

Stress, disruption and community - Adult learners' experiences of obstacles and opportunities in distance education

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Abstracts

English Abstract

The main purpose of this study was to describe, analyze and understand adult distance learners' experiences of obstacles and opportunities that influence their studying and learning. Many researchers in educational science, in Scandinavia today, state that knowledge is constructed through collaboration between the individual and the social surroundings, where language and communication between individuals are basic elements. Thus, another purpose was to investigate the learners' experiences of the effects the fellow students had on their studying and learning. The results are based on diaries from 33 adult distance learners, participating in a full-time introduction course in a teacher education program. The results show that most of learners found that it was difficult to combine labor and domestic life with fulltime studies. Many learners also expressed difficulties due to their lack of experience with distance learning. They reported that they have had problems in structuring and organizing their studies. Almost all learners emphasised the importance of peer learners for their feeling of satisfaction, social support and support regarding the interpretations of the assignments. The interaction affected satisfaction and motivation for most of the learners. Some of them also indicated that postings from classmates affected their self confidence. Since those are essential elements in the learning process, the interaction amongst learners indirectly supported their learning process.

Swedish Abstract

Huvudsyftet med studien var att beskriva, analysera och förstå vuxna distansstudenters erfarenheter av hinder och möjligheter som påverkar deras studier och lärande. Flera av dagens ledande forskare i pedagogik menar att kunskap konstrueras i samverkan mellan individen och dennes sociala omgivning. Ett annat syfte var därför att undersöka hur studenterna upplevde kurskamraters betydelse för studier och lärande. Resultatet baseras på dagböcker från 33 distansstudenter, under en 13 veckors introduktionskurs inom lärutbildningen. Kursen gavs på helfart. Resultatet visar att studenterna ansåg det vara svårt att kombinera arbete och familjeliv med studier på hel fart. Många av studenterna uttryckte svårigheter beroende på studie ovana, som bl.a visade sig i att de hade svårt att strukturera och organisera sina studier. I stort sett alla studenter ansåg kurskamrater var viktiga i den meningen att de gav socialt stöd och stöd för att förstå innebörden i olika uppgifter. Interaktionen hade en positiv inverkan på deras känsla av tillfredsställelse och motivation. Några menade också att kurskamraternas bidrag påverkade självförtroendet. Eftersom dessa är viktiga element för lärandet kan man säga att, interaktionen mellan studenterna indirekt stödde läroprocessen.

Keywords

Adult distance learners' experiences, study environment, interaction, obstacles and opportunities, socio-cultural perspective.

Introduction

"Now I have realized that there is little free time when one is studying and has a family. There has been a lot to do concerning the children's schooling, parent-teacher conferences and such. Because my parents are elderly they need help shopping and are in need of lifts to different places [...] Thanks God, for having my friends in the study group. It feels better when I know that others are in the same situation. [...] I feel that there is never enough time and I can't understand how some people manage working at the same time as they study. They are incredible. There is a lot that has to 'function' even if one is studying." (Quote from an adult distance learner, 1999)

Through my work as a distance education DE (distance education) teacher since 1995, I have often met adult distance learners who describe their studying and learning situation in a manner similar to that expressed in the above quote. The learners often mention domestic and work related factors as obstacles to their studies, and that support from fellow students is an important factor for the feeling of satisfaction. To a lesser extent, the learners mention the structure and organization of the course as obstacles or opportunities. However, this is the area on which I, as a DE teacher, often focus when evaluating and developing courses in DE. Since, learning can be viewed as a social activity (Säljö, 2000; Dyhste 2003) my intentions have been to create learning environments that make collaborative learning possible when designing a DE course. My experience, though, has been that the DE learners communicate with each other about a lot of things, but that they do not collaborate about the content of the assignments if it is not a requirement according to the study guide.

Research about DE has increased during the last two decades (Holmberg 2003). A major part of the research has focused on distance bridging techniques, organization, and pedagogy in DE. Research and development in these areas is essential, but not sufficient. To create favourable prerequisites for studying and learning based on the individual's vital necessities and to support lifelong learning for more individuals it is also important to investigate the students' own experiences of the conditions under which they study. It is particularly important if the intentions are to make collaborative learning possible; since the learners' everyday life has an impact on the time they can spend on their studies.

