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Web-based Andragogy in Open University – Enhancing the Meaningful Learning Process of Research Skills

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Abstract

The research examines adult students studying on a web-based qualitative research methodology course in the Finnish open university context. The research questions concern adult student experiences of supportiveness of the learning environment, their studying orientations, and their relationship to andragogical assumptions of self-direction and collaboration. The research material consists of 47 learning diaries and was analysed by using abductive content analysis. The course script, initial stage orientation, teacher's meta speech and sensitive supervision were experienced supportive for studying and learning. Three different studying orientations were summarised: the effectiveness orientation, the managing orientation and the learning orientation. The research makes visible connections of micro and macro levels of the open university web-based studying at an intersection of the market, equality policy and academic expert culture. The results also implicate that self-directness and collaboration can be supported by sensitive andragogical supervision relying on adult students' responsibility and freedom.

1. Introduction

The andragogical studies concerning the adults' academic web-based studying have extended the understanding of the possibilities for adult learning but also the restrictions in the online learning environments [1; 2; 7; 15]. The adult students who participate in open university education form a group with very heterogeneous starting points in regard to their educational history and their work history. These students' consciousness of the academic culture and their readiness for web-based studying vary greatly. The resources to do with time-usage and other adhesions of an adult life restrict the adults' possibilities to engage in education which may affect both the learning results and the studying activity [6; 9].

Andragogy, in the form that Knowles [14] presented it, contains the assumption of the qualitative difference in the learning of adults and that of children. Growing to adulthood means in andragogy the development into a self-directing learner. The ideal image of an adult learner is an active agent who has self-knowledge, utilises one's own experiences, solves practical problems, and is internally learning oriented. [13]

Andragogical assumptions have met criticism which is directed at its psychologising idea of human being. According to Pratt [14], the assumptions of both self-direction and collaboration in the learning and studying of an adult have to be analytically examined as changing relations which change in time and place. We still take a contextualizing step in this study from the situational construct presented by Pratt to a reflection between the micro and macro levels. In this article we examine the studying experiences of Finnish open university students on a web-based research methodology course. We aim at understanding the different relations of the students to online studying (the degree of self-direction and collaboration) in the tension field formed by the logic of the open university's macro level determinants, education market, adult education policy and the ideals of the academic autonomy of the universities.

2. Web-based learning as a solution for open university education

Individual, social and global preconditions set expectations, objectives and restrictions for the open university education internationally. In the education market academic adult education has become a commodity and capital to be purchased. Socio-politically examined the academic adult education should not only promote competitive ability but also more broadly the social equality and the strategy for lifelong learning [16]. These starting points that are sometimes laden with tensions become concrete in the operation of open university when adults from different social and educational starting points make

education choices based on accessibility and student centredness.

High expectations are directed globally at adapting educational technology and web-based education in regard to lifelong learning and increasing equality. Web-based education, having grown over the last few decades, has indeed opened up new opportunities for the attainment of the objectives of lifelong learning [also 10]. However, the promise of the equality given by the technology has not become unambiguously fulfilled according to international studies [16;18]. It is important to analyse the social effects of technological solutions in the contexts of adult education and higher education, for example, the online implementation of the processes of communal learning or the significance of limited online interaction from the point of view of understanding [8].

3. Open universities' web-based learning in a Finnish context

There are no separate open universities in Finland, but universities have their own open university education units. Haltia [4] performs a research review in distance teaching in Finnish higher education. Web-based education is widely used in Finnish university education, and open university education has been, from the beginning of the 2000s, a forerunner and a laboratory of distance education in Finland. It has also remained so with its substantial and versatile distance learning opportunities. Participation in the open university education is not restricted according to previous education, age or any other criterion, but there are fees. A survey (2014) of Finnish open university and open polytechnics students shows, that the age of open university students has risen over the last ten years. Nowadays most of students are female adults in their thirties and forties and in professional positions. The students on web-based courses are older than other open university students. [5]

The motives of open university students are the development of vocational skills, general education, getting to know the subject field and studying towards a degree [5]. Students on web-based courses emphasize the importance of flexibility in terms of time and place and the opportunity to combine work, family and study. Flexibility of time and place, independent learning, the web as a study format, general flexibility, communication and counselling are seen as the advantages of web-based study. Open university students experienced more lack of personal feedback and counselling and demanding course contents as barriers than other students in Finnish university education. [12.]

