THE EFFICIENCY OF E-LEARNING ACTIVITIES IN TRAINING MENTOR TEACHERS

Laura Serbănescu and Sorina Chircu

Teacher Training & Social Sciences Department, Politehnica University of Bucharest Splaiul Independentei, Nr.313, Sector 6, Bucuresti

ABSTRACT

In the present article we aim to present the general framework related to the laws and practice of mentorship in Romania, as well as the results of a related investigation of the POSDRU project concerning the training of professional insertion mentors, "From start to success – national program for the professional insertion mentorship of teachers". The paper aims to measure the degree of efficiency of the project's e-learning platform. In this sense we are using an evaluation model for e-learning activities called Kirkpatrick's progressive evaluation model on 4 levels: Reaction, Learning, Behaviour, Results. To obtain a maximum congruence with these 4 progressive levels we use the following research methods: document analysis and survey-based research. The sample was comprised of 342 teachers from the lower secondary system, participants in the project in order to obtain an extra mentor qualification. The data processing was done in the IBM SPSS software package, the obtained results indicating a maximum level of efficiency of the project's e-learning platform both in assuring a high level of learning as well as implementing information on a behavioural level and the impact on the organizational context through the effects it can produce.

KEYWORDS

E-learning platform, Kirkpatrick's model, mentorship, teacher training

1. INTRODUCTION

In the present article we aim to present the general framework related to the laws and practice of mentorship in Romania, as well as the results of a related investigation of the POSDRU project concerning the training of professional insertion mentors, "From start to success - national program for the professional insertion mentorship of teachers". In the national law of Education no. 1/2011, in article 236 (1), letter c, apprenticeship is seen as part of the initial training: every apprentice teacher undergoes a 1 year long practical stage in a school, under the coordination of a mentor teacher. During the apprenticeship period we can observe an ever growing exit from the system of the young apprentice teachers (over 500 annually), which reconvert to other fields of activity, not only for financial reasons, but also for the lack of support programs aimed at overcoming difficulties in adapting to the professional environment. Every year 1000 graduates receive tenure. The weak methodical training is reflected in the results at the tenure contest: from 7241 enrolled in 2007, 1764 (33%) were accepted; from 8890 enrolled in 2008, 2264(47,3%) were accepted. Although the legal framework for supporting an apprentice teacher is new in Romania, it's important to mention that in the Romanian Education system theoretical and practical experiences exist, concerning the mentorship activity, several national and international projects of this type being organized in the last few years: the MOSS (Mentor Observation and Support Scheme) aimed to create national standards for the mentorship activity through elaborating a structure to support mentors (of all specialties) through the involvement of all mentorship partners; Romanian trainers have delivered such training activities, consultancy and experience exchange with countries such as Hungary, Ukraine, countries from the former Soviet Union, Latvia, Bulgaria (http://asmero.ro/index.php?module=cms&page=79); the START project -The purpose of the project is to create and implement a training model that leads to the systemic professional development of apprentice teachers in the first 2 years of their teaching (http://www.euroed.ro/index.php/home).

The project "From start to success - national program for the professional insertion mentorship of teachers" held between February - December 2013 aimed to improve the professional insertion of apprentice teachers from the lower secondary school educational system through the development of a national, formal and coherent system of apprenticeship. The professional insertion concept outlines the integration process of a young apprentice or new employee in the professional environment for which he received specific training (L. Ezechil, 2013, page 1). The improvement of professional insertion of teachers involves that this process is so well done that it provides teachers who are performers to the education system starting from their career beginnings and on the other hand it retains them into the system. The teacher is not yet fully qualified, so he is called a candidate or trainee, even if he runs certain teaching activities. This form of training that belongs to the initial training period is present in numerous European countries: Germany, France, Luxembourg, Portugal, Austria, Scotland, Holland, England, Cyprus, and Slovenia. There is, in education systems from other countries, a transition period of 2-3 years, in which the young teacher, the apprentice, does not have the status of a definitive teacher, but obtains it if he fulfils certain criteria concerning the quality of his teaching activity, promoting certain forms of examinations. This is the case in Greece, Spain, and Italy. Only half of the countries in Europe offer new teachers a certain method of support in their first year of teaching. In the school systems there are various guidelines for transferring initial training of teachers to their actual professional activity. For example, the duration of programs varies from 7 months to 2 years. In the majority of countries, mentor teachers, most of the time in cooperation with the school's director or other more experienced teachers, have the responsibility to help teachers start up. Experienced teachers, invested with the role of tutors (mentors, trainers, counsellors, coordinators) have the task to offer support to candidates from 3 points of view: 1. training for their teaching activity; 2. knowledge and adapting to the school environment; 3. monitoring and evaluation of professional activities of the candidates. Therefore, we can see the effort of education systems in several countries to facilitate the transition of future teachers towards their full professional activity (L. Şerbănescu, 2011, page. 76-77).

