BARRIERS FOR THE USE OF THE TRADITIONAL TRAINING EVALUATION APPROACH IN ENTERPRISE

Signe Enkuzena, Mag psych, PhD student, Banku Augstskola, Rožu street 9, Baldone, <u>signe103@inbox.lv</u>, +37128630044

Abstract: The need for training evaluation has never been more important than today when economic condition pressures businesses to carefully consider each investment. Why do companies continue to evaluate employee training incompletely or even there is no training evaluation at all?

In the present paper the author briefly discuses the traditional training evaluation model and methods and indicates what barriers T&D practitioners face when evaluating training. The paper also explains and searches for the reasons of training evaluation vacuum. The author offers ways to reduce barriers in training evaluation.

The aim of the paper is to discover what the barriers to use traditional training evaluation models in an enterprise are. **The objectives** of the paper are:

- 1) To find out the current situation of training evaluation practice in enterprises;
- 2) To identify the differences between the theory and practice in training evaluation;
- 3) To describe the reasons why the gap between theory and practice is so big.

The methodological framework is based on the review of the latest literature.

Findings: The complexity of learning, inadequate evaluation methods and organizational barriers are only few reasons of weaknesses in current training evaluation processes. Training evaluation should not have a universal approach; each case requires its own individual approach. Being aware of and understanding the reasons of barriers in training evaluation, HRM practitioners will be able to act critically to further improve the credibility of the training evaluation.

The Originality/value: The number and king of training evaluation barriers identified is valuable for HRM professionals. This is the first step to bridge the gap between academic research and practitioners' needs.

Key words: Training evaluation, barriers to evaluate training, evaluation models and methods

Introduction

At present, when most enterprises in Latvia are fighting for survival, it is important to evaluate the yield of every Lats invested in the development of the enterprise. Companies are carefully following their budgets and calculating the yield from the investment. A difficult task is to evaluate yield from the funds invested in the development of human resources because the result is not always immediate and it cannot always be transferred into monetary units. One of the ways how to develop human resources is employee training. LBKA and LPVA evaluation approves that money is still being saved by reducing the training budget. 50% of the respondents indicate that the training budget continues to decline also in 2011. (Latvijas Biznesa konsultantu asociācija, 2011).

However, strategically planned and managed human resource development allows the organization to combine different knowledge elements (previous and new, internal and external knowledge) and create the competitive advantage that ensures the sustainable development of the organization. Therefore it is so important for personnel managers or other staff responsible for HR training and development to evaluate employee training and find proof and reasons that training expenses are justified and that employee "training turns into investment, not a cost structure" in the company operations (Strategic Human Resource Management, 2001). Thus, training evaluation is a critical tool that proves the need to invest in human capital. It is important to clarify what the author

means with the concept of evaluation in this paper. Although databases contain several thousands of research papers about training evaluation, only a few of the authors offer a complete definition of training evaluation. One of the clearest and most complete explanations is Pilar Pineda's explanation of training evaluation, "The evaluation of training in organizations is the analysis of the total value of a training system or action in both social and financial terms, in order to obtain information on the achievement of its objectives and the overall cost-benefit ratio of training, which in turn guides decision-making." (Pineda, 2010, p.674.)

Methodology

Scientific research publications about the need for evaluating training in companies, the methods and tools of evaluation are available from the sixties of the previous century. A pioneer in training evaluation is Donald L. Kirkpatrick and his training evaluation hierarchy model, which offers a framework for evaluation of the training results and the organisational process by using four levels (Kirkpatrick, 1994).

At Level 1 of training evaluation - **Reaction** – the trainees' reaction to the training process is evaluated; at Level 2 - **Learning** - to what extent the trainees obtain knowledge and skills; at Level 3 - **Behaviour** – the ability of the trainees to demonstrate the acquired skills is measured; and the highest training evaluation level - Level 4 - **Result** – reveals what the impact at the company operational level is, measuring it in such units as money, effectiveness etc. The works of Donald L. Kirkpatrick and his followers analyse in detail the training evaluation at all four levels (Clark, 2008).

This model was created in 1959, but despite its respectable age and received criticism, 2/3 of the authors still refer to this approach in training evaluation.

