THE SIGNIFICANCE OF THE DETECTION AND ASSESSMENT OF ADULT EDUCATIONAL NEEDS IN KNOWLEDGE EFFUSION

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Abstract

The diversity of problems that adult education is approaching, heterogeneity within the target populations, concerning educational level, motivations, expectations and preferred learning styles, as well as different objectives set by the funding insitutions and implementing programs require the detection of the participants needs. Therefore, the process of investigation needs is important because it is associated both with the active participation of learners and secondly the effectiveness of the training program.

The aim is to highlight that the process of detection of adult learning needs for the diffusion of knowledge mostly depends on:

- the scientific expertise of specialists who undertake it,
- the characteristics of the target population,
- the adult education strategies, which are developed from the corresponding educational institution.

The learning needs in continuing adult education are usually resulted by changes in the same occupations or working conditions, change in occupation of the people and the inadequate performance of duties in a specific job or career. An educational need is generally determined as the difference of the actual knowledge, skills and attitudes of trainees from the desired ones. In any case, the detection of adult learning needs is also necessary because it contributes to identifying the characteristics of educational programs that attract the interest of learners, contributes to the combination of different interests in an educational activity, provides information on practical issues, while contributes in saving time and resources when planning and, finally, is a mean for ensuring the quality of continuing educational programs, thereby enhancing the diffusion of knowledge.

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1. Introduction

Adult continuous education emerges as a necessity in modern society, as it conduces to the renewal and expansion of their knowledge, the reinforcement of their abilities and also, in the development of attitudes which contribute towards a more efficient exercise of their profession. This contribution of continuous education in knowledge effusion and the professional development of adults, has resulted in recent years, in the importance of a more methodical and systematic planning of relevant programmes, thus for them to be more affective.

By the by, it is the full coverage of these needs for adults participating in such educational activities-procedures, that is considered by leading theoretical adult educators (Rogers, 1999; Cafarella, 2002) to be one of the fundamental principles when designing and bringing into materialization such programmes. Adults attend educational procedures by setting targets which are linked to some of their own basic needs, however when they do, they are not regarded as ordinary educational trainees, as only just the sheer consumers of educational services, because they have already been the bearers of some educational, professional and social experience and in their majority they studied up to a certain level in basic education.

Therefore, the adults to whom such educational and training programmes are aimed, are people with certain experiences and personal characteristics, interests, motivations, wishes, needs, practices, behaviour and, at the same time, they may be members of social groups, collective parties or constitutions. Thus, for the planning of such adult educational programmes, it is demanded not only an extensive study of the existing conditions and a definition of the significant data, but also, an investigation on the personal and collective educational needs of the population-target (Jarvis, 2004; Sork & Cafffarella, 1989).

As an educational need, is considered to be what the individuals may have to learn either for their own benefit, for an organization or for the society, in other words, the gap between real level of their abilities and a higher more desirable level, which is demanded for the execution of their duties, however may this be defined by themselves, their organization or the society. Therefore, an educational need is the difference between what they (people –organization-society) wish them to be and what they are in reality (Knowles, 1980).

As further educational need is described every knowledge, ability or attitude that is required by the individual, yet not available, for the sufficient and complete execution of a task or, in general, for an activity that comprises a total of tasks. Therefore, a further educational need

is evident whenever the individual is lacking in that particular knowledge and ability which is essential for the satisfactory execution of their duties (Steward, 1999).

The educational needs are presented in three levels (Dalziel, 1994): a) in work level or profession, when this engages knowledge and abilities that are demanded for the effective functioning at their work environment or profession, 2) in personal level, when there exists a difference in the availability of their knowledge, ability or attitude which is required for the execution of a task or for a profession and 3) in organizational training level, when it regards the total of the personal training needs of the employees in an organization or some knowledge, abilities and attitudes that is required for all their members (Kilpatrick & Allen, 2001).

In any case, the choice in approaching the detection of adults' educational needs, most of the times, depends on the scientific specifications of the experts whom have undertaken such a task, the characteristics of the population-target and the strategic for adult training that is developed by the equivalent body.