4. Open university case – research methods online

The empirical part of this research is directed at qualitative web-based research methodology studies in the field of education (bachelor level) in open university. The study module was compulsory for the students and worth 5 credits. The e-pedagogical solutions of the study module were based on the andragogical principles. Studying was reliant on self-direction and was carried out completely in the online learning environment. The main objectives were that the students would build their own relation to the scientific knowledge construction and to a research process.

The central starting point in the orientation period of the course was the heterogeneity of the adult students regarding the contents, objectives and e-study skills. Some of the students have plenty of earlier university level studies and understanding of the nature of research operation whereas a number of the students were novices in academic studies. Because of this, in the script of the study module attention was paid to make different ways of participation possible.

The script of the study module proceeded by adapting the process of the qualitative study. From the student's point of view the studying consisted of online lectures, study counselling, the literature of the study module and of the online examination as well as the learning diary. The web-based learning environment comprised all the materials, and the interaction and participation possibilities of the study module. The aim was to clarify objectives and facilitate the course participation. The lectures (8) of the course were short, about 15 to 60 minutes, and only accessible as video recordings. The videos could be viewed according to the student's own schedule. The studying was supported by synchronous counselling sessions, over the four weeks from the beginning of the course and they were also recorded. The study counselling was placed according to the study process amongst the lectures. In course pacing attention had been paid to the different needs, the possibility to proceed as a group or individually according to one's own schedule.

The learning diary consisted of subtasks, which proceeded according to a qualitative research process, and of the students' diary-like reflection. In the first task of the learning diary the students reflected their own starting points in relation to the course objectives and contents. Later parts of the task were created as a process in the research examination of the subject matter chosen by the student. In the last part of the task the students reflected upon their learning and especially their own way to participate online and the meaningfulness of the different ways for their own learning.

5. Research questions

The practices of web-based teaching and meaning giving by the adult students are examined in this study in relation to the social context of web-based teaching of the open university. At the same time the solutions of the online learning environment are reflected in relation to the andragogical assumptions of the adult's self-direction and collaboration. In the study answers are sought for the following research questions:

- 1) What solutions of the web-based learning environment are considered as supportive for learning?
- 2) What kind of studying orientations adult students have, and how these orientations are negotiated?
- 3) How do the adult students' orientations to web-based studying relate to the andragogical ideals of self-direction and collaboration?
- 4) How can the adult students' studying orientations be understood in the social context of the web-based open university education?

6. Research material and method

The research material consisted of the 47 learning diaries (20 pages each) kept by academic adult students during the course into qualitative research methods. Such students' learning diaries who evaluated themselves as novices with respect to the contents were selected from a wider material (63). The research material was analysed by adapting abductive content analysis. Our approach to reading was hermeneutically interpreting and understanding as the teachers, researchers and as colleagues. We utilised the researcher triangulation in the interpretation of the material. The adult students' orientations to web-based studying were analysed through the three fundamental relationships of the studying activity: in relation to the studying environment (undertaking the web-based study module), to oneself as learner and student (the adult student's identity) and in relation to the contents to be studied (the research methods and scientific thinking and practice). The parts in the material concerning these themes and negotiations of meaning were distinguished from material and categorized by themes. Orientations to web-based studying were categorized from these themes abductively. The concept of the negotiation of meaning is connected to the social learning theory [19]. In this context it refers to the meaning giving process the adult students participate in the open university's web-based course community (a community of practice). The negotiations of meaning apply to the student's self-direction and participation in the social learning of the web-based course (the conditions of the participation and the adult student's possibilities) and reify in the learning diary texts (reification). The

participants of the web-based course regulate their commitment and their participation in the action of the community of practice and in the negotiations of meaning.

7. Results

Sub-sections present the main results of this research. The theoretical framework and the analysis are focused on the andragogical process of e-pedagogical solutions for supporting learning and the adult students' orientations to web-based studying in open university social context.

7.1. E-pedagogical solutions supporting learning

7.1.1. Planning the script of the web-based implementation of the study module. Versatile advance planning and the compilation of the script are significant stages of the process [also 8]. In this case the students were also provided with the opportunity to practise online the basic technical skills needed in the web-based studying and to test their own devices before the actual beginning of the web-based course. Clarity and ease of navigation support the learning in the online environment, such as Tallent-Runnels, Thomas, Lan, Cooper, Ahern, Shaw & Liu [17] emphasize. Realizing this, the material of the study module had been arranged to progress according to the process in the form of timed links in the online learning environment. According to the students these measures which pace and clarify the process were significant in regard to structuring the wholeness and in dividing one's own study into sections. The students appreciated the general clear organization of the online environment.

