# Blended learning in a teacher training course: Integrated interactive e-learning and contact learning

RITA KUPETZ AND BIRGIT ZIEGENMEYER

*English Department, University of Hannover,*
*Königsworther Platz 1, 30167 Hannover, Germany*
*(email: {Rita.Kupetz, Birgit.Ziegenmeyer}@anglistik.uni-hannover.de)*

## Abstract

The paper discusses a blended learning concept for a university teacher training course for prospective teachers of English. The concept aims at purposeful learning using different methods and activities, various traditional and electronic media, learning spaces covering contact and distance learning, and task-based learning modules that begin with multimedia-based case stories. The learning concept is based on theories of situated learning in multimedia-enhanced learning environments. The activities discussed include classroom recordings and multimedia-based case stories, an electronic interview with an expert who is an experienced grammar school teacher, and mini-practices, which implement micro teaching in a classroom setting. Case stories used as a didactic tool in teacher education are supposed to contribute to a closer and more reflective relationship between theory-driven and practically-oriented aspects of teacher education. The multimedia-based case stories are hypertexts designed as essential components of computer-based learning modules that support various ways and styles of learning. Students worked with the case story material either in guided or in self-regulated scenarios several times during the course. Three types of learners could be distinguished: students who mainly create and apply experiences, students who mainly study the theoretical resources, and students who create with focused selection of resources. The e-interview promotes an exchange between theory and practical teaching and experience with this format of e-learning at the same time. The mini-practice offers guided insights into analyzing teaching materials, hands-on experiences with lesson planning and the experience of acting as a teacher in an authentic teaching context. Furthermore, the mini-practice is meant to help the students broaden their perspectives on "English lessons at school" and change their perspective, that is, from a pupil's to a prospective teacher's. These activities combine contact learning and interactive e-learning. This combination is highly appreciated by our learners and represents our concept of integrated interactive e-learning and contact learning.

## 1  Topic of investigation

In this section we will discuss the development of a blended learning approach and related research in the context of EFL teacher training. Blended learning refers to the purposeful arrangement of media, methods and ways of organizing learning situations

through combining traditional media and methods with e-learning elements and possibilities (Kerres, 2002; Reinmann-Rothmeier, 2003). On a methodological level our approach integrates a combination of guided and self-regulated learning scenarios, receptive and exploratory learning as well as individual and cooperative learning, and realizes these with the help of old and new media. Kerres (2002) emphasizes that the blended learning approach takes into account and starts from the students' prerequisites and needs. It can offer access to manageable information and thus aims at supporting the individual construction and integration of knowledge. At the same time direct and systematic teaching are not denied. We want prospective language teachers to consider their learning by exposing them to a variety of learning activities. These are arranged in a purposeful way to facilitate various ways of learning combining cognitive and social constructivist as well as instructional approaches, depending on the content and the learning style of the individual learner (Felix, 2004).

### *1.1 The institutional and curricular context*

We work with students in their first phase of teacher training at the University of Hannover in Germany. Our project concerns the course "Introduction to the Methodology of Teaching English as a Foreign Language", which is designed for students in the third semester. The course can be described as follows:

- learning spaces:  university seminar, e-learning platform, school classroom
- participants:  students (e.g. learners as moderators or as student teachers), university professor, tutor, outside experts
- materials:  video recordings, reader, textbook, learning modules
- methods:  lectures, discussions, video-recorded classroom observations, reading tasks, learner diaries, mini-practices, e-interviews
- content:  theory and practice of TEFL

The goals of this course are threefold: (i) to gain a teacher's perspective on learning English, (ii) to gain knowledge about basic TEFL issues and (iii) to gain competence in observing and reflecting upon teaching practices based on a theoretical framework. A weekly 90-minute class session taught by one professor and one tutor with usually between 25 and 50 students is central to our approach. These sessions are enhanced by the use of an electronic learning platform for information and material exchange.

Theory and practice are integrated through theory-guided, reflective approaches to teaching. Various activities that support the learner when constructing knowledge are initiated by tasks typical of a learner-oriented approach. Traditional tasks, such as listening to lectures, discussing in class, completing reading assignments, taking a written test, preparing a mini-practice (also called microteaching) are also included. The mini-practice is not imaginary but for a concrete target group of pupils. These activities are combined with four e-learning tasks: discussing in an online forum, participating in a chat as part of an e-interview with an expert from school, writing learner diaries and sending them to the teachers via e-mail and working with multimedia video recordings from school either in class or in self-guided study. The design of the written test has not been changed so that the results of former courses could be compared to the blended

learning course. The most active participants in the course (moderators and student teachers at school), though, are exempted from the written test as a reward for their work.

### *1.2  Research aim*

We want to develop a holistic concept for teacher training using a multimedia-based case story approach and a purposefully blended arrangement of activities, methods, materials and tasks. Furthermore, we want to evaluate this arrangement. The project presented could be considered as a pilot study to form hypotheses.