A number of scientists and practitioners have developed further and improved the training evaluation model (Warr et al., 1970; Hamblin, 1974; Cannon-Bowers et al., 1995; Kaufman et al., 1995; Molenda et al., 1996; Phillips, 1997, 2003; Cascio, 1999; Tyler, 2002), as well as criticised it (Clement, 1982; Alliger and Janak, 1989; Tannenbaum and Woods, 1992; Brown, 2005; Sitzmann et al., 2008, Holton, 1996)

At the end of the previous century scientists developed several integrated models that combine response to the criticism of Kirkpatrick's model and improvements to it, thus creating a universal approach to training evaluation: Integrated model (Pineda, 2010), Four-phase or Double loop approach (Lingham et al., 2006), CIRO (context, input, reaction, outcome) model (Warr et al., 1970), CIPP (context, input, process, product) model (Worthen and Sanders, 1987), IPO (input,

process, output, outcome) model (Bushnell,1990) and TVS (training validation system) approach (Fitz-Enz, 1994).

Several methods and tools have been developed for the companies to implement the training evaluation models in real life. These methods and tools are different for each training evaluation level, regarding the evaluation of both the content of training programmes (Grammatikopoulos et al., 2004) and the process (Darby, 2007).

However, despite the wide range of scientific literature about evaluation training, as well as the available diverse training evaluation instruments, only a few enterprises evaluate knowledge until Level 4. Training evaluation at all levels takes place in relatively few cases. Poor application of the evaluation model in practice is approved by relatively low percent indicators about enterprises that evaluate training until Level 4: 15% according to Dixon (1990), 20% are indicated by Shelton and Alliger (1993), 31% is identified by Olsen (1998), 2% are found by Pershing and Pershing (2001) and Lee and Pershing (2002). The CVTS-2 survey indicates that the status of training evaluation is very similar all over Europe. It is noted that seven out of ten companies evaluate some aspect of training: however, the percentages decrease when it comes to evaluating the training results and application to the workplace, which occurs in only two out of every ten businesses (Pineda, 2010, p.674-675).

Having stated the fact that only few enterprises evaluate training to define the real value of training a question arises - what are the barriers to use traditional training evaluation models in an enterprise?

The author analysed the available scientific literature. Trying to find answers to the research question, a lot of effort had to be exhibited because in difference from the huge amount of information about how to evaluate training, the answers to the question why it does not follow the theoretical models were rather simplified and without justification. A deeper analysis of the reasons why training is not evaluated can be found only in the works of some authors.

Results

One of the problems that T & D professionals meet at their work is an ever-increasing difficulty to define the relation between training and its result. When training is over, until the moment someone acts to find out what new knowledge and experience are created or what behaviour has changed since the training, a vacuum appears. Tom Short uses an innovative term "evaluation vacuum", which describes conceptual differences existing somewhere between the actual training activity and being aware of the benefit arising from the training. Results of three

case studies in the industry sector of New Zealand and focus group discussions in which independent senior human resource practitioners participated serve as a proof for reality with significant qualitative and contextual changes in the environment where enterprises in the 21st century learn and train their staff. Tom Short mentions nine factors that, to his mind, affect the evaluation vacuum (Short, 2009).

Which moment is the most appropriate to evaluate training when it ends? There are different theoretical arguments and sometimes they are contradictory, but delay in time creates difficulties for trainees to offer meaningful and precise information. People's memories fade away and there may appear difficulties to show direct relation between training and considerable changes in performance. Research findings among front-line managers indicated that *pressure of the work and lack of time* are the main reasons why training evaluation does not receive the necessary attention.

In his taxonomy of learning Bloom indicated (Bloom et al., 1956) that it is simpler to evaluate training the goal of which is transferring knowledge and skills than training on solving complicated problems or conceptual training. For example, it is more complicated to evaluate benefits from training about changes in organizational culture than to evaluate simple skills acquisition training. When evaluating training a rich scope of data is developed, but it is possible to state a significant and credible lack of proof at the strategic level about investment in training and development (Short, 2008). Thus, one more reason for training evaluation vacuum is the fact that training can be different and **the type and instruments of training evaluation can vary** from the context of the particular training.

Present life requires organizations to learn continuously. A learning organization is characterised by several simultaneous training initiatives, thus creating additional complications for training evaluation. Integrated training projects make training evaluation a challenge. As a result of implementing several training projects "learning bleed" is created. Implementation of several training projects simultaneously in the enterprise ensures stable basis for development, but it also requires special investment in training evaluation and it is difficult to calculate yield from the training. More and more segmented business units in organizations implement different training projects to improve entrepreneurship. Such a strategy creates bigger potential for "learning bleed", making the evaluation process even more complicated. Thus evaluation activities become sporadic, creating a tendency not to evaluate those projects where the assumption exists that they offer less benefits. Such a strategy creates a high risk because, without credible information, managers cannot know which project should be terminated.

