

Distance and Autonomous Self-Access Learning: The Necessity of Closeness and Authoritative Organizing

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Abstract — *Web-based teaching tools have created and opened new opportunities for distance and autonomous self-access learning. Many teaching and training courses have introduced and applied web-based tools as new delivery channels for their users. There are however new challenges for this approach and the web-based learning environment could be ended up as a stressful experience for new learners. They could possibly feel the psychological distance and isolation from their teachers and other learners, since their PCs are the only connection to the class. They might need back up, more closely and technically than what they would have in a traditional classroom based teaching environment. They might appreciate much personal supporting or guiding for their autonomy for self-access learning, so that such a learning style could be a real functional and valuable method. A research study has reviewed and analyzed an online course's activities, feedback and comments from learners, in connection with mentioned challenges. The course was sampled from a training course for teachers, designed by Østfold University College and conducted on November 2002. The course's activities were defined and collected by a quantitative dimension, thus by the online statistical parameters, while feedback and comments from the learners were generated by a qualitative dimension, thus by pre-designed questions and learners' answers. The study analysis has addressed the necessity of closeness during the teaching process and authoritative organization for the course program.*

Index Terms — *Web-based learning environment, psychological distance, and closeness, teaching process.*

BACKGROUNDS

Online teaching and learning is a new development and practice for many academic institutions and individuals. There are also many research articles and analysis work focused on users' experience and evaluations of online course conducting. The current study is an analysis for an online course conducted for a group of Norwegian teachers. This online course is primarily designed for teachers and the intention is to introduce an open discussion about online teaching issues and practical problems. The course intends also to motivate teachers to adapt their own teaching practice online.

The course is named as "Online Teaching – Introduction and Basic Practice" (Nettbasert læring og undervisning – NBU, in Norwegian). The course was arranged and conducted by two online teachers at Faculty of Engineering and Natural Sciences at Østfold University College of Norway [1].

THE ASPECT OF DISTANCE AND AUTONOMOUS SELF-ACCESS LEARNING

Two online instructors and one assistant instructor were assigned for course conducting. The intention of this approach is creating a learning environment online in these aspects:

- Providing technical supporting in time (two or three are always better than one)
- Presenting different teaching style and methods (from each instructor)
- Balancing instructor's work loading so that online communications are assured

The course was totally conducted online, except the final face-to-face meeting day, which was planed primarily for the course evaluation. This means every course activity, including course introduction, information messages, lecture materials, invited lectures, assignments and exercises, instructors' feedback, comments, evaluations and summary of class performance were all presented online. Writing documents, messages, or notes is the basic communication method throughout the course. We were thinking about the option of visual and camera lecture transferring synchronously, but chose not applying this time. There was no face-to-face classroom meeting neither, so all the course activities were really processed remotely between the

participants and instructors, online. Many would find this approach is unexpected, unusual and uncomfortable at the course beginning, compared with other traditional course conducting. However, our intention of this practice is:

- Simulating a real and “difficult” online environment so every participant is able to experience how would an online student likely feel and see during such an online course. This must be a primary experience for a participant, thus, a future online teacher to have.
- Up to now, most existing and operative online courses are still using document and writing message based communication during their course conducting. Our previous experience indicated that there are still quite few remote students following the online courses through their PC/Internet connected with analog phone lines. It is therefore important to introducing the most simple, accessible and available technology solution for our participants so that the complexity of the receiving process reduced to the minimum level.
- Providing a flexible learning environment by conducting the course asynchronously, so that every participant is able to log into our online course and follow the course progress anytime and anywhere.

Nevertheless, it was also possible for participants to receive the course instructors’ technical supports and guiding orally, through the telephone consultation whenever necessary or needed.

Overall, the course conducting is practiced by a principle of distance and autonomous self-access learning, so the learners will be the essential responsibility of the learning process. In reality, this means we expect the participants will be the initiative actors for questioning, commenting and acting actively in the course’s virtual classroom.

PREPARING AND REGISTRATION BEFORE COURSE STARTING

The course was marketed and announced through these media sources:

- Course catalog from Section for Continual Training of Teachers - Network Norway Council (Statenslærekurs av Norgesnettråd) [2]
- An advertisement in Saturday issue of the most popular Norwegian newspaper - Dagbladet
- An own website of this NBU course with registration addresses
- An internal announcement in Østfold University College’s main homepage.

