

A Blended Learning Approach for Teaching Professionalized Action

Ilse Schrittester

University of Vienna

ilse.schrittester@univie.ac.at

ABSTRACT

In this paper, we present a blended learning design which we use in an academic course programme that deals with the professionalization of teachers. The focus of the paper will be the evaluation of two courses of this programme by our students. The courses are both conceptualized as hybrid learning structures relying on face-to-face meetings as well as distance learning sequences. We worked with two different platforms, one that is technically quite basic, mainly offering an organizing and an up- and download function, as well as a forum; and one that is rather complex providing interactive patterns in combination with knowledge and content management tools. Our interest lies in two predominant questions: first we want to find out which specific resources platforms can offer for our teaching objective - educating for excellence in professionalized pedagogical job fields. In this connection, we also look for if and to which extent face-to-face meetings are crucial to the learning process. The second question we pose, is if and in which way our students consider the learning platforms we worked with as a means of facilitating their learning processes. We will first discuss our concepts of learning and of professionalized action; consequently, we will describe our course design; finally, we will present, compare and interpret the results of two non-standardized questionnaires that the students had to answer in order to give us feedback on their experiences with the platform work in both courses and with both platforms.

Keywords

Professionalized action, distance learning, face-to-face meetings, practice and reflexion, learning platform

INTRODUCTION

The department of teacher education at the University of Vienna is responsible for the professionalization of future grammar school teachers. We consider every professionalized area of work as characterized by three fundamental tasks: first, the task to find efficient solutions to oncoming problems; second, the task to critically relate these practical solutions to theory; and third, the task to use an underlying methodology on the basis of scientific thought when relating practice to theory. All three tasks mentioned can only be met if we manage to create a link between such seemingly opposed fields as personal involvement and rational analysis, intuition and theoretical thought, experience and innovation. The boundary that runs through these opposing spheres of action has to be kept open to both sides in order to provide for the necessary mobility of feeling, thinking and acting as a precondition of what is considered as the genuine asset of professionals (Oevermann, 1996).

As we consider the New Media as a challenging tool in learning and education we try to introduce elearning in our course programme. A trade-off of this strategy would be that we can deal with a large number of students without giving away teaching quality – this, at least, is our aim. The question we ask therefore in connection with elearning aims at the profit we can derive from using it in our courses. Apart from a mere advantage as to the number of students we reach, we are specifically interested in the potential of elearning as a teaching and learning medium and as a medium for knowledge creation, application and dissemination in the context of the development of professionalized action. Finally, introducing elearning to future teachers can be seen as a necessary measure to support IT literacy in education.

OUR THEORETICAL CONCEPT AND HYPOTHESIS

We regard knowledge production as a process that has to be understood as deeply influenced by its social context. It represents both the decisions inherent in the production process and the norms regulating these decisions. The result is not only to be seen on the basis of the choices and options made, but also on the basis of

those options that have been declined in the course of the process. If we want to support self-organized knowledge acquisition, learners will have to gain active insight in the above described contextual and selectional character of knowledge in order to deal with its results in a self-determined and reflected way, which is part of the requirements a professional has to meet (Mittelstrass, 2001).

Analogous to a context-oriented concept of knowledge, we see human action and human learning as essentially stimulated by the situation in which it takes place, triggered by the constant crises it has to overcome in order to protect human existence. According to John Dewey (1938), action can be defined as some constant "inquiry", which "is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole" (p. 104 f.). The critical psychologist Klaus Holzkamp (1995), in turn, defines human learning as an activity aimed at securing and expanding the quality of human life.

Therefore, human action and, consequently, human learning have to be defined as both situated and creative, as they answer to the challenges of a given situation and thus transform the status quo in a way that will shape the situation and turn it into meaningful experiences. In the course of this process, human beings attempt to expand their competence in order to extend their free disposal of the world (for a learning concept that defines learning as an interaction of experience and competence, as a situated and participatory activity see Lave and Wenger, 1991, and Wenger, 1998). This is why we want to offer opportunities to learners that will help them make meaningful experiences and that will support their development of competence.