The main purpose of this study is to describe, analyze and understand adult distance learners' experiences of obstacles and opportunities that influence their studying and learning. A second purpose is to investigate the students' experiences of the effects their classmates have on their studying and learning. The study is a part of a larger project, "Interactive Learning in Distance Education", that has been granted funds from The Swedish Research Council. Gunnel Wännman Toresson, lecturer at Umeå University and senior advisor at

the Swedish Net University Agency is project leader.

Literature review

DE is assumed as a mode of learning that suits adult distance learners, since it involves possibilities to study independently of time and space (Holmberg, 2003; Peters, 2003). Assessment studies show that there is no significant difference in performance, in terms of learning achievements when comparing DE and on-campus learners (Thomas & Carswell, 2000). However, dropouts are more prevalent in DE courses (Hiltz, 1997; Gunawardena & Zittle, 1998; Morgan & Tam, 1999; Holmberg 2003; Rovai & Barnum, 2003). Among other things, important factors for motivation and successful studies are the learners feeling of belonging to a group and social presence of fellow students. Learners increase their level of satisfaction and the likelihood to complete their studies if they feel involved in a learning community and can develop a relationship with other members of the community (Wegerif, 1998; Soller, 2001; Rovai, 2001; Kreijns, Krischner, Wim, 2003). Another social arena for learning in DE is the local environment, including family, friends and colleagues and professionals in the neighbourhood (Holmberg, 1998; Simpson, 2000; Rekkedal, 2004).

However, DE has traditionally been associated with disconnectedness and isolation, as the studies mainly are conducted when the participants in the course are separated in both time and space. But, the advent of computer technology, Learning Management Systems (LMS) and Internet allow for learning communities that transcend geographic barriers between participants and have made it easier to create collaborative learning environments in DE (2003, Rovai 2001; Korsgaard-Sorensen, 2002; Peters, 2003; Holmberg 2003). Studies shows that distance learners appreciate the possibility to communicate with classmates and that they express that it has a positive influence on their studying and learning (Kumari 2001; Piccano, 2002; Wännman Toresson, 2002; Rickardsson, Swan 2003).

Many leading researchers in educational science, in Scandinavia today, explain knowledge and learning as socio-cultural (Säljö, 2000; Dyste, 2003). They are influenced by the theories of Vygotsky (Vygotsky, 1978) who postulate that interaction and collaboration between the individual and the social surrounding are central to learning. Language and communication between individuals are basic elements. Many DE courses are also moving towards a more interactive and collaborative approach (Korsgaard-Sorensen, 2002; Weller, 2002; Rekkedal, 2004). However, just placing DE learners in a group and put computer communication software to their disposal do not guarantee collaboration for learning (Soller, 2001; Wännman Thoresson, 2002; Rekkedal & Qvist-Eriksen, 2004). It might be so as that collaboration is time-consuming. Therefore it can be difficult to implement methods for collaborative learning, since adult distance learners often combine their studies with domestic and professional work (Korsgaard-Sorensen, 2002; Weller, 2002; Rekkedal, 2004). Many adult distance learners are not familiar with DE and computer mediated communication (CMC). Hence, it is important to teach them why and how to use CMC in their studies (Piskurich, 2003; Weller, 2002). Asynchronous communication has been proven to be an excellent means for adult distance learners to interact. It allows them to make their contributions and join into discussions whenever it is convenient for them (Hiltz, 1997; Weller, 2002; Holmberg, 2003). But, CMC must be integrated into all aspects of the course and have close connection with assignments and assessments if it is to be useful. Unless the course requires communication and collaboration, the learners will not use the forum created, and the few who do try will stop because of lack of response from fellow students. An essential task for the instructional designer or the teacher is to stimulate interaction between learners and to create situations and assignments where the learners can be actively engaged in discussion (Hiltz, 1997; Alexander 1998). Consequently, it is important to create a distance learning environment where feelings of community can be developed. Strong interpersonal ties shared by the learners increase the feeling of trust and spirit which enhance the courage and willingness to share information and resources and also to support each other with encouragements and confirmations in times of need (Haythornthwaite, Kazmer, Robins, 2000; Rovai, 2001; Wegerif, 1998).

However, even if distance learners express satisfaction concerning DE they also put forward difficulties. Studies indicate that distance learners have periods of frustration, anxiety and confusion because of technical difficulties or because of delayed or lack of feedback from teachers and fellow students. They also feel shame and even guilt when they have sent in assignments with which they are not entirely pleased (Blum, 1999; Hara, Kling, 2002; O'Reagan, 2003). These feelings have an influence on how the learners experience their study situation, but also on the learning process since negative feelings can reduce concentration, memory and motivation (Damasio, 1996; Sylwester, 1997).