7.1.2. The importance of the counselling at the initial andragogical stage. The study module began with a web-based counselling meeting, an introduction of the structure of the course and the operating principles. The start with a counselling removed students' feelings of uncertainty and strengthened the experience of self-efficacy. The teacher's orientational meta speech created the feeling of confidence and community from the point of view of the learning. According to the students, the introduction of the process-like progress as well as the structuring of the pedagogical script were also central. Students were able to perceive both the wholeness and the parts of it and the nature of contents. According to the students, *"the studies progressed very logically and that is why it was easy to become absorbed in the matter and to understand it."*

7.1.3. Lectures in opening contents and the meaning of meta speech. The online lectures received good feedback. According to the students

they clarified the core content of the whole study module and the challenging methodology literature which was included in it. The teacher's clear lecturing style with meta speech extends the understanding. The students' experience was that the everyday language facilitated learning which strengthened the more concrete personal structuring of the theoretical part. It also further reinforced the experience of participation and andragogical experience of self-efficacy. In addition the examples of the teacher's own experience relating to research and their reflection on a meta level were experienced as educational. One of the students reflected that, *"the lectures were extremely clear, suitably summarizing in my opinion, and the notes supported the matter, they helped absolutely in perceiving the wholeness."*

7.1.4. Andragogical counselling and the feelings in the learning process. The number of students participating in the live study counselling was large at first but became uniformly smaller towards the end. According to the learning diaries the reason for the decreased need for counselling were the students' slower study pace, which was caused by various reasons. The live counselling would not have been correctly timed considering their learning process. The schedule of the group proved to be a challenge but on the other hand, for some the tight schedule encouraged efficient and committed work. Again, it was experienced that sufficient support of one's own learning was obtained from the counselling recordings and through exploiting the questions posed by others. Surprisingly many students said that they had felt nervous about participating in the counselling. Still some students participated actively. The teacher's encouraging and understanding attitude proved to be the most significant contribution of counselling. *"In counselling sessions I remained in the listener's role because I did not participate in them live. But all the provided study counselling supported the course and it was clear."*

7.1.5 Student's own learning as a process and the multiple dimensions of interaction. The students evaluated that emphasizing the process-like construction of personal understanding strengthened their learning. The process-like learning diary with its subtasks was also evaluated to be to supportive of learning. The space for students' own consideration in the tasks was inspiring and liberating for some students, whereas some missed a tighter structure.

The interaction and community of the web-based course were also supported in the form of a discussion area in the online learning environment. The students regarded the possibility of discussion as meaningful even though the use was minimal in the end. The entries consisted of the teacher's messages of encouragement and a few questions by students which the teacher answered. The mutual interaction was not created amongst the students and the students did not experience that they had required it. However, the

mutual interaction would create andragogical reflection and would deepen the understanding of the learning material as well as extend the understanding of the different study and research contexts [also 11; 3.]

7.1.6. Critical observations. The adult students also presented critical observations concerning the script of the web-based course. A particular dissatisfaction if a student started the process distinctly later than the others. In that case the feeling of hurry and being an outsider affected the depth of the learning process and the experienced meaningfulness. As a whole, the amount of work in the study module was also evaluated as significant. On the other hand, the personal processing of the contents linking to one's own research idea deepened the learning.

The majority of students told that at the beginning of their learning diary they had been motivated to learn the contents and that they would need them in the later stages of their studies. The frightening, distant and boring methodological content was becoming to be understandable and personally interesting and central.

The description of learning processes conveyed at times even an excessive easiness, which could be supported with the andragogical means. Learning was not directly differentiated, but encouraging supervision was offered to the students for making the meaningful choices [cf. 11]. So the challenge on the course became the differentiation of the contents to be studied, finding the suitable level of challenge and the expert-like challenging of one's own learning [cf. 3]. The adaptive functions of the web-based course would be perfectly suitable for the module, also with regard to andragogy. Also the students' mutual interaction would bring a new level of depth to studying. That would require aligned e-pedagogical and andragogical observations when drawing up a script.

7.2. Students' orientations to web-based studying in the social context of open university

Relations of the adult students to themselves as learners (self-directiveness), to the collaborative ideas of the web-based course and to the contents to be studied can be read in the learning diaries as negotiations of meaning between effectiveness orientation, managing orientation and learning orientation. These relations also reflect the andragogical meanings of self-direction and collaboration in the material. In the following we describe these relations and the tensions between them in the adult students' life contexts. Orientations to web-based studying that have been described above are contextualized at the same time to the social and cultural place of the open university at an intersection

of the market, equality policy and academic expert culture.