As professionalized action has a lot to do with a fertile association of practice and theory, of doing and reflecting, it is both closely linked to the dimension of the "present" (doing) and the dimension of the "distant" (reflecting) (Schrittesser, 2002, 2004, Schrittesser/Treichel, 2004). Donald Schön (1987) coined the expression of the "reflective practitioner" to characterize these specific aspects of professionalized action. The development of professional capability, we hold, requires a learning architecture that allows for both: instances of practice and instances of analysis and critical reflection. This can best be reached by making our students participate "on the job" like apprentices - not by simulating school practice, but by offering participation in university practice, e.g. making them take over some real teaching sequences in our seminars or having them take part in research projects that are assigned to us by real clients. In this way, we make experts, novices and clients work together and learn from each other. Parallel to this, we organize sessions of reflexion during which we analyze and explore what went on in the phases of active participation. One teaching objective here is to create the capacity of relating one's action to existing theories, holding them against the demands of practice. Another objective is to create the capability of critically analyzing one's actions, one's decisions and one's learning process and by this, turning implicit practical learning into explicit knowledge and skills.

Relating the learning process to the social situation in which it takes place draws our attention to the potential of face-to-face meetings. We assume that this potential is to be found in the possibility of direct interaction with others, in the "social act" (Mead, 1934) itself, and in the enormous resource the physical presence of others represents due to the immediate and emotionally intense response human beings get from fellow human beings. In this perspective, learning, too, is immensely influenced by face-to-face interaction and group processes, as well as by the personal relationship between teachers, learners and their co-learners. Accordingly, face-to-face communication plays a predominant role in the development of professionalized action.

On the other hand, a virtual community is a social formation in its own right and defines learning processes and knowledge interchange in a completely new way.

If we wish to combine the potentials of both, web based knowledge and skill acquisition with face-to-face learning activities we will therefore have to focus our interest on the question of how each - distance learning and face-to-face meetings - can best support a learning architecture relying on an apprenticeship concept on the one hand, and on reflexion processes on the other.

Consequently, we decided for a blended learning design as its logic represents both dimensions, the virtual and the physical one. We generated the course design on the basis of the hypothesis that the face-to-face seminar phases would focus on the aspects that have to do with the dimension of "doing" and would make our students aware of the immediate requirements of the given situation, whereas the elearning phases would have the task to explore, to conceptualize, to reify and to reflect the ongoings of the face-to-face phases.

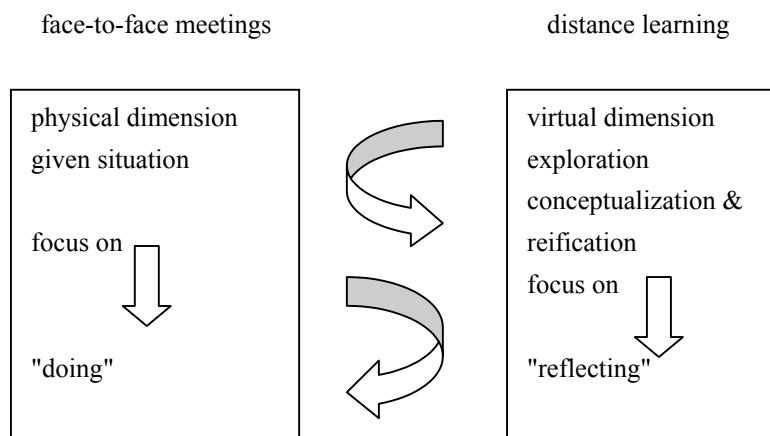


Figure 1: Assumed potentials of face-to-face meetings and distance learning

In the following we will present the two seminar designs to make this idea more palpable for our readers.

TWO BLENDED LEARNING SEMINARS DESIGNED FOR THE EDUCATION OF PROFESSIONALS

Seminar A is meant to introduce students to the act of teaching on the basis of various theories of teaching. In order to do so, we have the students work on central themes of pedagogical theory, which they are supposed to teach to their fellow students. After every teaching sequence the students get feedback on the form of their teaching. In a second step, the problems they treated and the ideas they presented are discussed as regards the underlying theories. In this way students get in touch with both pedagogical theory *and* practice in a learning-by-doing and in a learning-by-reflecting procedure. In order to make their teaching interesting, the students also learn to make high quality presentations in a separate workshop at the beginning of the semester and then prepare their teaching sequence with a tutor, who will help them with both the didactic organization, as well as with questions in connection with the pedagogical content they have to teach.