The case

This study is based on information from 33 adult distance learners (6 men, 27 women), during a 13 week full-time introduction course in a teacher education program, in the fall of 2003. The author was one of five teachers running the course. The course had two meetings. The first meeting extended over two weeks and the second one week. A computer conference system, FirstClass, was used for communication between the participants while studying at a distance. FirstClass supports both asynchronous and synchronous text based communication. A study guide was produced; containing information about the course, ten assignments and a timetable for when they were to be sent into the conference. The assignments was individual graded. However, three of them required some collaboration using FirstClass and two were preparations for a "face to face" seminar on campus.

The learners had an average age of 36 years. Approximately two-thirds (24), had children living at home. Half of them (15) had upper secondary education only. Only six of the learners had previous experiences of distance studies. Two-thirds of the learners (21) worked in combination with their studies. Six out of them would work full time (in Sweden 40 hours a week). On average they intended to spend 28,3 hours a week to their studies. All but one had a computer with Internet access at their own home. Most of them had a dial-up connection. The majority of the learners (30) indicated that they were relatively experienced with word-processing and using e-mail but most of them (25) had little or no experience of computer conferencing.

Method

The purpose of this case study was to survey different aspects of the learners' experience of their distance studies during an extended period of time, 10 weeks. While studying at a distance the learners were encouraged to make notes in a diary on a weekly basis. The diaries contained a structured part with three questions about computer communication and learning and a more open-ended section, "*Narratives from a distance learners life*". The learners were asked to write freely in this part, but were encouraged to write about family, work, free time, assignments and their study group. This study is principally based on question three in the diary "*Are there any contributions from your fellow students during this period that you feel have helped your learning and understanding? In what way?*" and the open-ended section

"Narratives from a distance learner's life".

Results

In the analysis of the data, it was found that the 33 learners mentioned different obstacles and opportunities in their study and learning processes and those were categorized into six different groups (Table 1). The table shows number of learners, who at one time mentioned an issue as an obstacle or opportunity. They could mention more than one issue. The learners' experiences are presented during the first two weeks separately from the next eight weeks so as to point out the changes in those experiences. The first weeks of a study program are also, according to (Rekkedal, 2004) critical if the learners are to achieve success and finish their studies. To note is that there where no drop-outs in this course.

The learners felt stressed, in the meaning of pressure due to lack of time and disrupted during a large portion of the course, but also community with classmates. Half of the learners stated that they had difficulty to start up their studies after the introduction on campus, but, after the first two weeks all of them had made headway. As presented in table 1, the learners identified three main areas which they felt affected their studies in a negative way: circumstances in their domestic lives, circumstances in their work lives, and lack of experience with studying. The number of learners who put forward difficulties due to domestic life increased as the course proceeded whereas difficulties caused by lack of studying experiences decreased. However, basically all of the learners indicate the ability to communicate with classmates as a positive factor for their studying and learning, throughout the course. They also indicate that gatherings are important for their studying and learning, after a few weeks when their studies have got started.

Table 1. Learners experiences of obstacles and opportunities according to the diaries' Narratives from a distance learners life.

Obstacles	Week 1-2	Week 3-10	Opportunities	Week 1-2	Week 3-10
Domestic	14	22	Domestic	7	6
Labor	10	15	Labor	3	8
Study experience	14	9	Study experience	1	2
Teacher achievement	-	7	Teacher achievement	1	10
Assignments	-	8	Assignments	-	-
Technique	2	9	Technique	-	-
Fellow learners	2	5	Fellow learners	31	28
Gatherings	3	-	Gatherings	1	15

Domestic factors

Many of the learners felt that circumstances within the home environment were obstacles to their studies. All except two of them were studying at home which meant that they were in a situation where many other commitments called for their attention. Close to half of the learners stated that household work and care for their children took priority over their studies for the first two weeks. They felt that they had to spend a lot of time with the family after being away for two weeks on campus and that there were a lot of household chores which had been left undone while they were away. A few wrote that they felt guilty because the family's needs had been put aside for the own need of self-fulfilment.

