

E-COLLABORATION AS SOCIAL EVENT WITH UNANTICIPATED CONSEQUENCE. OUTPUT FROM PARTICULAR CAMPAIGN

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ABSTRACT

Necessity for teachers from rural schools to spend about a week out of home on regular post-graduate courses is a significant inconvenience for them due to their style of life and daily duties.

To exclude embarrassing overnight staying on training site the Programme combining both traditional classrooms and Internet-based activities is developed, approved by the state highest educational authority and implemented in Latvian Republic.

Besides its primary aim – improvement of teacher’s professional skills, realization of training over the Internet gave very generous additional effect – formation from graduates the county-wide network of supporting points capable to perform various e-activities.

KEYWORDS

Distance learning, presentation tools, collaboration platform, network of partnership

1. INTRODUCTION

Virtual collaborations (e-meetings, e-conferences etc.) are usually promoted mainly to technologically advanced high and medium level management with the profitable aim to save time and money for journeys. We have discovered that Internet-based collaborations could also be a great benefit for the ordinary inhabitants of the rural areas. The particular campaign carried out in Latvia by Riga Technical University (RTU) is described below.

The first precondition is that according to the local rules each school teacher (both secondary and primary) once in 3 years has to improve his/her professional skills attending special training courses. The duration of such courses has to be not less than 36 contact hours. In most cases such courses are provided in Riga - the capital of Latvia - and their duration is 5-6 days. It means that teachers from rural schools are forced to spend around a week away from home (the distance from Riga to the frontier areas is up to 300 km). For the majority of rural inhabitants it is very uncomfortable due to their lifestyle and daily duties..

The second precondition is that conventionally among the students of the Faculty of Computer Science and Information Technology of RTU there are many graduates of rural secondary schools. To a certain extent, it is because of regular 1-day seminars for the teachers of Informatics held by the Department of Informatics and Programming of RTU. The department provides the fundamentals of software for all year 1 students as well as a set of courses for the whole faculty.

The mentioned seminars have two basic aims. On the one hand, they are a part of the annual stump (presentations of University, Faculty etc.). But on the other hand, they are a good chance to talk about the problems and disadvantages of the future students being ready to study Informatics at the high school. So the

main attention during these seminars was paid to the methodology and methods of teaching Informatics at the secondary school.

There were much more subjects for conversation than is possible to discuss during one day, but the attempts to prolong the event have immediately decreased the number of the participants from the regions as it had required from them to spend a night out of home.

The result of the two above mentioned preconditions was an idea to organize an official (recognized and approved by the Ministry of Education and Science (MES) of the Republic of Latvia) training course on the Internet. The idea has been supported by the MES and the Programme “E-course for practical computer using in teaching of programming and adopting of application programs” was developed. The programme was certified by the MES as a legal post-graduate training for the teachers of Informatics.

The rest of the article is devoted to our experience of creating a study group, its face-to-face instructions, “rolling-on” Internet-base sessions, behaviors of “virtual participants”, a bit of statistics, an explanation of collateral effects, as well as conclusions and plans of further development.

2. INTERNET-BASED TRAINING

The programme consists of a 1-day introductory seminar in Riga, a set of Internet-based sessions and a final 1-day seminar in Riga. The implementation of the programme started in summer 2004. The core platform for Internet-based collaboration was Blackboard (<http://www.blackboard.com/>), the tool for presentation development - ScreenFlash (<http://unflash.com/>).

2.1 Selection of the tool for the presentation development

It had been decided from the very beginning that all the materials of the presentation have to be “as alive as possible” that means not only showing the face of the presenter, but also providing:

- the voice of the presenter, accompanying the moving pictures,
- similar to hand-drawn pictures,
- showing the execution of the application with additional comments on the image of the screen,
- the ability to watch the presentations without any specific client-side software.

So the first task was to select the tools for design of the presentation which would allow recording the lecture. It was decided not to look for the best tool, but to use the fist that corresponds to the above mentioned requirements. The search has been stopped on ScreenFlash. It has been possible to play the recorded movie though a simple browser or to create an executable file (.exe).

2.2 Kick-off meeting

The first face-to-face meeting is needed not only to go through the formalities (application form, signature etc.), but also to understand the local conditions in which participants will be working. Those are:

- internet facilities (type of connection, broadband capacity, used e-mail client and browser),
- the rights of the participants to install an additional software (in the institutional equipment as usually any new installation could be done only by the System Administrator),
- the ability of access to the Internet not only from the schools, but also from home (for working at out-of-office time),
- the previous experience of “chatting” and participation in forums.

The evaluation of the environment of the participants has discovered that many of them have mail-boxes from the public-wide e-mail providers (the local equivalent of “hotmail” and similar) with the limitation of the size of attachments. To a certain extent, it predefines the preparation of the presentations.

The last and the main task of the meeting is to explain the participants how the further work will be done.