Seminar B works on a cooperative basis with schools. We are assigned research projects schools cannot carry out by themselves, but can use to foster school development. One such project, for example, is to investigate into a school's strategy of giving marks. The aim of this project is to make the school's practice of marking more transparent to pupils and parents. It is our students who make the enquiries and define the results. They finally have to write a project report and are supposed to present the results of the project to the school. In doing so, students gain insight into school culture from the point of view of a researcher and not as practitioners, which gives them the opportunity to cast a detached and analytical glance at their future job field.

Both seminars were quite successful when held without elearning. The only electronic device we would use was email. In the past winter term we started using a blended learning design in both seminars.

In seminar A, the teaching and feedback sessions were held as face-to-face meetings, discussions as regards content reflection and exploration of the teaching sequences were partly shifted to an elearning platform. The platform we used in this seminar is quite simple in its structure – just upload and download functions for texts and handouts and a forum for discussion. The students were introduced to the technical features and to platform use by a tutor who also helped them whenever technical problems occurred. So, the students of this seminar were well taken care of as they had two tutors: one who helped them prepare their teaching sequences and another who was responsible for their work with the platform.

The face-to-face meetings were held every two weeks, the time in between we communicated via platform forum. The students who were supposed to teach a pedagogical topic in the following seminar unit were responsible for forum moderation one week before their teaching sequence and one week after it. The preparation time was aimed at sensitizing the co-learners for the topic and at addressing its theoretical implications. The week after the teaching sequence was used to offer further information and/or to discuss questions that had remained open in the face-to-face meeting.

In seminar B, the group met every week, the platform work took place in between the meetings. As the work in the cooperation project is highly interactive we mainly used the platform for project management and for

communication. In this seminar, we worked with a different and technically quite complex platform that had been developed at our institute together with a German ICT-firm. The design of this platform, which we call "PiN", Pedagogy in the Net (on the concept of the platform cf. Schrittmesser/Treichel 2003), is structured as a two-fold resource: on the one hand, we use it as a content management tool, which provides the full course programme that our students have to run through in order to finish their pedagogical education; on the other hand, it offers a number of interactive features that students can make use of as additional learning facilities. Moreover, students can adapt parts of the platform to their personal needs – they can, for example, create their own private folders that function like a word document and can be stored on the platform as their personal work space. From these folders they can take selected materials and put them into their career portfolios, whose quality will be relevant for the certificate they get at the end of the course programme.

Moreover, we invite experts to present their work on the platform in order to stimulate the creation of a scientific community in whose discourse again our students can participate.

For seminar B we did not make much use of the content tool offered by the platform, but primarily used the platform as a repository for the project materials (project plan, interview transcriptions, project report etc.) and as an additional space for communication on the project. For this latter purpose a forum was installed. Every student was responsible for one week of forum moderation. Crucial questions concerning the project, as well as some of the theoretical background of their work was supposed to be discussed there.

Just as the students of seminar A, the students in seminar B, too, had an elearning tutor who introduced them to the platform work and who helped them whenever problems occurred.

Before Christmas we carried through a first evaluation of both seminars concerning the advantages and disadvantages the students saw in the use of the platform and, therefore, in our blended learning design. We will evaluate the two seminar designs a second time at the end of the winter term, in the first week of February 2004.

The Provisional Results of the First Evaluation

The enquiry was not carried through according to representative principles. The questions we asked were focused on a first orientation concerning the frequency of platform use, the technical equipment of our students (e.g.: do they have a computer and internet access on their own or do they have to use the facilities offered on-campus?), the usability of the platform and - finally and most important - on the incentives and drawbacks they saw in using a platform in our seminars. We had to ask the technical questions (1 - 4) in order to be able to distinguish between problems caused by the blended learning design and problems due to technical insufficiencies. The evaluation was meant as a basis for further investigation.

