Role-Based Cooperation in E-Training. A Mentor Net Case Study

Abstract. The scientific progress achieved by the modern society; starting with the second half of the 20th century and continuing in the present times, has led to major changes in all domains of human activities, along with the occurrence of stringent requirements for specific new technology-related qualifications and niche jobs. Nowadays, everyone wants to improve his/her theoretical or professional capacities and skills in order to accomplish various work assignments and tasks. This article performs a review of the contemporary e-training systems, analyses the deployments and educational outcomes, and finally, advocates for a larger acknowledgement and employment of these distance-training alternatives, which highlights their advantage and effectiveness in providing learning opportunities.

Keywords: e-training, Mentor Net, distance learning, technology

1. The Path from Face-to-Face Tuition to E-Training

It is a matter of record that, on a systematic basis, educational scholars (Boyle and Boyce, 1998) are putting a lot of effort in their attempt to improve training and coaching as a science. According to some authors, e-training is often used to explain static lessons, such as completing mathematical equations or how-to-use computer programs (Coovert and Craiger, 1997). In order to define the concept of e-training, emphasise its benefits and identify some notable specialised software tools, Martin Sloman (2001), author of The E-Learning Revolution, states that e-training "is the process of acquiring the knowledge and skills related to work requirements using formal structured or guided means, but excluding general supervision, job specific innovations, and learning by experience".

Field literature (Bruen, 2002) has shown that the use of electronic means of communication brings additional advantages compared to face-to-face training (Single, Muller and Carlson, 2002). A visible benefit has emerged in cases in which better skilled and/or status-placed people serve as mentors to those with poorer knowledge or status, the actions leading, in some situations, to intimidation or lack of comprehension, eventually resulting in an unequal relationship during the stages of the instructional process (Bruen, 2002). The results of recent experiments (Gregari, 2006) have clearly shown that the goal of e-training is a way to augment the satisfaction and involvement for students and educators alike (see Figure 1).

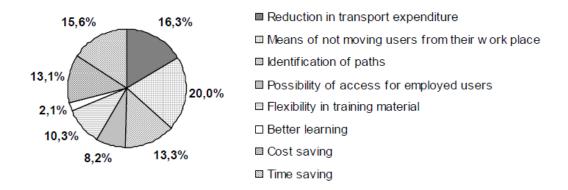


Figure 1. The main advantages that organisations have from e-training (Gregari, 2006)

2. Basics for an E-Training Environment. A Mentor Net Case Survey

In the practical section of this article, the author would like to share his experience and insights about Mentor Net (Single and Muller, 2001), a large-scale electronic training program with the specific purpose of identifying effective features and potential capabilities that could improve and expand the advantages of e-training, both in academic and working environments (Coovert and Craiger, 1997). Issues like the frequency of attendance, accuracy of learning objects, and social features have been analysed and documented. Some authors (Slator, R. Beckwith, 2006) have pointed out that, in order to increase the success of programs like Mentor Net, an essential element could be the frequency of coaching, as frequent sessions seem to produce greater satisfaction (Slator, R. Beckwith, 2006).

For higher complexity programs, the training process must be analysed from different angles and assorted strategies are to be embraced; this is why, in order to develop a large-scale form of training, Mentor Net has created an online set of interactive case studies. Multiple modules have been implemented for students and their tutors in different levels of education, each of them containing scenarios based on the common experiences of everyday life. In the case studies for undergraduate people (tested in the present project), the scenarios include the impostor syndrome, adapting to college life, finding the equilibrium between school, family issues, and social life and gender related issues. For the experimental group, the completion of the tutorials before the initiation of the training program itself was required. Several hypotheses have come under scrutiny on a sequential basis:

a. Hypothesis One: Involvement (Kasprisini and Boyle, 2003)

Engaging in a required training program will increase the number of students who stay focused on their mentors and courses. Involvement is a particular issue since repeated researches and evaluation programs have identified a bound between involvement and the level of satisfaction. Therefore, a second hypothesis has emerged:

b. Hypothesis Two: Satisfaction (Kasprisini and Boyle, 2003)

Involving in a training tutorial will augment the satisfaction of participants in a formalised e-training program. High levels of satisfaction lead to increased value and benefits.

c. Hypothesis Three: Value (Kasprisini and Boyle, 2003)

Online training will increase the value of involvement for students who stay focused on the program.

Survey items

Measures of Value

The value was analysed based on the participants' responses to questions about how the Mentor Net experience affected them. The first item addressed the student's self-confidence regarding his or her ability to succeed in the chosen field (Huppert, Tsilalas, Meade and Honey, 1998).

Data Analysis

The procedure that has been used in order to compile the results involved, firstly, the creation of a correlation matrix to determine if the three variables (involvement, satisfaction and value) were related. The correlation matrix is presented in Figure 3. The next step was to examine the outcomes of the participants, utilising two-tailed t-tests in order to establish whether the control and experimental groups had performed in a different manner for each of the variables. The results are reported in Figure 4.

| Variable | Involvement | Satisfaction | Value |
|--------------------------------------|---------------------|--------------|-------|
| Involvement Satisfaction Value | 1 .344* .274* | 1 .635* | 1 |

^{*}Correlation is significant at the p < .01 level (two-tailed).

Figure 3: Correlations between e-training outcomes (Mentor Net Research Project, 2002)

| Variable | Control group M (SD) | Mandatory e-training group M (SD) |
|--------------|------------------------|-------------------------------------|
| Involvement | 4.64 (3.06) | 6.42 (5.08)* |
| Satisfaction | 21.43 (2.80) | 20.62 (4.20) |
| Value | 10.65 (2.94) | 10.20 (2.23) |

^{*}Denotes significance at the p < .05 level.

Figure 4: Involvement, satisfaction, and value for the control group (Mentor Net Research Project, 2002)

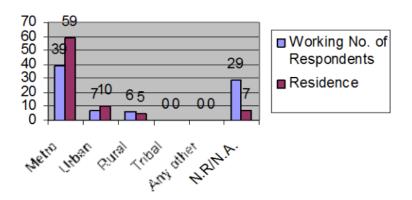


Figure 5: Place of working and residence distribution (Hadjiathanasiou, 2009)

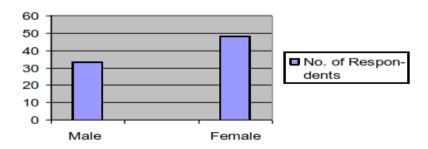


Figure 6: Gender Distribution (Hadjiathanasiou, 2009)

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