Learning strategies and metacognitive awareness

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Preface

Respected readers,

In front of you is the thematic Proceedings, as a collection of papers presented at the 2nd MILCON'19 Conference "Contemporary education based on ADL", organized on November 12th 2019, by the Military Academy "General MihailoApostolski" - Skopje associated member of the University "Goce Delcev" - Shtip, within the RADLI Project (Regional Advance Distributive Learning Initiative), supported by the Kingdom of Norway and implemented by the Jefferson Institute, USA.

The objective of the Conference was to gather educators and trainers from different countries in order to give us the opportunity to increase both knowledge and cooperation within all aspects of advance distributed learning - ADL. Hence, the Proceedings contain **32** papers focused on the contemporary trends in the use of information technology in a pedagogical way, as well as the best practices both from a theoretical point of view, but also from a practical aspect on the topics related to educational programs using blended learning, emerging learning technologies, multiplatform delivery of courseware, motivational and pedagogical learning strategies and other topics related to ADL. This international scientific conference gives us a wonderful opportunity for exchanging experience and knowledge between the scientific workers and the practitioners from North Macedonia, USA, Serbia, Poland, Slovenia, Bosna and Hercegovina and Norway.

The papers published in the Proceedings are written by eminent scholars as well as by members of the security system participating in the educational process of the army, police and other security services from different countries.

Each paper has been reviewed by international experts competent for the field to which the paper is related.

The data and information gained with the empirical research, as well as theoretical thoughts and comparative analyses in the Proceedings will give a significant contribution to the development of the use of ADL in a pedagogical way.

We wish to extend our gratitude to all authors and participants to the Conference, as well as to all those who contributed to, or supported the Conference, especially the Kingdom of Norway and the Jefferson Institute, as well as to the Ministry of Defense and the Armed Forces of the Republic of North Macedoniafor their immense support of the Conference.

Skopje, November 2019

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Use of training needs' analysis for improvement of cadet's training skills

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Abstract. Training needs analysis or training needs assessment is often considered the most important step among the steps in the training cycle and therefore, should precede any training invention. The training needs assessment or training needs analysis at organizational level should first be analyzed, followed by operational and individual analysis or assessment. Today we know that every educational institution and military organization invests in implementation of effective training programs to maximize the value of their existing human assets, which increases the effectiveness of the organization as well as their own effectiveness in the educational process. Human development training programs have been an integral part of encouraging the cadets/students to be a competent and skilled labor force that are knowledgeable and able to perform assigned tasks based on their training needs analysis and assessment. Training needs come from undeveloped skills, abilities, performance and insufficient knowledge or inappropriate cadets/student's attitudes that are considered as relevant for their educational process or practical job in their near future. The educational institution or the military organization should realize that there are elements for the identification of this type of assessment or analysis to increase the knowledge, skills, abilities, performance and competence of the cadets/students. Always we must be aware that there is still a lack of literature that reviews the potential elements for the identification of the training needs assessment and training needs analysis in different organizations.

1. Introduction

Training needs' assessment is crucially important for the professional knowledge and skills' development of the cadets at the Military Academy at all levels, helping them to be more successful and motivated in their study process. The study and learning process is very important for the cadets, because they are the new commanding generation of the army and they must be prepared in every way to become successful in their military career. Training needs' assessment can serve as main tool for creating a powerful training process that helps cadets/students to be more accomplishing and engaged during the four years of studying. Many tools and methods are used in order to find a way to help them to improve their results in studying or learning practical knowledge. However, today training needs' assessment can be considered as expensive and very costly, if not managed correctly. They should be planned in a wider perspective of growth and development of the cadets/students at the Military Academy.

It is essential to recognize the value of proper implementation of training needs' assessment in order to provide effective cost of training and studying that motivates and nurtures the students in their studying or learning performance. Implementing this type of training in the right way will increase the knowledge and the practical abilities. It is vital that this training, especially when it comes to the Military Academy, applies different training needs' assessment tools, methods and strategies for the purpose of increasing the study and learning performance of the cadets. The training needs assessment is the primary key to determining who needs to be trained in the process, where the training is needed and what type of training needs to be taught in order to stimulate learning success and motivation. The purpose is to ensure the effectiveness of the training program. Well-managed and planned training is needed by the cadets and by the military academic staff. If implemented in the right way in the

educational system, it increases knowledge, practical abilities and other skills, which makes the cadets successful in the educational system and afterwards in the military organization.