2. Detection of educational needs

The variety of problems approached by adult education, the diversity in the core of population-target regarding the educational level, motives, expectations and the suggestive learning methods, as well as the difference in targets set by the funding bodies into materializing these programmes, necessitates a further research into the needs of the participants, for two reasons related to the effusion of knowledge:

- the first reason is related to the active participation of the trainees, provided that a programme would be able to cover all participants' needs and so forth their active participation would be promoted, thus alleviating any reduced classes phenomena or even students withdrawals from a course (Rogers, 1999)
- the second reason is related to the effectiveness of the programme, given that a programme is considered effective when its purpose is accomplished. In a reverse situation, when targets do not correspond to the needs or, the problems which are required to be met by this particular intervention, then its accomplishment is rendered uncertain.

The educational needs may identified as: individuals needs, collective body or constitution needs, social group needs, regional area needs, or financial branch needs or employment needs in general.

However, is worth to mention that various classifications have been suggested for the educational needs, one of which proposes the understanding of their nature through the following opposed pairs (Queeney, 1995):

- *perceived and assessed needs*

Perceived needs are the ones that the individuals believe they possess, while the assessed are detected through a structured needs assessment process.

- *felt and expressed needs*

Felt needs are the ones that the individuals may sense but do not express while, on the contrary, the expressed needs initially become alert before they subsequently are expressed. The individuals tend to be preoccupied with the satisfaction of the expressed needs.

- *normative and comparative needs*

The normative needs are defined by certain criteria of knowledge, abilities and potentials that need to be fulfilled and thus they era are set by experts. On the contrary, comparative needs occur when some individuals or groups that differ from the level of other individuals or groups, in terms of some knowledge, abilities or potentials.

- *discrepancy and maintenance needs*

The discrepancy need, reflect the distance between the desirable and the existing state and are aimed towards the educational needs. Nevertheless, there are also the maintenance needs of the existing levels of knowledge, abilities and potentials.

- *current and anticipated needs*

Current needs concern the modern activities of the individuals, while the anticipated ones are the needs that will occur in the future and they are related to the future roles and responsibilities of the individual. The anticipated needs are particularly significant to knowledge effusion, when the individuals may seek for training due to career change or in their way of life.

In general, however, when matter arises for the detection of adult training needs, it is evident the necessity to look for the answers into some important issues or, at least that we should have an elementary preoccupation with the issues listed below:

- for whom is this research of the training needs is conducted, namely, which body has requested it, which body will use its outcome and what are their priorities;

- which body is conducting this research, in other words, a state body, a private body, some special researchers or members of a body where the population-target belongs;

- in what environment are these needs detected, work environment, public places or the private space of the individuals in question;

- whose needs are in question, that is, the body to where the population – target belongs, the administration or the individuals who are already included in the population target;

- how we collect evidence for the detection of training needs, that is, by which methods and techniques.

In adult training programmes, in particular, the phase of needs detection is an inseparable element during its planning, because they are planned in such a way, according to their corresponding parameters, analytical content, the choice of trainers, the choice of methods and techniques, thus to satisfy the needs of the population target at which they are aimed.

3. Educational needs assessment

As needs assessment id defined a systematic three phase procedure that includes: a) the detection of all forms of needs, as it was analyzed in the previous chapter b) their identification and recording, their analysis and prioritization and, c) the creation of an educational programme. (Barbazette, 2006). Today, educational needs assessment does not only identify what it should be learned by the individuals but also what should be included and how this knowledge could be accomplished, it means that it should express applicable learning suggestions and strategies. (Dalziel, 1994).

More specifically, adult educational needs assessment is considered as essential and fundamental in the process of planning adult training programmes, because:

- the designers of such programmes focus their attention on important issues and thus it will assist them in their decision making during planning, and the development and formation of training programmes. Besides, the data from needs analysis may be utilized in such a way as to secure the better usage and distribution of time and resources,

- authorizes such a focus of attention in specific needs which describe knowledge, ability and attitudes and are essential yet not available by the individual for adequate performance on a task and,

- it secures this collection of important info, according to which certain levels of change in the performance of the student may be assessed.

At the same time, adult education needs assessment facilitates in the detection of characteristics of equivalent educational programmes in which the trainees are interested, also contributes to the integration of various interests in an educational activity while at the same time provides the information for practical matters, like the formation of time- schedule and the delivery of continuous education.