2.3 Preparation of presentation

The main issue was not as much to record a lecture, as to determine the optimal duration of one movie. To make sending presentations by e-mail possible, the initial limitation of the size of the file was set up to 5 MB (it is the maximum size of the attachments allowed by the majority of e-mail servers). In our case (recording using ScreenFlash) 5 MB are equivalent to 15-minutes long movies with sound accompaniment.

Later on when we proceeded only to downloading from our server and such kind of limitation was declined; it became clear that 15-minutes portion of recording is the most convenient also for the lecturer. Thus the theoretical part of the course consists of 15-minutes movies consolidated in blocks.

2.4 Collaboration platform and some statistics

We haven't been searching for an appropriate collaboration platform, but simply utilized the solution which RTU offered at that moment – it was Blackboard.

We started with a short movie explaining how to use Blackboard and sent it by e-mail to all our participants together with the request to confirm that they had delivered, watched and understood the contents.

19% of our respondents did not respond to the first message at all (despite the fact that they had expressed interest during the kick-off meeting). Several telephone calls, e-mails and SMSs with reminders from our side also hadn't helped to find them. It was an obvious simple probabilistic dropout that could be ignored for the evaluation of the strengths and weaknesses of the results.

The rest of the participants entered the Blackboard (following the instructions given in the movie) and left a comment on the e-forum that they are ready for the training. Later on the e-forum has become the main tool for the exchange of information.

13% of the participants who had started the e-course had sign out from it or postponed the training. The reason for that was either the lack of time, or the complexity of the issues considered, but no one had dropped the course due to the inconvenience of distance learning.

Therefore, 70% of the participants of the kick-off meeting have completed the course successfully.

2.5 Lectures and practical exercises

The initial idea of the project was to provide some kind of synchronous actions artificially. As it was essential for us to know the stage in which the participants are at the moment, they were asked to report on the specially opened e-forum every time they have fulfilled any action, e.g., downloaded the lecture, listened to it, asked the questions aroused etc. The new training materials had been put on the forum for downloading only after the majority of the participants had mastered the previous content. It seemed to us that in such a manner we could expect the most dynamic debates on the e-forum on the familiarized issues. However, later on due to the numerous requests from the participants who were doing well we gave up the artificial slowing of the progress; and the rest of the course went purely in an asynchronous mode. Nevertheless, that didn't affect the activity of the participants on the e-forum. The reports on the performance, questions to the lecturer and internal discussions between the participants allowed the moderator to control the event completely.

In addition to pure informational materials (presentations and explanations) the course also includes a set of tasks for practical execution. In this case the executed tasks were sent to the evaluator via e-mails due to confidentiality. This simple solution was convenient and secures enough.

The primary idea of the project was to carry out the course partly in the offline mode and partly arranging real-time sessions. The first one was realized fully - Blackboard's features like e-mails, repository of the learning materials, the forum etc. has been working perfectly. However, the establishment of the interactive session has failed because even the most advanced participants couldn't install the client part of Blackboard which is necessary for online mode.

2.6 Final meeting

The main goals of the final meeting are as following:

- to introduce the participants with each other – during the virtual interactions some images of the participants have been formed and it was interesting for them to communicate face-to-face,
- to bring to the end the training itself – to realize the troubles and mistakes in practical exercises (furthermore, to verify the authorship of the work),
- to issue the certificates,
- to make a SWOT analysis of the contents, the platform used and the methods applied.

The evaluation has showed that the implemented distance learning programme is very attractive for the participants, and the graduates of the course highly appreciated this approach. Incidentally, for many of them it was the first experience of cyberspace collaboration.

3. COLLATERAL CONSEQUENCE

Besides the primary objective (to improve the professional skills of the teachers) the implementation of the training on the Internet had a much unexpected additional effect, i.e., the desire of the participants to continue e-collaboration. People who live far from advanced technological and scientific centers could actively participate in joint efforts and feel their involvement in the solutions of outstanding problems.

This willing of e-collaboration has formed a unique infrastructure of partnership that allows us to plan country-wide experiments and implementations. This infrastructure will be used in a couple of future projects. We are intended to use the “human-technique structure” created not only for education, but also for various informational events as well as research.

4. CONCLUSION

First of all, the primary objective has been achieved - the post-graduate training of the rural teachers has run in the way which was the most convenient for them.

An additional result of the undertaken activity is the formation of a certain country-wide e-community. The members of this community feel absolutely equal in rights and are equally participating in the work irrespective of their site. Actually, they are originating a set of the supporting points capable to perform various activities.

This network of partners could expand at least in two dimensions:

- on the first level by the new graduates of the programme,
- on the second level the network could be expanded by the teachers of Informatics from the schools next to the supporting points of the first level. In this case the first-level partners will act as moderators.

Such network can cover almost the whole county and can be used not only for education, but also for different kind of evaluations and informational events.

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