2. Related work

Before training design issues are considered, a careful needs' analysis and assessments is required to develop a systematic understanding of where the training is needed, by whom it is needed, what needs to be taught and who will be trained [1]. Unless such assessments have been adequately performed, it may be difficult to rationally justify providing training. Implementing helps and increases the result of the cadets/students in the theoretical and practical knowledge and in their skills and the different abilities in the military knowledge. Such need' assessment should enable an explanation to be given on why the training activities should be done and to show that training is the best solution for the performance problem and the development need. Now this type of training can be an important tool for every trainer and instructor. It can help develop a program or course based on the real needs of the cadets/students that are serving. As today the time is limited in the training program and courses, learners take this type of training into account. This can ensure what is more important that must be learned by them [2]. In every educational system today whether the complication of the education system requires the cadets/students to have knowledge, skills and abilities appropriate to the task.

If they are not skilled or do not have enough abilities to learn and study or to do the job, later it becomes difficult to them to do the job or to learn and study. Realizing they cannot do the job or cannot learn and study, they immediately are halfway in identifying their training needs assessment [2]. Identifying this type of training helps the cadets and them to increase the knowledge and also the skills and abilities to do the job and to make them successful in their educational process. Training needs' assessment can be defined as the gap between what a cadet or other civilian student must be able to learn or study and do and what he or she can or currently is doing [3]. This type of training identifies the gap between what the educational system expects from a cadet or other student to do, study or learn on one hand, and what they are actually doing on the other hand. The training needs' analysis or assessment helps them to do the right thing in order to be successful and to increase their skills and abilities in every moment [4].

The continuous training can help in discovering whether there is a conflict between what a cadet or student should do and what he or she is actually doing. Every educational system offers different skills and abilities that the cadet or student must acquire in order to be successful in future. Their needs may be personal, performance-related or career-related and include needs such as for example:

- updating knowledge, skills, abilities or job-related competences;
- making decisions about military career choices and career progression;
- increasing education and job satisfaction and the fulfillment of personal goals;
- identifying personal strengths and weaknesses;
- developing communication, teaching abilities and skills, personal effectiveness and life skills and abilities;
- identifying and achieving work targets;
- improving qualifications;
- Individual learning, teaching and self-development; building self-awareness, motivation and self-confidence.

3. Proposed framework

Today the identification of this training is the most common term that can be used to refer either the training needs assessment or training needs analysis or both terms together as they may be used interchangeably and it generally used as similar terms to help the cadets/students to increase the result in the educational system [5]. The training needs assessment or training needs analysis can become crucial in changing their orientation and managing smooth change in the educational system [6]. Today, the training needs assessment and analysis can be used as a primary factor to increase the

knowledge, skills, abilities and competency of the cadets and the other civilian students to achieve expected individual and organizational performance. Many researchers in the past have presented different models of this method to increase the knowledge, skills and abilities of the cadets and the civilian students in the educational system [7-9]. All of the models aim is to increase the knowledge, the skills and the abilities with which they will be successful in the educational system of the Military Academy and also later, successful in the military organization. All of the presented models refer to the same aim of increasing the knowledge, skills and abilities of the cadets/students, since they are the next generation of leaders in the military organization. Following is a brief description of three levels for conducting a successful training assessment and analysis model: organizational analysis, task analysis and person analysis [6], [10-12].
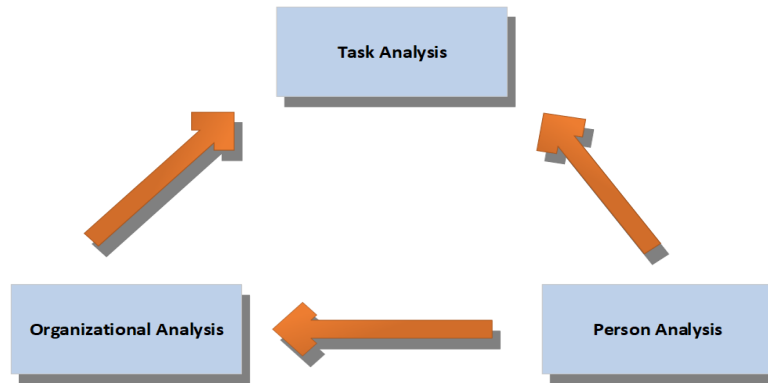

Figure 1. Proposed framework for training needs assessment.

3.1 Organizational Analysis

The organizational analysis or organizational assessment focuses mostly on identifying where in the educational system the training is needed, in order for the cadets and the civilian students to be more successful in their educational process [12-13]. The organization analysis or assessment determines the performance within the educational institution or system. This level of analysis or assessment can help them to reach organizational goals.

The purpose and the aim of organizational analysis or assessment is to provide information about where and when training was needed in an educational institution or system [5], [14-15]. By providing information when and where training needs assessment or training needs analysis is needed then the educational process can become easier and can increase the result in the practical knowledge in the field exercises.

3.2 Task Analysis

This level of analysis or assessment identifies the nature of task to be performed on the educational system or organization and the knowledge, skills, abilities and the competence of the cadets and the civilian students that is required to perform these different tasks. Task or operation analysis or assessment attempts to identify the content of training that a cadet or a civilian student must do in order to perform competently based on the educational analysis, organizational analysis, task analysis, knowledge, skills and abilities [5], [16-17]. Actually, this level of analysis or assessment is concerned with what knowledge, skills and abilities are necessary to perform certain activity, job or tasks [18].