Lastly, it should be mentioned the adult educational needs assessment for professionals contributes towards time saving and in financial supply during the planning of continuous education training (Queeney, 1996).

However, needs assessment calls for additional members, not only the educators, in decision making in order to facilitate this process.

Nonetheless, educational needs assessment alone is a complex process, granted that the presence of true needs initially must be detected and thus training is demanded for their resolution. For this reason, a variety of methods has been developed which, through a variation in the approach, and possibly by different facts, is in pursue of its verification. It is worth to mention that for the purpose of more reliable results the experts recommend a data analysis, in more than one method in order to verify their outcome. Therefore, the use of a single method alone sometimes may lead to uncertainties regarding training needs and their classification. On the contrary, the employment of two or more methods in collecting evidence for the study of some aspects in human behaviour is offered for the research of educational needs and consists in the usage of quantity as well as quality methods, given that in the modern society of knowledge and information, neither of them is self-evident, in the recent and imminent changes which are rapid and radical. Therefore, educational needs assessment is not merely a natural procedure that gradually results in realization by the individual and its consequent recording by the examining and educational bodies in charge.

Besides, one of the most common problems that may emerge during the educational needs assessment is the gap between the educational needs of an organization and the personal training needs of the participants. The educational needs of a business are referred to as *macro* training needs, while the personal educational needs as *micro* training needs. Frequently, the personal needs are overlooked, which is something that results in negative consequences for the

organization, as it minimizes training motivation and efficiency amongst professionals at work. Therefore, it would be beneficial to respond towards the educational needs of a body without overlooking the original educational needs of the individuals. Thus, it becomes obvious that the educational system is essential to function as a system of preferences between the two parties: the educational planning body and its recipients, who are adults. The preferences of the two parties although they are not necessarily opposing, they are however different. According to the balancing laws the rate of success and the effectiveness of the training may be achieved up the point where, when preferences operating as forces, they overlap. In other words, it is essential that the training planning bodies should draw and apply training strategies according to the needs and targets of the educational policy, yet during planning it would be necessary that they take on account the needs of the final recipients of the training.

Consequently, the detection and assessment of adult educational needs should take place in multiple levels and so to be feasible, methodical and scientific, thus for their conclusions to be valid and to contribute towards the effective planning of educational programmes.

At times, various models of needs assessment have been suggested, according to the area of expertise of the specialists who are engaged in this procedure and along with the personal characteristics of the population-target (Gupta, 1999; Witkin & Altschuld, 1995). Generally, it is suggested that this procedure comprises a planning phase, a materialization phase and a phase of utilization of the outcome for the planning of suitable continuous education programmes. During the planning phase, all those liable for needs assessment should be identified; all procedures and methods used must be chosen and funding resources and time concerning needs assessment must be examined. During the materialization phase of needs assessment, data must be collected to conduce to the identification of the needs, thus to classify them and locate their cause if possible. Finally, during the phase of utilization of the outcome, what must be defined is which needs to prioritize, thus to develop continuous education programmes that respond to the needs which were identified and so to have an evaluation of needs assessment, when possible.

4. Methods and techniques of training needs

Special methods and techniques of data collection for adult training needs assessment are classified in various ways that they present a particular interest (Noe, 1999). Also, it is worth clarifying that the choice of each technique and its tools depend on a variety of factors based on the time limits of the research, the human resources available, the precision level that is required,

the reliability of the resources and finally, the accessibility to each resource (Witkin & Altschuld, 1995). At this point it is essential to mention that all data collected by the methods and techniques of adult training assessment are various:

- *the report* is the most ordinary method of adult training needs assessment which can locate the views and opinions of individuals about their educational needs, they may be expressed in person by the individual, and they can be either oral or written (Queeney, 1995; Bee & Bee, 1994);

- *the questionnaire* is a common adult educational training assessment, which usually collects facts, attitudes and opinions by using a written questionnaire or an interview. The questionnaire may apply to a mass or part of the population concerned, or to key informants, which means individuals who, due to professional or social status, are aware of the educational needs of a group and thus they can indicate it (Bee & Bee, 1994; Queeney, 1995). In any case, the number of all those using the questionnaire must correspond to the population in question. Finally, such a questionnaire must be comprehensible, interesting and attractive thus to ensure that a large number of participants can use it accordingly for the purpose of educational needs assessment (Commission of the European Communities, 1992);