The advertisement in Saturday issue of the most popular Norwegian newspaper - Dagbladet appeared to be the most efficient way to attract the potential participants, since the majority of participants showed up, the newspaper advertisement on a Saturday issue of Norwegian “Dagbladet”, on 5 October 2002. Their professions and geographic locations are illustrated in the table below. Their physical distances to the course center in Sarpsborg have also illustrated this NBU is a real distance based course, and it will be difficult to conduct without an online approach.

TABLE I
AN OVERVIEW OF COURSE PARTICIPANTS’ PROFESSIONS AND THEIR GEOGRAPHIC LOCATIONS

Profession	Numbers	Geographic location	Numbers	Distance to Sarpsborg	Km
Administrator	4	Asker	8	Asker	110
Adult training leader	5	Bergen	2	Bergen	400
College teacher	4	Fjerdingby	1	Fjerdingby	300
High school teacher	11	Fredrikstad	2	Fredrikstad	20
Unknown profession	2	Halden	2	Halden	30
		Levanger	1	Levanger	580
		Moss	1	Moss	25
		Oslo	3	Oslo	90
		Porsgrunn	1	Porsgrunn	280
		Røros	1	Røros	500
		Sandefjord	1	Sandefjord	280
		Sandnes	1	Sandnes	450
		Sarpsborg	1	Sarpsborg	0
		Unknown address	1	Unknown address	NA
Total	26	Total	26		

RESEARCH QUESTIONS FOR THIS NBU COURSE CONDUCTING

According to recommendation [3] from Norwegian National Distance Education Network in Higher Education (SOFF), it should be the natural part of online course conducting focus on evaluation, which includes identifying and mapping of online participants and their different types of online activities.

Few research questions can be asked as the guidelines for this analysis:

It will be interesting to identify and map the active and engaged online participants and groups versus less active and less engaged online actors, such as:

- Who are online course participants? Where are they in geographic location in their daily life?
- What challenges these online course participants would face during an online course?
- Where do they work mostly online, at their homes, offices, schools or libraries?
- What time they usually work online, Friday, Weekend, before- or afternoon, or late at night?
- Who their working duties online would affect their daily work routines, their association with their colleagues or their family life?
- How they handle their online duties versus their daily working duties?

The first question was answered by the overview of registered course participants. As we can see, there were mostly represented by high school teachers (videregående skolelærere), followed by adult training leaders (voksen opplæringslære) and college teachers (høgskole lektorer). These participants are located in different geographic areas in South Norway, with few are from middle part of Norway.

The analysis of course activities, through course's secondary data, thus statistical surveys, combined with qualitative and questionnaire-based evaluations, will hopefully answer the rest of questions.

ANALYSIS OF COURSE ACTIVITIES

The analysis of course activities is mainly focusing on the quantity of total documents and how these documents were organized throughout the course, since the course was conducted asynchronously and the class interactions were basically occurred through document based communication.

The analysis was therefore based on the secondary data collected from the course by the following approaches:

- Statistical surveys for the quantity and organization of total course documents, *i.e.* frequencies of documents and messages sent by course participants.
- Statistical surveys for the quantity of each participant's own documents and messages throughout the course.
- Statistical surveys for the frequencies of each participant's visit on each course virtual page, *i.e.* read-only statistics.

Based on the nature of online communication, there are 2 definitions of activity performance, thus, active performance (message sending) and passive performance (read-only).

Definitions of Active Performance:

- An active activity is a document or message transferred by a course participant, either by an online teacher, an online student or by an online student group.
- An active day is a day when document or message transferring has been recorded in an online classroom.
- An active student is an online student, whom is, not only participating in and read an online course's documents or messages, but also being actively sending one or more documents or messages to his/her online classmates or teachers.

The active performance activities are automatically restored in the courseware's database, so it is an easy task to summarize the statistics of such activities.

TABLE II

AN ONLINE CLASS ACTIVE PERFORMANCE DISPLAY FOR ONLINE ACTIVITIES, INDICATED BY FREQUENCIES OF DOCUMENTS AND MESSAGES SENT BY EACH PARTICIPANT THROUGHOUT THE COURSE PERIOD 03 – 22 NOVEMBER 2002

Participant P/Instructor	Documents	Participant P/Instructor	Documents
P14	68	P12	18
Instructor2	60	P1	16
Instructor1	55	P5	12
P2	37	P9	10
P8	34	P15	10
P18	34	P13	9
P4	23	P7	5
P6	23	P10	5
P17	22	Instructor3	4
P11	20	P3	3
P16	19	P19	1
Total in the class		488	

Definitions of Passive Performance:

- A passive (read-only) activity is frequencies of web pages in an online course that has been read or browsed by an online student.