We used a non-standardized questionnaire. Here are our exact questions:

- 1) How often do you use the platform?
- 2) How long do you work on the platform on average?
- 3) Do you use it at home or at the university?
- 4) How easy is the platform to handle?
- 5) Please make a list of the advantages and the disadvantages of the platform use

The Results of the Evaluation of Seminar A

N= 19/22: 19 out of 22 students sent back our questionnaire. In the following a summary of the answers we got:

1. How often do you use the platform?

The frequency of platform use correlates with the students' possibilities of internet access. Those users who have private access to the internet use the platform 2-4x a week; those who have to rely on the computer facilities offered on campus use the platform less frequently. We have 4 rare users (<1 x/week); 5 light users (1 -2 x/week); 7 medium users (2 – 3 x/week); and 3 heavy users (>= 3- 4 x/week). Two students sometimes act as rare users and sometimes as heavy users depending on the time they have available and if they have a possibility of internet access.

Those students who stated to have no computer of their own use the platform by far less frequently than those who have their own computer and internet access. The latter use it 2 -3 times a week. Almost a third of the students use the platform up to 4 times a week.

2. How long do you work on the platform on average?

5 students use the platform ≤ 15 minutes; 5 students use the platform ≤ 30 minutes; 5 students use the platform ≤ 60 minutes; 2 students use the platform > 60 minutes per week; 2 students stated that their platform use is quite variable.

Again, we suppose that the different times the students give can be explained by the different technical facilities the students have access to. Those who are technically well equipped would use the platform more extensively than those who depend on campus facilities or on internet cafés. This leads to question 3:

3. Do you use it at home or at the university?

We have 8 private users and computer owners; 1 private user without his/her own computer (uses the internet at a friend's place or at an internet café); 2 users who exclusively rely on campus facilities and 8 mixed users.

If we once more interpret the answers according to the availability of technical facilities we get the following picture: 12 users out of 19 have their own computers and internet access; 7 users have to rely on external technical facilities, both private and on campus.

4. How easy is the platform to handle?

10 Students describe the platform as easy to handle and well structured. 6 students maintain to have had technical problems when trying to log in, to have had difficulties with down loading the material and with using the forum. 3 students consider the platform surface as confusing and the platform design as unattractive. 1 student explicitly states that his/her technical problems occurred only at the beginning when he/she was not yet used to platform work.

Most of the negative feedback focuses on some of the technical functions and on a "confusing" platform structure. If we compare the negative experiences the students describe with the positive feedback, however, we must come to the conclusion that technical problems might be not so much due to an insufficient technical quality of the platform – we already mentioned that the technical structure of the platform is quite simple - but are probably brought about by users who are inexperienced at working with web based technology.

5. Please make a list of the advantages and the disadvantages of the platform use

The following advantages of platform use were named: a practical means of reflexion and consolidation concerning seminar topics (9); a means of preparation and of getting informed about the upcoming seminar topic (5); the possibility of virtual exchange in general (5); a possibility to raise questions in between the face-to-face meetings (4); up- and download functions are easy to handle (3); the platform offers an opportunity of communication to introverted students who would not dare to talk in the face-to-face meetings (2); the use of the web in general (4); the availability of seminar texts on the platform (2); being independent of space and time (1); the platform structure (1); easy to handle (1).

The deepening of the topics raised in the face-to-face meetings by the forum discussions is considered as a positive feature by half of the students, including internet-beginners and more introverted students. The platform obviously represents an interesting *addition* to the face-to-face phases of the seminar. This means that the positive potential of the platform is predominantly seen in connection with the face-to-face meetings and not as a learning medium on its own.

As disadvantages the following instances are mentioned: Technical problems and insufficiencies (14); confusing structure (6); the negative influence of the internet (4); time-consuming (3); expensive for those who have to go to the internet café in order to work with the platform (1); being forced to work with the internet (1); no help-button on the platform (1); impersonal way of exchange (1).

As for the negative aspects, the technical insufficiencies represent by far the majority of the critical statements. As discussed in question 4, we assume that technical problems are not so much due to the technical structure of the platform, which is explicitly described as "easy to handle" by 10 students, but more due to lack of experience with web based technologies on the part of some of the students. A small group of students also have to be seen as critical of the use of the internet in general.

The Results of the Evaluation of Seminar B

N= 14/19: 14 out of 19 students sent back our questionnaire. In the following, again, the summary of their replies:

1. How often do you use the platform?

Students use the platform frequently and regularly. They work on the platform at least once a week. We have no rare users (<1 x /week); 7 light users (1-2x / week); 4 medium users (2-3x / week); 3 heavy users (>= 3-4x / week).