The project "From start to success - national program for the professional insertion mentorship of teachers" aimed to harness the experience of senior teachers therefore growing the attractiveness of the teaching profession and to create new education professions (professional insertion mentor, mentor trainer), the creation of a body of nationally certified mentors and the actual assistance of apprentice teachers from different specializations. One of the specific objectives of our project is to assure the accessibility, the efficiency, the transparency and the later sustainability of the project through the creation of the online platform. In order to reach this objective several activities were held: the design and implementation of the online platform with e-learning content and educational resources for training activities; the development of the software support for the online platform; the editing of the usage guide for the online platform; the submission of mentor training materials to the online platform; producing a project virtual library accessible to all teachers involved in the project; the editing and publishing of content in the e-learning sections; maintenance of the project's web site. The training program pursued the development of several competences, including an ITC blended-learning training module aimed at using the online platform. The monitoring activities in the project comprised the assistance of apprentice teachers by the mentors in the project through online communication via the ITC platform. Constant communication happened on the online platform, the online monitoring including the progress evaluation of the apprenticeship program, allowing corrections as applicable.

2. THE DESIGN OF RESEARCH

The paper's purpose is to measure the degree of efficiency of the project's e-learning platform. Working hypothesis: "We expect that the e-learning platform of the - From start to success, national program for the professional insertion mentorship of teachers - project will represent a virtual learning environment useful for mentors, destined to develop their competences in order to facilitate the professional insertion of apprentice teachers". To verify the working hypothesis we are using the Kirkpatrick model, a model that measures the efficiency of e-learning through a progressive evaluation of 4 levels: reaction, learning, behaviour and results. According to Kirkpatrick's model, the first level – the reaction – measures what the course attendants believe about the e-learning platform in general; the second level – learning – measures what the attendants actually learnt. The third level – the behaviour – measures the degree of information

implementation, their transfer into behaviour. The fourth level, the results, measures the impact on the organizational framework through the effects it produces. To obtain a maximum level of congruence with these 4 levels we are using the following research methods: document analysis and survey-based research. The sample is comprised of 342 lower secondary school teachers who have more than 18 years experience and who participated in the project to be certified as mentors. The data processing was done in the IBM SPSS software package, using descriptive statistics by calculating frequencies.

3. DATA PROCESSING AND INTERPRETATION

3.1 Document Analysis

Through the document analysis of projects we can observe the online activities delivered by experts and mentors of which we can name: creating homework, feedback for homework, quality assurance online procedures, online follow-up procedures, online ongoing evaluation activities, the support & monitoring of mentor's online chat activities with apprentices (www.mentorat.cpi.ro, pe-mentorat.cpi.ro). To emphasize results we will make a short description of the activities. Course manuals in electronic format were created as well as extra resources useful for mentors (the mentor's kit, the apprentice's portfolio, quality assurance procedures, etc). The implementation of the professional insertion program comprised the theoretical framework preparation and the instruments (online and face-to-face surveys) through which a feedback regarding the qualitative level of the program was obtained. All the organizational details have been posted on the project's platform thus facilitating a good dialogue between the management team, experts, mentors and apprentices.

3.2 The Survey Based Research

The items of the surveys were created to verify the way in which the 4 progressive levels (specific to Kirkpatrick's model) were attained. Level 1, the Reaction – measures what the course attendants believe about the online platform in general. We verify the attainment degree of this level through the result analysis of the following item: "To what degree do you appreciate the project's online platform components?".

		Very large		Large		Moderate		Small	
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Site graphics		141	41.2	132	38.6	62	18.1	7	2.1
Site usability		205	59.9	117	34.2	19	5.6	1	0.3
Site sections		211	61.7	107	31.3	22	6.4	2	0.6
The quantity information	of	205	59.9	116	33.2	20	5.9	1	0.3
The quality information	of	194	56.7	132	38.6	15	4.4	1	0.3
The timeliness information	of	192	52.1	123	36.0	24	7.0	3	0.9
The Forum		205	59.9	114	33.3	21	6.1	2	0.6
The Chat		201	58.8	122	35.7	17	5.0	2	0.6

Table 1. The degree of appreciation regarding the following levels of the e-learning platform

The obtained data show (Table 1) a favourable reaction of attendants regarding the various components and aspects of the platform. Thus, we observe that they appreciate the platform especially because of its usability, 59,9% of attendants appreciate that they navigated very easily on the platform's pages and 61,7% appreciate to a large degree the website's sections. Of these we can observe very favourable reactions for the forum (59,9%) and the chat (58,8%). Level 2, Learning – measures what the attendants actually learnt. We verify the degree of attainment of this level through the result analysis of the following item: "To what extent the intellectual interaction of attendants with the learning material and with the online tasks was

encouraged?". The various activities designed into the project and held on the platform prove their efficiency judging by the resulting values that indicate the appreciation of attendants regarding the fact that all activities encouraged their intellectual interaction with the learning materials and the online tasks, to a large and very large degree (Table 2).