TABLE III

A FREQUENCY DISPLAY FOR EACH PARTICIPANT’S ONLINE “PASSIVE” OR READ-ONLY, INDICATED BY FREQUENCIES OF THEIR READ/BROWSED WEB PAGES DURING THE COURSE PERIOD FROM 2:15 P.M. ON 31 OCTOBER TO 10:00 A.M. ON 25 NOVEMBER 2003

Participant P/Instructor	Web pages browsed	Participant P/Instructor	Web pages browsed
P17	2617	P10	467
P14	2307	Instructor1	421
P15	1422	P6	360
Instructor2	1060	P8	288
P18	1056	P12	261
P4	977	Instructor3	213
P2	976	P13	186
P11	972	P3	155
P5	823	P9	135
P16	774	P19	50
P1	636	P21	47
P7	627	P20	3
Guest	576		
Total in the class		17393	
Average pages/person		696	

Notice: Read-only data was not available for these periods during the course due to overloading of database caused by high frequencies of reading activities:

- Between 05 November, 08:40-12:00
- Between 06 November, 12:30-14:45
- Between 08 November, 15:45 – 10 November, 10:05

The above statistics indicated this NBU conducting has an upper level of class performance and read activities, when compared with previous NBU conducting.

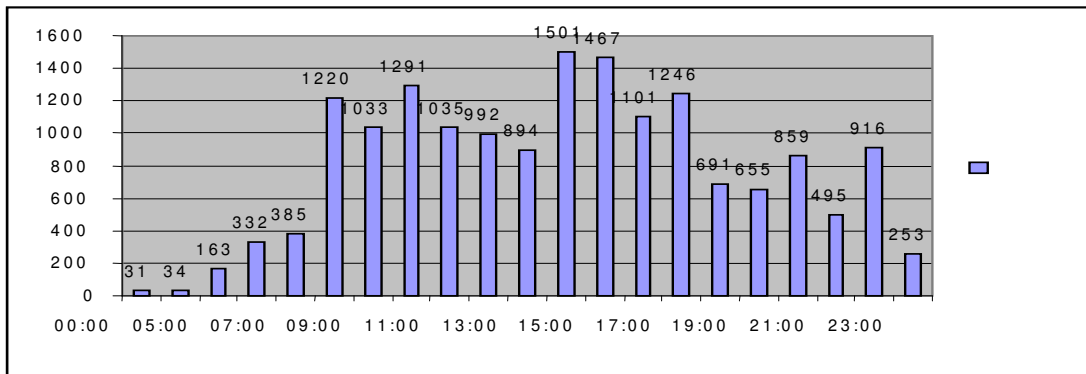
Online class activities displayed by different hours of a day

As research questions addressed early, we need to identify our online participants’ work profile or routines, thus, when are they usually working online? Friday, Weekend, before- or afternoon, or late at night? Apparently, the course’s secondary data will help us to identify these profile and routines.

There is a large amount of secondary data available for such activities. The current analysis has however sampled the total daily read-only activities by different hours of a day as an indicator. The activities were measured in frequencies read or browsed web pages throughout the course, and the measurement’s summary is illustrated in figure.1 below.

FIGURE. 1

THE TOTAL READ-ONLY ACTIVITIES IN FREQUENCIES DURING THE COURSE BY DIFFERENT HOUR IN AVERAGE DAY



It is easy to notice a fact that for most participants and their most course days, their work hours for this NBU course are most likely to be settled between 15:00 to 18:30, after a morning peak period between 09:30 to 11:30. However, there are activities all over a day, and even activities so early as from 04:00, which indicates the nature online activities is really autonomous self-access learning based.

Absence and drop off statistics

Unlike traditional classroom based teaching situation where a teacher could easily notice the absence and drop off by a particular individual or a group of students, online class activities appear to be rather “silent” or “invisible”, so there is a need to give notice of such types of information.

A passive and read-only survey can also be used to indicate absence or drop off statistics, or to confirm active learners. There were 26 registered course participants at this NBU course beginning. By the final day of the course, our read-only survey indicates that 10 of them have successfully accomplished the course.

TABLE IV

A READ-ONLY SURVEY FOR EACH COURSE PARTICIPANT’S LAST VISIT TO THE COURSE, AND THE SURVEY WAS UPDATED BY TO 21 NOVEMBER 1000 A.M.