"Of course it is unusual for the children that I am not there for them. That is also my great pangs of conscience." (Log 9)

The number of learners who indicated that domestic factors had a negative influence on their studies increased (3/4 of the learners) during the 3rd-10th weeks, when their studies were in full-swing. It was often expected that the learners, if they where at home during day-time, should take responsibility for different chores around the home, such as caring for children when they where sick, cleaning, cooking, driving elderly parents to appointments and going to parent teacher conferences. These commitments had an effect on the time the learners had to spend on their studies and it also increased the feeling of guilt and stress if they did not attend to them. In spite of the fact that most of the learners tried to prioritize activities with their families during evenings and weekends, many felt compelled to use that time for studies. They indicated that responsibility for the family, the great number of assignments and that they had to combine their regular job with their studies as a reason for this.

"The week has been hectic. There has been a lot of reading and I feel that I can't keep up with work around the house. The windows need to be cleaned and I would like to put up new drapes. But once the test has been taken, hopefully it will feel a lot better." (Log 4)

"...business as usual. All my time goes to work and studies (weekends and evenings)." (Log 24)

"The children have a break from school so now it is just possible to study at half speed [...] a dilemma for me because I can't study much when they are at home." (Log 20)

However, some of the families were supportive of the learners, not only by helping out with household chores but also by directly helping out with the studies.

"The family has acclimatized themselves to the new family situation (where mommy both works and studies). The children take on more responsibility." (Log 1)

"My family has supported me by reading my assignments and helping to correct spelling errors and grammar..." (Log 33)

Labour

The majority of the learners were gainfully employed. During the first two weeks, two-thirds of the learners indicated that, since commitments at their place of work had been put aside during the stay at campus, they had to catch up at work so that their colleagues would not have to fill in for them. Hence, studies were not a priority the first two weeks.

"It has been very difficult to make time for study. I work 60 per cent and it appears distinctively that I have been absent for two weeks." (Log 9)

Three of the students indicated that when they returned from campus, the curiosity of their colleagues regarding their studies increased their motivation to begin their assignments.

Many learners found the experience of combining studies with work very stressful. During the third to tenth week of the course nearly half of the learners felt that they had insufficient time for both work and studies and that their jobs had to take priority.

"Work is stressful as usual. At this moment it is extra stressful. Having a hard time, motivating myself to study. Simply just too tired." (Log 4)

Some of the students indicated that neither job nor study received their full attention and they felt that this was unsatisfactory. To handle the feelings of stress and disruption the learners tried to find out different strategies, e.g. reduce their working hours, decrease their level of ambition in both areas or structure their time more effectively.

"The result of both working and studying is that I have to lower the bar in both areas which is very frustrating. I want to do the best I can." (Log 9)

"I have probably been working too hard this week... I'll try to find a structure so that this can work for all parties." (Log 1)

However, eight learners indicated that even though it was hard to combine both work and studies, work was a pleasant break from their studies and that colleague's interest in the contents of the course was motivational for the studies. These positive comments came principally from learners who were already working in the same area in which they were training.

"...at the same time it was very positive to get out and have a social life. It can be lonely to just stay at home and study." (Log 6)

Study experience

As stated, nearly half of the learners had only upper secondary schooling and only six students had previous experience with distance education when starting the course. During the first two weeks of the course 14 of the learners expressed hindering factors related to their lack of studying experience. Many of them, especially those who had not had previous experience studying at a higher level, had problems planning and organizing their time.

"Things have been going pretty well except me not being able to structure and organize my studies." (Log 17)

"I have not study for many years, therefore it is difficult for me to structure my home studies." (Log 24)

"I am having a hard time concentrating on the assignments. It probably is due to lack of experience. I am used to the old ways of teaching..." (Log 9)

"Not used to writing and compiling complicated texts, it took longer than I had expected." (Log 18)

Other problems as discussed in the diaries involved difficulties in understanding the assignments and how one was expected to express oneself in writing at a college level.

"I don't know if I have got a clear idea of what is the meaning of the assignment." (Log 6)

"I've tried hard to keep it short but maybe it was too short and too shallow." (Log 23)

One can also see from the diaries that some of the students did not know what the criteria were to be met in order to pass a course at university level.

"Still not sure what it takes when one study at the university and I don't know if the assignments I have sent in are good enough." (Log 18)

"...I cannot skip any sections of the book; I have to be prepared for everything." (Log 31)

The difficulties with organizing and structuring the studies and concern over how to formulate texts seemed to decline as the learners got more familiar with the study form and the classmates way expressing oneself in written language. However, the difficulties to understand assignments and criteria's in order to pass a course at university level remained to some extent.