The questions on what cadets and civilian students must learn and what types of training are required in order to perform well in tasks, jobs or in the educational institution or military organization can be identified in this level [19-20]. This level is important in the training needs assessment and analysis for identifying what they need to learn and study, in order to be more successful in the educational system or in the military organization.

3.3 Person Analysis

Person or individual analysis or assessment determines how well each cadet/student is performing the task that makes up their job [5], [21]. It actually analyses how well the cadet /student performs the job or task in the educational and military organization or system. This level identifies who needs the training and who should be trained, what type of training is needed and for what purpose or aim the training should be conducted.

All of the above three levels of training needs analysis and assessment are interrelated. The training needs should be identified at all levels. Organization's as well as cadets' needs can be developed through all of the three levels: organizational, task and individual or person training needs, in order to produce a good training program [19-21].

Training needs' assessment and analysis increases the nine major human resources management and development areas such as: training plans, goal setting, cadet and civilian student development, knowledge, skills, abilities and attitude, learning and study motivation, cost effectiveness and performance appraisal. Training needs analysis and assessment provides information between training and non-training needs that should be used for cadets and civilian student's professions and personal development respectively.

It shows that this training is one of the main processes to develop human resources, for attending an appropriate training that is suitable to their training needs, thus enhancing the performance in different organizations. It is crucial that before the training program begin, there are few elements that can serve as a guideline in order to know the important relations with the training needs assessment or analysis process [18], [22]. The analysis can be done with identifying the competencies, knowledge and skills of cadets/students. When there is a lack of knowledge, skills and abilities, both of these aspects can be improved through identification of training needs assessment and analysis process first.

This is one of the important elements or tools that need to be considered in the training process in order to increase the knowledge, skills and abilities.

3.4 Elements for Identification of Training Needs Assessment in Education

There are few crucial elements that are part of the activities for identification of training needs assessment in education, such as: competencies of knowledge and skill assessment, career development assessment and performance analysis [18-19], [22-23]. These elements help them to increase the knowledge, skills and the abilities in the educational process and to be successful in the practical exercises.

Figure 2. Elements for Identification of Training Needs Assessment in Education.

3.4.1 Competencies of Knowledge and Skill Assessment

Training is a systematic process for an individual to learn, study and increase the knowledge for the personal and educational goals [6], [11], [23]. Human resources need to be trained in order to enhance the performance and increase the knowledge, skills and abilities of the cadets and civilian students in other organizations. To improve their results different questionnaires should be used, interviews and other methods to identify the training needs and then, with different training needs analysis and assessment, to increase their knowledge, skills and abilities. Both knowledge and skills are important predicators that are being studied in analyzing the training needs [6], [10-11].

Knowledge and skills are the factors that can be used when justifying the identification of training needs among the cadets or civilian students. This can provide actual training and will improve the knowledge and skills of potential trainees through the implementation of training needs' assessment and analysis [1-4].

3.4.2 Career Development Assessment

The significance of training and development is widely perceived by organizational theory and practice [5], [20-21]. Today training and development provide guidance to cadets and civilian students for enhancing their career development.

Their career development can be accessed through the training needs, to give them opportunity for growth by attending the required training development needs [7-9], [13]. The educational institution or military organization must continuously assess and identify their cadets/students' current training and development needs, to prepare them for their next position or the job in the near future.

3.4.3 Performance Analysis

Performance analysis refers to the analysis of conflict between standard and actual performance, whose problems can be solved through instructional and non-instructional solutions [17], [19-21], [24].

The three elements of performance analysis: the individual, the process and the educational institution or military organization, are referring to the organizational level that is affected by performance, and provide the solutions of problems and processes. The individual level makes certain that processes meet the needs of the cadets and civilian students or other organization's needs, to make them work effectively and efficiently.

The individual level is the most detailed level of improving performance in the educational institution or military organization [5], [14], [24]. After these three important elements are identified, the training needs' assessment and analysis can fulfil the real needs of both sides, i.e. the cadets/students' and the organizations'.

4. Conclusion

Today, the human development training program has been an integral part in encouraging the cadets and civilian students to be a competent and skilled labor force that is knowledgeable and able to perform assigned tasks based on their different training needs. Training needs assessment and analysis is the first crucial stage in training and development and is an important factor in increasing the knowledge, skills and abilities. The requirement for training needs assessment and analysis comes from underdeveloped skills, abilities, insufficient knowledge or inappropriate cadets or civilian student's attitudes in the educational institution.

Therefore, the organization should realize that there are elements for identification of training needs' assessment and analysis to increase the knowledge, skills, abilities, competence and performance of the cadets and the civilian students.

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