The student customer's effectiveness orientation to studying is connected to the emphasizing of individuality and independence enabled by the online learning environment. The adult students proportioned the resources (time, economy and energy) invested into studying in their particular situation in life to the output to be obtained from the studying. Effectiveness-oriented students emphasized the significance of flexible and web-based method of implementation and expressed self-confidence in e-study skills required. The studying objectives had been clearly defined beforehand and an instrumental interest in knowledge was conveyed in the diary texts. The teacher's support and supervision of learning were asked only for narrowly defined individual questions and other students appeared as insignificant regarding students' personal learning. The web-based studies of the open university offer the customer of the education market a tailored online study package which supports the education career. In that case the dimensions of the academic expert knowledge remain on the sidelines in the orientation.

As a student expresses: *"I did not experience community because I live in another locality and my studying is very independent. I work on the computer during the times that I have consciously chosen and give all my other time to my family members. Online studying is familiar for me and the positive experiences made me also choose it this time."*

The largest proportion of the novice students related themselves to studying in their diary texts according to the managing orientation. Confidence in their own learning, studying skills and managing in the web-based studies was first unclear or under internal negotiation. However, the relation lived and developed and many adult students described the confidence in their own learning having strengthened after the uncertain first stage. They thought about their own starting points, their situation in life as well as the demands of the studies and the nature of web-based studying. The diary texts can be read as the adult students' identity construction in relation to the academic studies, and to the online learning environment. Some of the students told that they needed and appreciated the encouragement, support, and contents provided by the teacher. Some were also in need of the support of the student community in the studies or reflected their own skills or their progress with other students. The negotiations applied, not only from personal starting points, but also to the tension of participation into the interaction in the web-based course and from the time limits brought on by their own situation in life.

A few of the students reflected the significance of the community: *"I experienced the community even though I was not even able to participate in the live lectures. When you follow the discussion forum you feel like you belong to the group. Even though I wasn't on the live*

lectures they were nice to view and it felt like I was in the lecture even though it was not. This affected learning in a meaningful way, when I thought of a questions and similar question was asked. On the lecture they also told about the matters which I had understood correctly and some others quite wrongly. It gave self-assurance that I had indeed done the things right."

The web-based teaching of the open university appears to the adult students struggling with their student identity and their situations in life as the enabler of studies and the constructor of cultural democracy. The confidence in one's own learning may have strengthened with the support of the counselling interaction as the following learning diary excerpts from the beginning of the web-based course describe: *"I was calmed down by the teachers comment that a process cannot be learned by forcing it but you have to give it time. You cannot become a researcher in a moment but the experience and the knowledge are gathered little by little. So I try to be hopeful. I will learn as well."*

In the learning diaries it was also possible to read plenty of internal commitment for the learning itself in the spirit of andragogy and the enjoyment from the insights gained from studying. Moreover, a place and mindset for lifelong studying and learning was found. Self-direction is manifested in acknowledged setting of objectives and in active relation to the studied contents.

"The course required personal activity and ability to plan things. And with the activity I mean that one had to digest, to think, and to examine matters also outside of the studying space. I also read a lot of literature surrounding the subject and diligently browsed the net, which I feel have been an advantage for understanding the matters."

In these descriptions the features of the different dimensions of expert knowledge and the understanding of the understanding cumulative emphasis of academic knowledge were found.

8. Discussion

The adult students' dynamic orientations to web-based studying reflect except individual variables also the social structures in the open university education. The principles of self-direction and collaboration must be seen as an objective of adult education, not as a starting point.

The conclusions of this research study support the principles of planning an andragogical learning process as presented by Knowles [10]. At the beginning of the studies the support by andragogical facilitator was connected to being acknowledging the adult student's own existential state, own resources and objectives. The target of counselling is the evaluation of students' own starting points and setting their own objectives in relation to the wholeness of the course. At the beginning stage of the web-based course the initiation of students to andragogical educational thinking and supporting to self-directional studying are at the centre of the study

counselling. At the same time, it is good to remember in the planning of the web-based course that too much freedom in the course structure makes it more difficult for the students to finish the course. Clearly planned courses with limited individual flexibility are found to be more efficient.