Teacher's achievement and assignments

According to the students, the teachers' actions were an important factor for the learners feeling of motivation. One-third of the students indicated that the teacher provided inspiration when giving feedback. Correspondingly, there were seven students who indicated that lack of feedback by the teachers hindered their motivation to study. Many also mentioned that the great number of assignments, especially at the end of the course, caused stress.

"Got part one of the test back. Got a rush. For the sake of motivation it is good to receive feedback on assignments somewhat quickly." (Log 19)

Technology

According to the questionnaire, all of the learners expected FirstClass to support their distance studies. Only two of the learners mentioned computer skills as a problem for getting started with the studies in that they had difficulties setting up FirstClass on their PC. This was quickly amended with support from classmates or someone in the neighbourhood. The majority of the learners did not have a broadband connection on their computer. Using a modem, they found, created a problem because it took a long time to download documents. A few learners therefore got a broadband connection during the course and this,

they found, was a good decision. Nine learners indicated that they experienced problems concerning computer technology during the third to tenth weeks of the course. Most of them had problems during an online examination. Since the time for doing the test was limited, the learners experienced these computer problems as very stressful.

"My test was not delivered to my teacher. I am not sure if I will continue my studies because such computer failures can happen." (Log 29)

One learner did not have a computer of her own. She had been promised to use a computer at the library for the test but when she got there she was informed that she could use it for only half an hour like every other library visitor.

"Test!!! What a mess and why do I take this course when I don't have my own computer?" (Log 14)

Only one learner felt that his/her own lack of computer experience was a problem throughout the course.

"I feel that my poor computer skills cause stress when things don't go the way I want and that affects the result of my studies." (Log 20)

Fellow students

E-mail and chat rooms in FirstClass were the primary form of communication and interaction among the learners, although some also talked on the phone and a few who lived close enough met face-to-face. Most indicated that these communications with fellow students had a positive influence on their studies throughout the course. They turned to the study group for support both in private situations as well as in situations directly linked to their studies.

"The café is littered with posts and it is fun to see how the others are doing." (Log 25)

"I feel very comfortable with my study group. They are nice to have in case there is something I wonder about and if there is something I find difficult. One is never alone to have these thoughts..." (Log 18)

The communication among the learners during the first week of distance studies was, to a large extent of social nature, keeping up with the fellowship that has been built up at campus. They then began to discuss how to interpret assignments, what to do and how much to write. This type of social and practical interactions took place very spontaneous. Thus, during the third to tenth weeks, while the social and practical interactions continued, the content of the course was discussed to a greater extent, principally when this was a requirement of the assignment. However, many learners indicated that they missed face-to-face meetings. More than half of the students wrote that they looked forward to the second meeting in real life. They expressed feelings of relief to get out of the home environment and the need for inspiration, but mostly they looked forward to meeting classmates and teachers face-to-face again.

"I actually look forward to going to campus. It feels like a place to breathe. It is going to be fun meeting the rest of the class and all the teachers." (Log 24)

"I've noticed that the posts in FirstClass have decreased. It seems as though everyone is having a hard time right now. We probably need to get to campus for a pit stop to refill." (Log 9)

The contact with the study group was not all positive, though. During the first weeks one learner indicated that the group did not work well and another did not have a computer of her own and hence could not participate much in the group's communications. During the third to tenth weeks, three learners expressed concern over the fact that their fellow students would read what they had written. They solved this by first sending the assignment to a teacher or a fellow student with whom they felt comfortable before sending it to the FirstClass conference. Their feelings of uncertainty decreased when more assignments had been sent in and they had something to compare their own assignment with.

Two learners wrote that they felt stressed when others sent assignments earlier than the time-table.

"Getting a bit stressed when I see that many of the others have sent in their reports and I haven't even decided what to write about." (Log 23)

One of them also wrote that it sometimes was stressful having to give feedback to other students' assignments that were sent to FirstClass.

"During this week the most negative thing has been reading classmates' assignments one of which was 49 pages long!!! That was pretty hard and it meant that other tasks and studying for the test did not receive as much time as it ought to." (Log 1)

In the structured part of the diary there was a question concerning how fellow students supported learning and understanding. The results show that the social support and the support for interpretation of assignments occurred twice as often as cognitive support i.e. discussion and collaboration concerning the content which was to be covered. (See Table 2). As mentioned earlier, discussion concerning content occurred mainly when the interaction was required by the curriculum such as when the learners had to comment on their classmates' assignments or collaborate in group assignments.