Table 2. The degree of intellectual interaction of apprentices with learning materials and online tasks

		Frequency	Percent	Valid Percent
Valid	Very large	213	62.3	62.3
	Very small	1	0.3	0.3
	Large	110	32.2	32.2
	Moderate	18	5.3	5.3
	Total	342	100.0	100.0

Concerning the online evaluation tasks of topic 5, Informational techniques in the mentorship activity and the measure they were learning and development tasks of ITC abilities, from Module 2, homework was evaluated from topics such as: a. making a Google Drive Form and submitting its link on the platform; b. making a Wiki glossary of useful links for the mentorship activity; c. making a SWOT analysis for an elearning platform.

Level 3 - Behaviour, measures the degree of information implementation and its transfer into behaviour. We verify the degree of attainment of this level through the result analysis of the following item: "Did you use in your mentorship activity the materials on the platform?".

Table 3. Usage of the platform's materials in the mentorship activity

		Frequency	Percent	Valid Percent	
Valid	Very large	213	62.3	62.3	
	Very small	1	.3	.3	
	Large	110	32.2	32.2	
	Moderate	18	5.3	5.3	
	Total	342	100.0	100.0	

After the training program the certified mentors started their activity of mentoring apprentices. The platform also offered mentors a virtual library that had resources useful in the mentoring activities: the mentor's guide, the mentor's kit, the apprentice's portfolio, the legal framework, etc. These resources, as well as the information obtained during the training period through the forum and the chat regarding the experts' answers to the various problems that were foreseen in working with the apprentice, represent for the mentor a guiding mechanism when needed. The values (Table 3) indicate the fact that the mentors through implementation have capitalized the experience and information acquired during the training period, the platform offering such training resource with a large degree (62,3%) of applicability in the daily school environment. Level 4 – Results, measures the impact on the organizational framework through the effects it produces. We are interested to see whether in the mentors' opinion, the program contributes to the creation of a national system of assisting and supporting junior teachers in the lower secondary school system, online teaching activities on the ITC platform contributing to this coherent teaching system. The impact on the organizational level is a large one, the mentors considering to a degree of 99,4% (Table 4) that the program contributes to the creation of national system of assistance and support of junior teachers in the lower secondary school system, online teaching activities on the ITC platform contributing to this teaching system.

Table 4. Online teaching activities on the ITC platform create a coherent teaching system

		Frequency	Percent	Valid Percent
Valid	Yes	340	99.4	99.4
	No	2	0.6	0.6
	Total	342	100.0	100.0

Concerning the platform's limits, identified at the level of possible difficulties met by mentors in using the platform we find a few worth mentioning: the difficulty of working simultaneously on several open pages in the platform; more suggestive keywords should be used on the platform.

4. CONCLUSIONS

Working hypothesis: "We expect that the e-learning platform of the - From start to success, national program for the professional insertion mentorship of teachers - project will represent a virtual learning environment useful for mentors, destined to develop their competences in order to facilitate the professional insertion of apprentice teachers" is confirmed. The reactions of the attendants to the online platform are favourable ones, 59,9% from the mentors appreciate they navigated very easily on the platform's pages and 61,7% appreciating to a very large degree the sections found on the website. Also worth mentioning are the requests of mentors posted on the online platform regarding the maintenance of the platform as long as possible, even after the end of the project, so that all mentors can have access to the discussion forum and the existing resources. The impact on an organizational level is a very large one through the effects it can produce on the Romanian educational system, the mentors considering in a proportion of 99,4% that the teaching activities on the ITC platform form a coherent teaching system and the program contributes to the creation of a national system of assistance and support of apprentices in the lower secondary school system.

REFERENCES

Kirkpatrick, D., 1979. Techniques for evaluating training programs. *Training and Development Journal*, 33(6),78 – 92. Kirkpatrick, D.L., Kirkpatrick, J.D.,1994. *Evaluating Training Programs*, Berrett-Koehler Publishers, San Francisco Kirkpatrick, D.L., Kirkpatrick, J.D.,2007. *Implementing the Four Levels*, Berrett-Koehler Publishers, San Francisco Ezechil, L. et al., 2013. *Ghidul mentorului de inserție profesională*, Editura Printech, București, Romania Şerbănescu, L., 2011. *Formarea profesională a cadrelor didactice – repere pentru managementul carierei*, Editura Printech, București

http://www.mentorat.cpi.ro http://pe-mentorat.cpi.ro

http://asmero.ro/index.php?module=cms&page=79

http://www.euroed.ro/index.php/home