- *an interview* is also widely used in adult educational needs assessment, aiming at the planning of continuous education training, and it is regarded as a flexible researching technique, as it may be either formal or informal, structured or not, it may involve the interviewer and a participant or a whole group, it can take place at work environment or elsewhere in a distance, or even by phone (Rosset, 1987; Gupta, 1999). The main advantage of the interview is that the presence of an interviewer may allow a further explanation of the questions, who they in addition, may record unstated information, may ask additional questions and at the same time, an interview allow the participation of under-educated individuals or those with sight impairment (Bee & Bee, 1994);

- *the emergency incident technique* is another method used for the location of adult educational training needs and includes a set of direct observations or self- references on specific behaviours, that are directly related to the execution of tasks by the employee at a specific situation. This technique mainly contributes towards the

location and the resolution of any problems within the organization (Altschuld & Witkin, 2000);

- *group session* is another common method which is used in adult educational training needs assessment, which allows the opportunity of interaction between the participants and therefore compliance regarding their training needs. The deductive information from the group sessions is usually of quality, as it concerns group opinions, morals, views and preferences (Witkin & Altschuld, 1995). Group sessions as their main advantage offer the combination of the different views; they build support and commitment for the purpose of continuous education, they create a sense of participation in decision-making amongst their members and they are able to involve hundreds of individuals at a low cost (Knowles, 1980). However, all data obtained from these sessions are usually of quality and subjective, it is suggested that they come in combination with the outcomes of other methods for the educational needs assessment (Witkin, 1984);

- finally, note that beyond all the aforementioned techniques there is also a plethora of methods which, if accessible, it would be possible to supplement with valuable elements the detection and assessment of the adult training needs, thus contributing in knowledge effusion. Such sources are the *business plans, the statistic plans, work descriptions, competence reports, educational evaluation, personnel files, financial budget and others*.

So, it may be said that an adult training needs assessment may be achieved by employing more than one technique. There are many advantages in this approach, although it is highly demanding on the behalf of the assessors' multiple abilities, as it promotes the understanding of training needs within the population-target and it ensures an in-depth aspect on these complicated needs, as well as it gives the opportunity to overcome any weaknesses of one method by the strong points of another and it ensures a holistic and multidimensional approach, while at the same time the validity of the outcome is increased.

5. Conclusion

According to all aforementioned, it is evident that in a time which is characterized by a revolution in knowledge and technology, by the rapid changes at a global scale, by the restructuring of the economy, the productive procedures, labor hiring, by the important

advantages towards a unified Europe and the enhanced exploitation in information technology and in communication in every aspect of the human activity, education constitutes a sharp edge in the developed countries.

Therefore, in the modern society of knowledge, further education comparatively can be a powerful advantage at personal and social level which may lead to financial development and also prosperity. Countries which have invested in the formation of a competitive and effective educational system which provides knowledge and ability during the early schooling years, higher education and continuously today can benefit from a satisfactory rate of development. More specifically, adult education is considered a statute of strategic significance, so much for their continuous professional evolution and progress, as well as for the modernization and the development of their work environment. In fact, this training is imperative for a professional, to be able to participate in a society of knowledge as this varies by nature alone, and thus it re-ensures their professional development.

Professional development includes the acquisition of knowledge and ability on new subjects, additional information in existing knowledge, the development of cooperative skills so to create a sense of understanding within their work environment and an in-depth realization of their profession. Besides, as mentioned previously, an educational need is defined as the difference between the *actual* knowledge, ability and attitude of the adult trainee and the *desirable level* of knowledge, ability and attitude.

In any case the detection and assessment of adult educational needs are essential stages in the process of planning of equivalent programmes, as they contribute towards the selection of the content of such an educational programme, and in the clear account of its educational objectives, according to which it is going to be assessed.

Therefore, for the achievement of knowledge effusion, it is essential that there should be a thorough and systematic procedure of detection, research and assessment of the adult educational needs prior to the planning of every educational programme.

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