The development into an expert and into a self-directing e-learner are supported by the script of the web-based course, which is clear and supportive of interaction, teacher's study counselling which is sensitive towards feelings and the students' responsibility, and freedom that have been made possible in process of their own learning according to the principle of andragogy.

9. References

- [1] Blondy, L. C. 2007. Evaluation and Application of Andragogical Assumptions to the Adult online Learning Environment. In *Journal of Interactive Online Learning*, 6 (2), pp. 116-130.
- [2] Conaway, W., and Zorn-Arnold, B. 2016. The Keys to Online Learning for Adults: The Six Principles of Andragogy, Part II. In *Distance Learning*, 13 (1), pp. 1-6.
- [3] Ericsson, K. A. 2006. The influence of experience and deliberate practice on the development of superior expert performance. In K.A. Ericsson, N. Charness, P. Feltovich, and R. Hoffman (eds.) *The Cambridge handbook of expertise and expert performance*. New York: Cambridge University Press, pp. 683-704.
- [4] Haltia, N. 2015. IDEAL Case Study – Finland. In *Distance education in European higher education – the potential*. Report 3 (of 3) of the IDEAL (Impact of Distance Education on Adult Learning) project. UNESCO Institute of Lifelong Learning, International Council for Open and Distance Education and StudyPortals B.V, pp. 64-82.
- [5] Haltia, N., Leskinen, L., and Rahiala E. 2014. Avoimen korkeakoulun opiskelijamuotokuva 2010-luvulla: Opiskelijoiden taustojen, motiivien ja koettujen hyötyjen tarkastelua. *Aikuiskasvatus* 34 (4), pp. 244-258.
- [6] Hashim, R., Ahmad, H., and Ahmad, N. 2011. Evaluation of andragogy: cognitive engagement of distance learners. In *International Journal of Technology Enhanced Learning* 3(3), pp. 322-331.
- [7] Hussain, I. 2013. A Study of Learners' Reflection on Andragogical skill of Distance Education tutors. *International Journal of Instruction*. 6 (1), pp. 123-138.
- [8] Hämäläinen, R., and Vähäsantanen, K. 2011. Theoretical and Pedagogical Perspectives on Orchestrating Creativity and Collaborative Learning. *Educational Research Review* 6: 169-84.
- [9] Kahu, E. R., Stephens, C., Leach, L., and Zepke, N. 2013. The engagement of mature distance students. *Higher Education Research & Development*, 32 (5), pp. 791-804.
- [10] Knowles M. S. 1995. *Design for adult learning: Practical resources, exercises, and course outlines from the father of adult learning*. Alexandria, VA: American Society for Training and Development.
- [11] Malinen, A., 2000. *Towards the Essence of Adult Experiential Learning: A Reading of the Theories of Knowles, Kolb, Mezirow, Revans and Schön*. Ph.D. thesis, University of Jyväskylä. SoPhi 49.
- [12] Mannisenmäki, E., and Manninen, J. 2004. *Avoimen yliopiston verkko-opiskelijan muotokuva*. Helsinki: Palmenia-kustannus.
- [13] Merriam, S. B., and Bierema, L. L. 2013. *Adult Learning: Linking Theory and Practice*. San Francisco, CA: Jossey-Bass.
- [14] Pratt, D. D. 1988. Andragogy as a relational construct. In *Adult Educational Quarterly* 38 (3), pp. 160-181.
- [15] Rossman, M. H. 2000. Andragogy and Distance Education: Together in the New Milenium. In *New Horizons in Adult education & Human Resource Development*. 14 (1), pp. 4-11.
- [16] Selwyn, N., Gorard, S., and Furlong, J. 2006. *Adult learning in the digital age: Information technology and the learning society*. London: Routledge.
- [17] Tallent-Runnels, M., Thomas, J., Lan, W., Cooper, S., Ahern, T., Shaw, S., and Liu, X. 2006. Teaching Courses Online: A Review of the Research. *Review of Educational Research*, 76 (1), pp. 93-135.
- [18] Tyler-Smith, K. 2006. Early Attrition among First Time eLearners: A Review of Factors that Contribute to Drop-out, Withdrawal and Non-completion Rates of Adult Learners undertaking eLearning Programmes. *Journal of Online Learning and Teaching*, 2 (2), pp. 73-85.
- [19] Wenger, E. 2009. A Social theory of learning. In K. Illeris (eds.) *Contemporary Theories of Learning* (eds). London: Routledge. pp. 209-235.