Not seeing the possibility to express the training result in monetary units, training evaluation is rejected because the qualitative approach to training evaluation requires much more time and usage of mixed evaluation methods. The choice of the philosophical paradigm significantly affects what is expected from training evaluation. People that prefer an objective approach rely on numeric and factual information. If we rely on this approach in training evaluation, it requires direct observation, analysis and data. In the past it was considered that skills training offers these results. But, on the other hand, in the qualitative evaluation, socially constructed information often exists and it is aimed at the importance of present events in the future development. Qualitative evaluation requires deeper interpretation and that is a process that requires time, e.g. training that is implemented as a means to change organizational culture and to improve organization's operations long-term (OP). In these cases it is very easy to refuse from a qualitative approach to training evaluation because very long time is necessary for collecting information. To analyse such complicated information to evaluate the performance of the organization mixed methods approach to data acquisition should be used, such as small-scale surveys, training reaction sheets, complemented with focus groups and climate surveys. Today not only rational financial considerations should be taken into consideration when evaluating training, but also the social aspect, which cannot always be expressed in monetary units. The increase of the importance of social aspects in the training process in enterprises makes to review critically the assumption that the real value of training can be only if the training benefit is expressed in monetary units.

The number of training participants creates barriers in training evaluation – the larger the number of trainees, the larger barrier in training evaluation it is. It is much simpler to evaluate training outcomes for one person than for the entire company team. A smaller number of trainees requires a smaller evaluation capacity. "Case study evidence indicates that small-scale evaluations are more likely to happen than major organisational projects, yet evaluating single-event activities is thought to have less influence on determining strategic success – unless the individuals are senior managers, whose learning and performance affect the entire organization" (Short, 2009, 17).

A not precisely defined training goal is a barrier in training evaluation. Defining precise learning outcomes nowadays is a big challenge. As practice shows, when planning training, the enterprise or the training provider not always strictly defines the training goal. The training goal can be vague, not precisely defined or each of the parties involved in the training may have their own understanding about it. Defining general goals, e.g. obtaining or extending knowledge, creates a

potential for "learning bleed". The more precisely the goals are defined for individual and group training, the more possibilities to determine what has to be done to evaluate training.

Information produced by third parties creates a false impression that training is evaluated, but in reality it has not happened. For example, if top managers are convinced that the organization has an open and fair culture, they may impact the evaluation with demonstrating their conviction. Political and egoistic interests may overshadow the evaluation results, as well as past events may create Halo or a barrier effect when evaluating training.

A wide range of training themes and planned outcome hinders training evaluation. Sometimes the list of planned outcomes is so long that it is impossible to evaluate it regarding the course objectives. When evaluating training, the training course developers should cooperate to determine the real training needs and the planned outcome.

There are difficulties to separate personnel training from tactical training and expanding experience. It is seldom when training can be distinguished as a separate issue in organizations. Nowadays organizations, as well as people learn continuously. The learning process does not have strict limits in time and space. With the development of new technologies, an employee can acquire a lot through self-learning, knowledge and skills are obtained working together with a more experienced colleague, learning by doing is also a typical practice. It is almost impossible to separate and measure a specific benefit from separate employee training because several types of training merge and impact the total result.

Blaming T&D practitioners and company owners of incompetence or saving money resources is the most frequently mentioned reason why the real value of training is not evaluated. It has to be admitted that such a statement is logical but it is a too simplified approach to searching for the real reasons. Saying that practitioners are incompetent, scientists avoid critical evaluation of the existing models. Antonio Griangreco has a different approach to explaining why training is not evaluated. His main idea is that the reason is not incompetence or lack of money resources but the fact that the evaluation model is outdated and not appropriate for the needs of the organization of the 21st century. Modern society and economic infrastructure very much differ from the ones when Kirkpatrick developed his model. New technologies and social emancipation assign a more significant role to the individual if compared with the 60-ies of the previous century (Friedman, 2005). New terms characterise economics, such as e-lace economy (Malone and Laubacher, 1998), knowledge economy and post-industrial economy (Sculley and Byrne, 1987). In this fast-changing world the individual is required to learn continuously, as well as organizations are required to become learning organizations (Senge, 1990). Learning and training are a key to survival, but are

the traditional evaluation types significant and appropriate? "The effects on training, its meaning and its evaluation of the societal changes that continue to emerge largely have been ignored by the research community. Yet practitioners likely have incorporated these changes into their modus operandi, without reconsideration of the reasons and the impact of their decisions." Practice approves that most of the organizations evaluate training at the Level 1 – Reaction. However, irrespective of that, it is not a surprise that the number of publications that would seriously explain training evaluation at Level 1 is very small. "The choice not to use higher-level evaluations is not associated with positive reflective skills but rather with negative and lesser capabilities. Companies do not do more because they do not have the skills or money or because they do not understand the model." (Griangreco et.al., 2010, 169) (Griangreco et.al., 2010,163).