Participant P /Instructor	Status Last visit	Participant P /Instructor	Status Last visit	Participant P /Instructor	Status Last visit
P1	Still active	P11	17.11.2002 12:05	P22	Never been visited
P2	Still active	P8	11.11.2002 19:06	P23	Never been visited
P4	Still active	P6	11.11.2002 14:51	P24	Never been visited
P5	Still active	P7	11.11.2002 11:34	P25	Never been visited
P10	Still active	P12	08.11.2002 14:36		
P14	Still active	P21	08.11.2002 14:05		
P15	Still active	P13	08.11.2002 13:28		
P16	Still active	P3	07.11.2002 15:26		
P17	Still active	P9	07.11.2002 14:46		
P18	Still active	P20	07.11.2002 14:11		
		P19	07.11.2002 11:45		

Notice: There was one participant never visited the course but did not be counted in the list since our introducing and opening message did not reach this participant in time. In this case, it should not count this participant into our statistics for absence.

An updating of read-only by 21 November 1000 a.m. showed these 10 participants were still active online until then (see details in table IV). However, other 11 participants dropped off gradually during the course and their last visits to course’s virtual classroom were noticed in the same table. There were 4 participants never visited the course site, though they were registered as participants.

Through continual updating and analyzing this read-only survey, we can easily identify and document every participant’s activity progression, period absence and drop off from the course as a part of the online performance evaluation. This analysis can be used as a part of closeness approaches to the participants, since it tells our learners work routine, online.

THE NECESSITY OF CLOSENESS AND AUTHORITATIVE ORGANIZING

The summary of table IV is actually a successful ratio for this NBU conducting, divided into successful accomplishment 10, drop-off 11 and never show-up 4. This figure is good, compared with previous NBU conducting, though it is far beyond the goal. The course activity statistics also showed the same and positive direction.

Though the course conducting is practiced by a principle of distance and autonomous self-access learning, the importance of these two aspects should never be neglected:

- 1) The necessity of closeness between the online instructors and participants, and among the participants
- 2) The authoritative organizing of the course conducting and progress, and sufficient time resource budgeting [4]

There has been practiced the following steps during this NBU conducting in order to fulfill these two mentioned aspects:

- 21 FAQ were collected, and the questions with answers were based on the supportive mails and technical tips.
- 234 mails were sent independently aside of the courseware, in order to answer, help and support course participants.
- 6 online groups were created to encourage the participants to work together online and support each other.
- 8 writing tasks were assigned for the course participants and their delivered reports were reviewed and commented.
- Short (2-3days) deadlines for the task reports deliveries so the participants would feel the pressure and seriousness.
- The statistics of online activities for the whole group and individuals were presented every week.

The experience of practicing these steps was valuable. The responses and feedback from the participants was mostly positive and encouraged. There was however criticism to the way of group organizing, that it did not budget sufficient time for grouping individuals from different locations, nor considered the variation of different backgrounds of each group member.

As a conclusion, we recommend the following remarks for further online course conducting, based on our own experiences:

- FAQ is useful and helpful tool for online users, and it can be collected before, during and after the course.
- E-mail is an important and addition tool to guide, answer, help and support course users. It shall be used often.
- Online grouping is a good approach, but it shall be well planed and budgeted for getting familiar with group members.
- Writing tasks and obliged reports are necessary for the engagement and progress of the course.
- Short deadlines are the incentive means for motivated and engaged participants, but a stressful factor for new bingers.
- The statistics of online activities are good to present as an extra measurement or indicator for the performance.

An online learning environment is something different from the traditional classroom, so the challenges for our future online teachers will be identifying and utilizing the advantages (easy access to writing documents and database), to compensate the limits (difficult to be real-time and spontaneous) of this new environment. However, the experience will only be obtained by frequent uses and many experiments.

ACKNOWLEDGEMENT

This online course conducting was approved and sponsored by Network Norway Council, Section of Continual Training for Teachers (Statenslærerkurs).

REFERENCES

- [1] <http://nettkurs.hiof.no/no/lspace/central.nsf>.
- [2] Kurskatalog for 2002. Statenslærerkurs. pp-21-22.
- [3] SOFF Sentralorganet for fleksibel læring i høgre utdanning. Veiledning for prosjektsøknad 2003.
- [4] Schweizer H, "Designing and Teaching an Online Course", Allyn and Bacon, Needham Heights, Massachusetts 02494-2130. pp-100-101.