Table 2. Are there any contributions from your fellow students during this period that you feel have helped your learning and understanding? In what way? From diary - Question 3. N=33

Category	Number of comments
Support – cognitive	26
Support – social	25
Support – interpretation of assignments	20
Tips on reading material	5
Increased self-esteem	5

Five learners indicated that the group affected their self confidence in that, by reading the others' texts and messages, they knew that they were not alone in feeling that something was difficult.

"It was confirmed to me that there were others that find the book difficult. That helped my confidence when I realized that the book is hard and that I am not stupid." (Q3 Log 15)

Many students also said that tips on reading material helped their studying. The majority of tips given could not be directly linked through the assignments in the course, but related to the area of studying and were linked through web pages and articles.

Discussion

A majority of the learners in the study had commitments regarding domestic life and labor. In addition, they were unfamiliar with studies at a university level and had no previous experience of DE. They planned to study on average 28, 3 hours a week (in Sweden full-time studies implies 40 hours a week) This indicates that the learners had an unrealistic concept of the effort required for full-time distance studies, and how it would influence their everyday life. The result also shows that the learners for the most part of the course were suffering from stress and disruption due to the pressure of study requirements combined with obligations in their family life and jobs. Besides that, many of them expressed that their lack of study experience was a hindering factor, especially at the beginning of the course. This demonstrates the importance of taking adult distance learners' everyday life and earlier study experiences into consideration when planning DE courses, since it has an impact on the time they can spend on their studies. Early information about how to study at a university level and what DE involves would probably facilitate for these students to manage their studies. It would give them opportunity to organize and structure their everyday life and to prepare themselves for the studies. Some open-learning universities offer courses preparing for DE e.g. Open University. From 2005 Umeå University offers a preparation course for newcomers unfamiliar with studies at a university level. However, this course is not specially adjusted for DE learners.

The adult distance learners' situation with commitments regarding domestic life and labor would support the assumption that flexible studies, with possibilities to pace the studies in relation to their own commitments, would be convenient for them (Korsgaard-Sorensen, 2002; Holmberg, 2003; Rekkedal & Qvist-Erikssen, 2004). However, nothing in the diaries indicates that the learners disapproved either of gatherings on campus or timetables for assignments. On the contrary, half of the learners expressed satisfaction, especially concerning the gatherings. This may be explained by the fact that many adult learners are used to traditional nonflexible "face to face" education (Guawardena & Zittle, 1998). For that reason learners in this study might have felt comfortable in this nonflexible course design. Also, since they indicated that they appreciated the presence of fellow students, another explanation might be that gatherings and a common timetable for assignments facilitated the establishment and continuation of fellowship and community.

Almost all of the learners emphasised the importance of peer learners for their feeling of satisfaction in their study and learning situation. These findings are consistent with other research e.g. Kumari, 2001; Picciano, 2002; Wännman Toresson, 2002; Richardsson & Swan, 2003. The learners in this study supported each other in private situations as well as in situations directly linked to their studies. Some of them also indicated that fellow students affected their self confidence. Social support and support concerning interpretation of the assignments occurred spontaneously. This spontaneous contact indicates that the learners had feelings of confidence, solidarity and community with the classmates in the group. The two weeks face-to-face meeting at the beginning of the course probably facilitated the community building as this kind of support happened the very first weeks of their distance studies. In addition, this happened twice as much as cognitive support, i.e. discussion and collaboration concerning content in the assignments. Since learners feeling of belonging and social presence of classmates are important factors for motivation and successful studies (Wegeirif, 1998; Soller, 2001; Northrup, 2002; Kreijns, Krischner, Wim, 2003) it can be said that the interactions between the learners in the study indirectly supported their learning. Cognitive support occurred principally when required by the curriculum. The learners had no experience of learning together with others in DE and therefore they probably did not see if there were advantages associated with collaboration when working with assignments. Especially so, as collaboration in computer mediated DE is time-consuming and the learners had a tight time-schedule due to commitments in their work and domestic lives. Thus, in agreement with Weller (2002) and Piskurich (2003), it is important to teach the learners how to learn in computer mediated environments, especially if they are supposed to collaborate. It is also important to create assignments that stimulate the learners to collaborate (Hiltz, 1997; Alexander, 1998). They have to feel that the time they spend on collaboration is well invested.