The present, little criticised *universal approach is one of the most significant barriers in training evaluation*. Many authors have tried to create universal models that could be applied to any enterprise evaluating training of any type and goal, but when the specifics of the training in the organization and the trainees is not taken into consideration, training evaluation in the organization is formal.

In the traditional training evaluation models *evaluation of the training process and the training results is not separated*. To reduce barriers in training evaluation, the evaluation of the training process – training goal, correspondence of training to the company needs, content of the training programme, training methods, trainer's professionalism, training facilities and venue have to be evaluated separately from the training result. As the case study in retail store chain approves, the training process and training results may have different evaluation (Enkuzena, 2011). It disproves the traditional opinion that training evaluation at one level affects training evaluation at the following levels (Clarck, 2008).

As it was already mentioned above, most of the enterprises finish training evaluation with measuring the trainees' reaction because studying trainees' reaction has clear goals and tools, and it is also possible to clearly separate trainees' reaction to particular training. Research of trainees' reaction, or Level 1 of Kirkpatrick's model, is the only stage in training evaluation according to traditional methods the result of which one can be safe. Taking into account how widely the research of trainees' reaction is used, it offers a large potential, which not always means that evaluation of reaction is sufficient to evaluate skills, but rather that in some contexts it represents an acceptable and enriching solution. Despite this potential, journals are not willing yet to publish research aimed only at researching the trainees' reaction.

Discussion

Reviewing the above listed reasons for not evaluating training, it can be observed that the reason is mainly related to unsuccessful attempts of T&D practitioners to apply traditional training evaluation models and methods to the evaluation of training processes in a modern enterprise – the enterprise and the employees are continuously learning, training overlaps, the training process has to be separated from the learning outcome and it has to be understood what exactly should be evaluated in each particular case, the training result and goal can be different for the stakeholders involved in the training process.

The need to distinguish the learning effect at four different levels becomes less significant in the post-industrial economics because the content of training is already such that it undeniably works on changes at all levels. Changing of the traditional model, in fact, means moving away from evaluation of cause-effect relationship or even liquidating evaluation levels (Giangreco et al., 2010). To evaluate training in a modern enterprise it is necessary to develop a qualitatively new approach where the value of training evaluation is not universal but it is a part of the training goal, which is different for each of the stakeholders. Training value and costs is a difficult issue that requires a special approach that is modified from one case to another. Evaluation cannot be considered linear (as it is evaluated by many practitioners – a direct relation between costs and the result). Nowadays situation requires saving resources, therefore different training evaluation strategies should be chosen for different training (Tannenbaum and Woods, 1992, p. 68).

Evaluation of the training content should be separated from the evaluation of the training process. In the modern enterprise one and the same method and group cannot be used to evaluate various training groups because their reaction and expectations depend on the training initiator (e.g. the direct supervisor). When evaluating training, it is necessary to evaluate how training facilitates the performance of the enterprise and the employees (Brinkerhoff, 2003), not to evaluate training per se.

A modern enterprise and the need to change the approach to training evaluation in it have facilitated a debate also among researchers. To develop a topical and convenient method/model/approach of training evaluation, useful for the organization, it is necessary to carefully study the practice of present enterprises in training evaluation: reasons for both training and its evaluation in relation with the concept of post-industrial economics (Giangreco et al, 2010).

Why are employees sent to training? What does the employee gain from the training? Does the training help to keep the employee in the enterprise? Does the training evaluation contain attaining of organizational goals or sense-making for employees? What measures are significant in the modern world?

Refusing from the deterministic model in training evaluation a direction to reflective approaches should be taken as they are typical for post-industrial economics in which the existing training evaluation model would become only one of many tools, where, for example, "not-evaluation" can be as effective as formal Level 4 evaluation.