Some students explained their platform use by the tasks they got in the seminar ("2 – 3 times a week to publish a text or organize work", "I use the platform 2 – 3 times a week, mostly on Friday or the weekend and then before the seminar in order to see if I have to take over some task").

2. How long do you work on the platform on average?

4 students use the platform <= 15 minutes; 4 students use the platform <= 30 minutes; 3 students use the platform <60 minutes. No student uses the platform > 60 minutes. 3 students report variable times.

The time the students stay on the platform depends on the task they have to accomplish (e.g. "about 15 minutes if I make a comment or if I look for news, if I have to do some work I usually stay 30 minutes"). We conclude from this that the students use the platform even if they have no explicit tasks to fulfil – they simply use it to inform themselves, they use it for communication, to read the project news, etc.

3. Do you use it at home or at the university?

We have 8 private users; 1 private user without his/her own internet access (uses the platform at a friend's place or at the internet café); no user who uses the platform exclusively on campus. The majority are the five mixed users, who combine private use with the use of campus facilities.

This means that in this seminar all except one student have private access to a computer and to the internet. Two students underline that the computer facilities at the university are not sufficient, that there are too few computers for too many students.

4. How easy is the platform to handle?

The usability of the platform is closely linked to technical problems, such as the opening and the loading of documents, problems with links, etc. In addition, the surface of the platform is criticized: students say they are afraid to get lost or they consider the platform structure as too complicated. Positive statements express more general aspects and are quite often followed by a critical remark on the technical condition of the platform.

5. Please make a list of the advantages and the disadvantages of the platform use

The following advantages of platform use were named: quick access to news and information (6); private folders, exchange of material (5); forum (4); improvement of the communication in the seminar (4); quick access to seminar material (3); a change in "normal" teaching (2); independent of place and time (2); the layout of the platform (1); a good means of reflexion (1); improvement of the organizational work (1); new medium (1); on the pulse of the time (1).

All in all, the easy exchange of information, quick access to news and seminar topics and an improvement in communication are the essential aspects named in the list of advantages.

As disadvantages the following instances are mentioned: technical problems (8); low speed (8); confusing surface and structure (6); time-consuming (2); a higher risk of misunderstanding when communicating via platform (2); complex structure (1); time-consuming introduction to platform work (1); badly organized (1); a too big change when compared to traditional seminars (1); not anonymous (1).

Insufficient technical quality and technical problems can make the platform use frustrating and irritating. This aspect was mentioned by nearly all of the students. Another negative aspect that was named by a majority is the complex structure of the platform.

The evaluation results show that there is a clear benefit in platform use in spite of the technical problems the platform sometimes caused and in spite of the additional time students had to provide in order to learn to work

on the platform. The fact that the platform is rather complex and offers quite a lot of different features – from mere content management to a wide range of interactive opportunities – leads to quite ambitious technical requirements and, unfortunately, in connection with this to technical problems. In this respect, the feedback of the students has to be taken seriously - the technical quality plays a predominant role if platform work should become an efficient component in our learning arrangements.

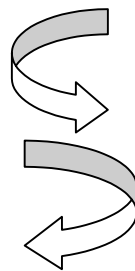
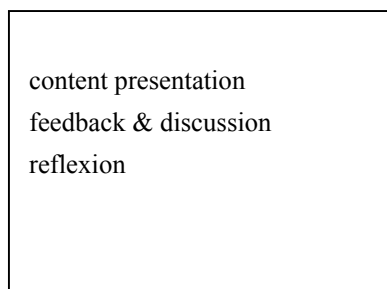
Another important factor is the technical skills students have when working on the platform and if they have their own internet access. Both factors are crucial to the extent students can benefit from a blended learning design.

Apart from this, students seem to profit from a blended learning approach because it offers additional space for organization, research and communication, which are not limited to the face-to-face meetings, but can take place independent of place and time. Furthermore, students seem to appreciate their personal space on the platform where they can experiment, as well as the additional possibility to communicate with co-students and with the teachers. Face-to-face meetings can be used for more personal interaction and discussion if knowledge transfer and project organization can be shifted to the platform.

