was
spread over time from November 2012 to March 2013. OIC Foundation with the support of ISTUD
Foundation was responsible for the development of the common instrument. The administration of
the survey and the preparation of national needs reports was passed to three transferee partner
organizations. The analysis indicated the interest in new training methodology based on "analogy".
Companies were able to express clear needs concerning their management and leadership. Training
needs were induced from the perceived challenges that surveyed companies were facing which
included: the necessity to increase flexibility inside the organization, handling emergencies and
crises by reducing complex systems vulnerability, constructing strategies, integrating organization,
increasing understanding of financial market and business operations interdependence, developing
high potential individuals and strong leaders, defence and attack strategies on the competing market.

As a result of needs analysis three new "analogies" were developed together with methodology pack
comprising training program, training materials and guidelines on how to deliver the sessions based on
the use of "analogy". The guidelines specifically addressed the questions of how to deliver narrative
phase and then the decoding phase with the discussion relating to the specific company issues. Three
new "analogies" related to the historical events of the specific partner country: Polish Ghetto rebellion,
Economic miracle after the Turkish invasion of Cyprus and The late communist period and the
transition period in Timisoara and Romania were prepared.

The pilot testing programs were delivered in each partner country. In total 68 executives of SMEs took
part in 3 to 4 hours sessions including two "analogies": the original ISTUD Gardens analogy and
national history analogies. The fine tuning of the new methodology that was taken over was done on
the basis of two feedback processes. After session response questionnaire evaluated the level of
satisfaction of participants. The results shown that the workshop received high scores in all criteria.
Good reaction is necessary, however the evaluation of implementation and application of learning
back in the working place is vital. To gather feedback in this area follow up open question surveys
were collected 2 to 4 weeks after the analogy sessions. Such feedback relating to behavioural
changes is less easy to be quantified. Qualitative analysis of the answers to 11 open questions
allowed to extract the issues concerning the effectiveness of the activities carried out and guidelines
for further improvements.

Trainees indicated several managerial issues possible to be addressed drawing from the lesson
learned through the analogy. Participants made easily correlations between analogies and issues
such as: organizational changes, strategy formulation, identification of risks to the organization and
prevention plan, setting new goals and organizing teams acting for a common goal. The use of
analogy can give good insight into how leadership is conditioned by circumstance, context and
business environment. The follow up feedback information confirmed also that analogies were
perceived as good opportunity to shape diverse, transversal managerial competencies such as:
project management, shaping the organizational structure, communication.

Trainees during follow up phase described some benefits that they brought out of participation in the
program. Some related to them personally like gaining new points of view, new way of thinking which
increases self awareness. They also noticed generally formulated usefulness of analogies training for
their organizations. They agreed that the analogy sessions had at least some and often a lot of impact
in the relation to their business. The analogy sessions experience was discussed back in their
companies on formal and informal meetings.

The most important issue associated with the benefits participants brought out of training was the
question on how much transfer of learning to the workplace occurred. This phenomenon with the
greatest severity and tangible results occurred in case of two Romanian training groups formed from
decision making teams of two companies each. Those groups were extremely responsive and quick in
drawing up a plan of action agreed to be implemented as a result of the analogy learning session. In
other groups composed of different companies those results of learning transfer were not so concrete. Some comments indicated that participants would like to have better understanding of how to apply the analogy experience and insight gained for a variety of particular organizational situations. There were no specific reasons why it did not happen provided. One can look for the causes between observations relating to the training sessions process, though certainly not only.

Participants drew attention to some issues that could influence the expected transfer of learning. First of them was the level of activity that they have experienced. They would appreciate more dynamic workshops and some actions to get the energy level up especially after a historical analogies presentation. From the two analogies used during the training sessions The Gardens analogy made far more an attractive sessions than those drawn from the national history of participating countries. Following to the activity level comments were those on the more practical approach. This expectation was however not more specifically described other than scarcity of practical examples, exercises and case studies on the application of the analogy for the benefit of other organizations. Participants suggested to increase the amount of time spent on discussion to do the decoding.

Participants declared that the key factor that encouraged them to participate in the program was the understanding analogy as an innovative approach in training. They confirmed that they still perceive it as such after the end of the sessions. They pointed a couple of issues that could help to cope with the assimilation of something so new. First was the suggestion to introduce briefing seminars about the analogy philosophy and provide participants with more information from the beginning on the analogical learning method. Second was the need to prepare analogies more tuned to the actual company situation and relevant to the particular audience. Concluding comment was that the new methodology should be introduced best for the groups from the same company but gradually over the longer period of time to be able for this fine tuning, work through the analogy, its conceptual transformation and use in form of plan of action.

In addition to the considerations on the use of analogues for competence development were the comments on determinants of such process. Most suggestions related to the management area. Existence of the strategy in the organization and stability of the executive board was mentioned. Than the commitment to training and openness of the executive staff to changes and innovative solutions was indicated. Time availability and cost of such training were mentioned as major barriers.

4. CONCLUSIONS

The study aimed to investigate and develop propositions for the application of analogy as innovative method of management and leadership competencies development in light of current socio-economic challenges. The findings showed considerable positive reaction to the method in the three EU transferee countries and sector of small enterprises, where this method has not been yet applied. The findings indicated that factors of time availability, participants’ attitude, training group composition, and the nature of analogy influenced the effectiveness of the analogical learning the most. The contribution of this study are the insights relating to those factors, already recognized as important in adult learning process, for the improvement of innovative analogical methodology.

Results of the pilot testing sessions confirmed the need to reconcile the quality time for training with the availability of employees and allowance for the sufficient time for training. Feedback gathered as a follow up to sessions highlighted another issue on the time factor. Because of lack of experience and knowledge on this innovative methodology on the national level, its implementation should be organized more as a sequence of events to help at the outset to understand what is the analogical learning and finally help in the use of applications and their transfer to the management practices. The whole analogical learning process will work best when it turns more into the consultancy intervention rather than the stand alone event of analogy delivery.

The testing sessions confirmed that full use of the analogy requires conceptual work and reflective attitude. The follow up feedback gave insight into difficulties that managers experienced to enter and maintain a state of conceptual thinking. Reasons were ascribed to pragmatic attitude of participants and tangible results expectation. Results orientation may cause annoyance and hinder perceptual abilities enabling participants to delve into the “analogy”. Another element influencing the reflective attitude was a sense of stability. The managers employed on the contract basis experienced more problems to fully engage in the analogy sessions.
The best results manifested in the transfer of learning to the workplace happened when the facilitator worked with homogenous group of employees of the same organization. In such case all advantages of the focus group work can be exploited. The analogical learning is then better to be implemented as in-company, customized process rather than open access program.

The very nature of the analogy tested also influenced the level of training efficiency. The Gardens’ analogies deep structure of the "base" turned to be easily discovered by participants. The internal structure of the "base" for three national history analogies was more difficult to be discovered.

The study posed new questions in the subject of analogy learning for managerial transversal competence development application. Further works on the method could aim to establish the impact of the learning style of participants on the effectiveness of this method. Another question relates to the choice of the analogy type according to the managers’ positions.

REFERENCE LIST