To develop a new approach to training evaluation and to avoid the present universal approach, a number of practical researches should be performed. Griangreco indicates to the need to base this research on four elements of interest – the size of the enterprise, the type of the trainee audience, the training content and the legal framework (Griangreco et al, 2010). Research of training evaluation in SMEs could provide a significant value added because these enterprises possess limited resources and these enterprises are more clearly aware of the relation between the result and training than large enterprises are. Training that is aimed at different categories of trade require individual approach to evaluation. For example, training can be a means to motivate and keep the employee. It is characteristic to post-industrial organizations and the training itself, in fact, is evaluated together with the evaluation of trainees' reaction.

Conclusions

- 1. The main barriers mentioned in literature why enterprises do not evaluate training are insufficient knowledge of T&D specialists, lack of time and money resources, not separating the training process and training results in the training evaluation, large number of training participants, not precisely defined training goals, information produced by third parties, a wide range of training themes and planned outcomes and "learning bleed".
- 2. Analysing the reasons why training is not evaluated, the author concludes that the traditional approach to training evaluation does not correspond to the needs of a modern enterprise because it is impossible to use linear and separable training evaluation methods and approaches in the dynamic and changing environment.
- 3. To have a full-fledged evaluation of employee training and to obtain proof and justification that training is investment in the development of an enterprise, a new approach to training evaluation should be searched for so that it would correspond to the processes taking place in the modern economic environment.
- 4. The new approach to training evaluation should be based on the research of practical experience. When studying and summarising the practice of training evaluation of different

goals and content in the enterprises of different size, for different positions and in different countries a sufficient amount of information is collected, it will be possible to speak about the development of a qualitatively different training evaluation model, suitable for the needs of the enterprise functioning in post-industrial economics.

References:

- 1. Alliger, G.M. and Janak, E.A. (1989). Kirkpatrick's levels of training criteria: 30 years later //Personnel Psychology, Vol. 42, pp. 331-42.
- 2. Bloom, B., Englehart, M., Furst, E., Hill, W. and Krathwohl, D. (1956), Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain, Longmans, Green, New York, Toronto.
- 3. Brinkerhoff, R.O. (2003). The Success Case Method, Berrett-Koehler, San Francisco, CA.
- 4. Brown, K.G. (2005). An examination of the structure and nomological network of trainee reactions: a closer look at 'smile sheets // Journal of Applied Psychology, Vol. 90 No. 5, pp. 991-1001.
- 5. Bushnell, D.S. (1990). Input, process, output: a model for evaluating training // Training and Development Journal, Vol. 44 No. 3, pp. 41-3.
- 6. Cannon-Bowers, J.A., Salas, E., Tannenbaum, S.I. and Mathieu, J.E. (1995). Toward theoretically based principles of training effectiveness: a model and initial empirical investigation // Military Psychology, Vol. 7, pp. 141-64.
- 7. Cascio, W.F. (1999). Costing Human Resources: the Financial Impact of Behaviour in Organizations, 4th ed., Kent Publishing, Boston, MA.
- 8. Clark, D. R. (2008), "Kirkpatrick's Four-Level Training Evaluation Model", available at: http://www.nwlink.com/~donclark/hrd/isd/kirkpatrick.html (assessed 20 February 2011)
- 9. Clement, R.W. (1982). Testing the hierarchy theory of training evaluation: an expanded role for trainee reactions // Public Personnel Management Journal, pp. 176-84.
- 10. Dixon, N.M. (1990). The relationship between trainee responses on participant reaction forms and posttest scores, Human Resources Development Quarterly, Vol. 1 No. 2, pp. 129-37.
- 11. Darby, J.A. (2007). Open-ended course evaluations: a response rate problem? //Journal of European Industrial Training, Vol. 31 No. 5, pp. 402-412
- 12. Enkuzena, S. (2011). Management training does it help to decrease the consequences of socio-economic crisis? A case study of a retail store chain. Proceedings of the conference: MANAGEMENT HORIZONS IN CHANGING ECONOMIC ENVIRONMENT: VISIONS AND CHALLENGES, (22.-24.09.2011), Kaunas, Lithuania
- 13. Friedman, T.L. (2005). The World is flat: A Brief History of the 21st Century, Farrar, Straus and Giroux, New York, NY.
- 14. Fitz-Enz, J. (1994). Yes . . . you can weigh training's value // Training, Vol. 31 No. 7, pp. 54-8.
- 15. Giangreco, A., Carugati, A., Sebastiano, A. (2010). Are we doing the right thing? Food for thought on training evaluation and its context // Personnel Review, Vol. 39 No. 2, pp. 162-177.
- 16. Grammatikopoulos, V., Papacharisis, V., Koustelios, A., Tsigilis, N., Theodorakis, Y. (2004). Evaluation of the training program for Greek Olympic education // International Journal of Educational Management, Vol. 18 No. 1, pp. 66-73.
- 17. Hamblin, A.C. (1974). Evaluation and Control of Training. McGraw-Hill, New York, NY.
- 18. Holton, F.H. (1996).The flawed four-level evaluation model // Human Resources Development Quarterly, Vol. 7 No. 1, pp. 5-20.
- 19. Kaufman, R., Keller, J. and Watkins, R. (1995). What works and what doesn't: evaluation beyond Kirkpatrick // Performance & Instructions, Vol. 35 No. 2, pp. 8-12.
- 20. Kirkpatrick, Donald L. (1994). Evaluating Training Programs: the Four Levels. San Francisco: Berrett-Koehler Publishers
- 21. Latvijas Biznesa Konsultantu Asociācija (2010). *Personāla vadības loma un aktuālie uzdevumi organizācijā*. Survay, available at: http://www.lbka.lv/?sub=news&id=125 (accessed 02 May 2011).
- 22. Lingham, T., Richley, B., Rezania, D. (2006). An evaluation system for training programs: a case study using a four-phase approach // Career Development International, Vol. 11 Iss: 4, pp.334 351.
- 23. Malone, T.W. and Laubacher, R.J. (1998). The dawn of the e-Lance economy // Harvard Business Review, Vol. 76 No. 5, pp. 144-52.