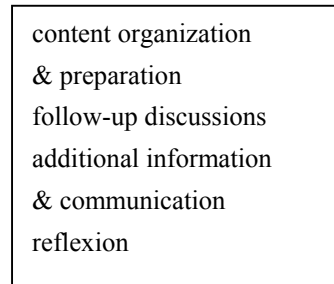
CONCLUSION

On the basis of our concept of professionalized action as a mediating sphere between theory and practice, scientific knowledge and practical skills, we are about to develop a blended learning approach that aims at educating for excellence in the teaching profession. According to our assumption that the mediation between action and reflexion can best be reached by a learning arrangement that relies on alternating phases of practice and analysis, we designed two blended learning seminars in which the face-to-face meetings provide opportunities of skill-training and theoretical discussion, whereas the virtual processes focus on the preparation, exploration and reflexion of what happened in the face-to-face meetings. In seminar A distance learning mainly took place in the content-oriented forum discussions, while in seminar B the learning platform was mostly used as an infrastructure for project-organization and -reflexion. After our first evaluation of the potential of learning platforms in hybrid learning arrangements we found our hypothesis confirmed that the internet platform can be considered a useful but predominantly additional medium. For our purposes, it is at its best if used to deepen face-to-face learning processes through supporting content organization, enhancing information and communication processes and fostering reflexion.

Face-to-face-learning processes



distance learning processes



As to the technical aspect of platform work: for our students, technical complexity seems to be still more of an obstacle than an incentive, especially for those students who are inexperienced with web based technologies. This latter problem, we hope, will become less and less important with the expected increase of IT literacy among future student generations. Yet, for the time being, we have to find working solutions such as obligatory introductory courses to the use of the New Media.

All in all, our experiment with blended learning seems to be quite resourceful for our teaching goals. However, we know that we are only at the beginning of our attempt to create an optimal version of blended learning for the development of professionalized action.

REFERENCES

- Dewey, J. (1938) *Logic: The Theory of Inquiry*. Holt and Co, New York.
 Holzkamp, K. (1995) *Lernen*. Campus, Frankfurt.

- Lave, J. and Wenger, E. (1991) *Situated learning: Legitimate peripheral participation*. Cambridge University Press, Cambridge.
- Mead, G.H. (1934) *Mind, Self and Society*. University of Chicago Press, Chicago.
- Mittelstrass, J. (2001) *Wissen und Grenzen: Philosophische Studien*. Suhrkamp, Frankfurt.
- Oevermann, U. (1996) Theoretische Skizze einer revidierten Theorie professionalisierten Handelns. In: Combe, A., and Helsper, W. (Eds.) *Pädagogische Professionalität: Untersuchungen zum Typus pädagogischen Handelns* (3rd ed.). Suhrkamp, Frankfurt 1999, 70 – 182.
- Schön, D. A. (1987) *Educating the Reflective Practitioner Toward a Design for Teaching and Learning in the Professions*. Jossey-Bass, San Francisco.
- Schrittesser, I. (2004) Professional Communities: Contributions of Group Dynamics to the Development of Professionalized Action. In: Hackl, B., Neuweg, G. H. (Eds.): *Zur Professionalisierung pädagogischen Handelns*. Litt, Münster [in print].
- Schrittesser, I. (2002) Professional communities: On the Implementation of a New Concept for the Development of Professionalized Action. *ÖFEB conference '03* (Klagenfurt, Austria, September 2002), [in print].
- Schrittesser, I., Treichel, D. (2003) PiN: Pedagogy in the Net. *Newsletter Lehrentwicklung, September '03*, University of Vienna, Vienna.
- Schrittesser, I., Treichel, D. (2004) Das PiN Konzept: Handlungstheoretische Koordinaten zur Organisation von Präsenz und Virtualität in der Hochschullehre. In: Mayer, H.O., Treichel, D. (Eds.) *Handlungsorientiertes Lernen und eLearning: Grundlagen, Anwendungskonzepte und Praxisbeispiele*. Oldenburg Verlag, München.
- Wenger, E. (1998) *Communities of Practice: Learning, Meaning and Identity*. Cambridge University Press, Cambridge.