The assumption that distance learners main social arena for learning is the home environment (Simpson, 2000; Rekkedals, 2004; Holmberg, 2003) does not add up with this study. However, some learners mentioned that colleagues, members of the family or friends had shown interest in their studies, given computer support or helped them in their every-day life. But only two mentioned that someone else than the fellow students had actively helped them in their learning. Moreover, the learners indicate that they where too occupied with their studies combined with other commitments. They had no time to spend with others.

The computer technology in this study did not cause the same amount of stress and frustration amongst the learners as Hara & Kling (2002) and O'Reagan (2003) found in their studies. Most of the learners in this study had a computer at home and felt that they had sufficient computer skills. This did not exempt them from technology problems, however. Technological problems arose for some of the learners, when having a time limited net based examination, which caused stress. It indicates that it is important to have alternative technologies available, especially, at such times. Furthermore, many learners were using modems to access FirstClass and found that this was very time consuming. Instructional designers should therefore take into consideration the fact that many distance learners often do not have access to the latest technology; hence they should avoid using technology that impedes or excludes some learners.

Conclusion

The purpose of this case study was to survey different aspects of the learners' experience of their distance studies during an extended period of time, 10 weeks. Because the memory of events and feelings changes over time, the learners in this study were encourage to make notes in a diary on weekly bases, instead of retelling them in an interview at the end of the course. However, this approach has weaknesses. The result might have been influenced of the learners' ability and practice to express themselves in written language. In addition, the author of this article was one of five teachers in the course, grading some of the assignments. It might have had a restraining effect on what the learner noted in their diaries. In addition, the learners were encouraged to write freely about there situation as a distance learner but the author had also pointed out some specific areas. This was done as help for the learners, to get ideas what to write about but also for the author to make sure of getting information related to the purpose of the study. This might have directed the learners to make notes in a certain direction and the learners might have omitted

interesting information for this study. However, it turned out that the amount of information was beyond the author's expectation. The learners wrote about subjects related to the purpose as well as very private issues. It shows that the learners did not hesitate to write about many different aspects of their lives as DE learners. They had confidence in how their diaries would be used. Moreover, the researcher's initial understanding has always an influence on the interpretations of the data and this study is probably not an exception. The validity and reliability would be improved if more than one coder of the data was employed, by using a multiple case study approach and using supplementary methods for collecting data e.g. interviews and analysis of the communication in FirstClass. This will be done in a coming study, focusing on collaborative learning.

Although, the findings in this study cannot be readily generalized, it gives an insight in some adult distance learners' experiences and by that it stresses aspect on some prerequisites for their study and learning. The findings point out the importance to consider the learner's familiarity with higher education and computer mediated DE, and their everyday situation, when planning and organizing DE courses. The learners in this study expressed that most obstacles for their studying an learning were in these areas. The findings also show that the learners were in need of social support and support in clarification of the meaning of course assignments. In this context, the fellow students were of great value for the learners since they from the very beginning, spontaneously turned to the study group even though it took away time from their other responsibilities. The contact between the learners was probably facilitated by the fact that they first met face-to-face at campus and there started to build group solidarity. This point out the importance to create situations where distance learners can get to know each other and generate feelings of security and community in the study group. However, in this case cognitive support i.e. discussions and collaboration concerning the content which was to be covered only occurred when it was an obligatory. As discussed earlier it might depend on the learners' ignorance of possible advantages with collaborative learning but also how to collaborate in a computer mediated environment together with the time-pressure due to their everyday commitments. Thus, it cannot be taken for granted that DE learners collaborate or support each other just because they have possibilities due to e.g. acquaintance with each other and CMC software to their disposal. There are numbers of circumstances that have an influence on DE learners study and learning situation, some of them mentioned in this study.

The study also generates further questions to be investigated in the future. Would the result differ if there were a majority of men in the course instead of women? Are adult distance learners interested in collaborative learning, even though it limits the flexibility in time (women/men)? How do women and men as distance learners perceive advantages, drawbacks and learning outcome from collaborative learning? How would assignments be designed to promote collaborative learning, even if it is not an obligatory? How would a course design look that both consider learners' need for flexible studies in time and space and the ambition to create collaborative learning.

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