- 24. Molenda, M., Pershing, J.R. and Reigeluth, C.M. (1996). Designing instructional systems, ed. Craig, R.L. The ASTD Training and Development Handbook: a Guide to Human Resource Development, McGraw-Hill, New York, NY.
- 25. Olsen, J.H. (1998). The evaluation and enhancement of training transfer // International Journal of Training and Development, Vol. 2 No. 1, pp. 61-75.
- 26. Pershing, J.A. and Pershing, J.L. (2001).Ineffective reaction evaluation // Human Resources Development Quarterly, Vol. 12 No. 1, pp. 73-90.
- 27. Phillips, J.J. (1997). Handbook of Training Evaluation and Measurement Methods, Gulf Publishing, Houston, TX.
- 28. Pineda, P. (2010). Evaluation of training in organizations: a proposal for an integrated model // Journal of European Industrial Training, Vol. 34 No. 7, 2010, pp. 673-693
- 29. Tyler, K. (2002). Evaluating evaluations //HRM Magazine, June, pp. 85-93.
- 30. Shelton, S. and Alliger, G. (1993). Who's afraid of level 4 evaluation? A practical approach // Training & Development, June, pp. 43-6.
- 31. Short, T. (2009). Exploring the vacuum in training evaluation: is this a case of mission impossible?//Development and learning in organizations, Vol. 23 No. 5, pp. 15-18
- 32. Short, T. (2008). Strategic alignment and learning in human resource development: a hermeneutic exploration, PhD thesis, University of South Australia, Adelaide.
- 33. Sitzmann, T., Brown, K.G., Casper, W.J., Ely, K. and Zimmerman, R.D. (2008). A review and meta-analysis of the nomological network of trainee reactions // Journal of Applied Psychology.
- 34. Sculley, J. and Byrne, J.A. (1987). Odyssey. Pepsi to Apple . . . A Journey of Adventure, Ideas, and the Future, Harper & Row, New York, NY.
- 35. Senge, P.M. (1990). The Fifth Discipline: The Art and Practice of the Learning Organization, Century, London.
- 36. Strategic Human Resource Management (2001), in Greer, C. R.(Ed) Prentice-Hall, Inc. A Pearson Education Company Upper Saddle River, New Jersey,pp.14.-32.
- 37. Tannenbaum, S.I. and Woods, S.B. (1992). Determining a strategy for evaluating training: operating within organizational constraints // Human Resources Planning, Vol. 15 No. 2, pp. 63-81.
- 38. Warr, P., Bird, M. and Rackham, N. (1970). Evaluation of Management Training: a Practical Framework with Cases, for Evaluating Training Needs and Results, Gower, London.
- 39. Worthen, B.R. and Sanders, J.R. (1987). Educational Evaluation, Longman, New York, NY.