### *1.3  Research questions*

The goals of the course are directly reflected in our research questions.

1.  How can we support students who are prospective teachers in gaining a teacher's perspective on teaching and learning English?
2.  How can we support these students in gaining knowledge about basic TEFL issues?
3.  How can we support these students when observing and reflecting upon recorded teaching practice using a theoretical framework?

We suggest that a learning space for teacher education should consider methods and media as well as different theoretical and practical content dimensions as outlined in Figure 1. Our research focuses on how to blend these elements efficiently in order to support our students' broadening perspectives.

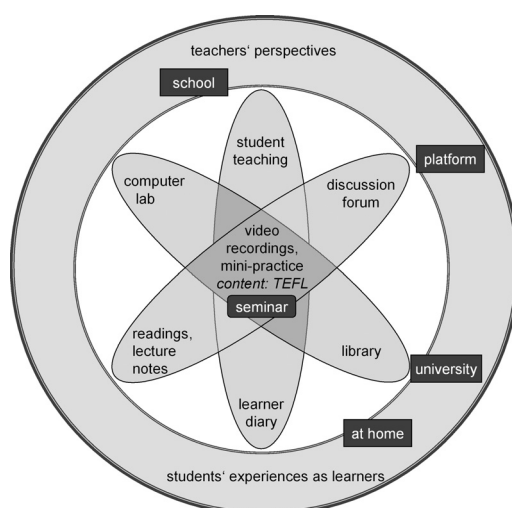Our research is concerned with the design of learning modules. We investigate the



Fig. 1. Learning space.

role of tasks in the integration of knowledge in an individually-regulated scenario versus a guided- learning scenario when working with multimedia-based case stories. A multimedia-based case story combines exploring fully transcribed video recordings as situational anchors from teaching practice with study materials related to lesson preparation and to the lesson itself. The video recordings introduce students to problems from real-world classrooms which can be explored from different perspectives. Apart from the products resulting from the lesson, both the pupils' comments and the teacher's reflections on the lesson are integral parts of a case story (see Figure 2).

Furthermore, we ask which activities stimulate learning best, and what kind of materials are needed. In this paper we will discuss the potential of (i) video-based "classroom" observations, some of them designed as multimedia-based case stories, (ii) expert einterviews and (iii) mini-practices for integrating theory and practice, leaving out a discussion of more traditional activities such as completing reading assignments and working with lecture notes.

## 2 Related work

The design of the blended learning modules, which embed the various tasks and activities in the course, is based on theories of situated learning in multimedia-enhanced learning environments. We use an anchored instruction approach that has been developed by the Cognition and Technology Group at Vanderbilt since the 1990s (CTGV, 1990; 1993). It provides the learner with a focus by "anchoring" or embedding the instruction in a rich, authentic and interesting situation (Woolfolk, 1998:502). We use complex, narrative multimedia-based anchors from real foreign language teaching situations that encourage students to get involved in contextualized problem-solving tasks related to these situations. Thus, like the Cognition and Technology Group, through anchored instruction, one of our goals is

to help students [...] find as well as solve problems and experience the changes in their own noticing and understanding as they are introduced to new ideas and concepts. We therefore want them to begin with their own perceptions and understandings rather than have these imposed by the expert. (CTGV 1990:8)
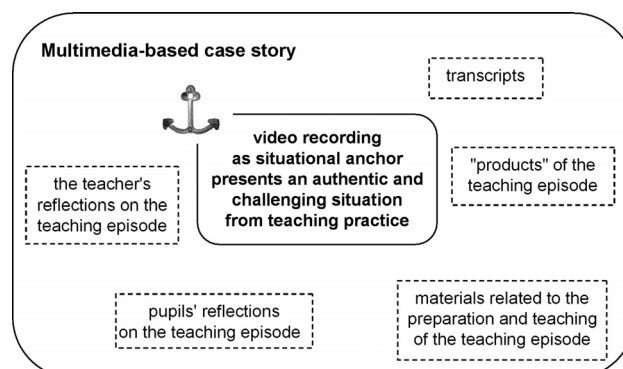


Fig. 2. Multimedia-based case story

Although concepts of situated learning have been discussed rather controversially in educational psychology and have been criticized to some extent for being limited in terms of enabling learners to create transferable knowledge (Klauer, 2001), they have been successfully applied in the context of multimedia-based learning (Mandl, Gruber & Renkl, 2002; Niegemann, 2001). Whereas anchors were originally presented as interactive videodisc programs (CTGV, 1990), anchors can now be constructed as multimedia narratives that offer access via hypertextual structures that support manifold perspectives on the underlying problem. This can support learners' understanding effectively (Mandl *et al.*, 2002).

At the *7th Conference on Language Teaching and Learning Processes with (New) Media*, organized by Gabriele Blell and Rita Kupetz at Hannover University in October 2004, there was a discussion devoted to the relevance of video recordings for teacher training. Whereas this means was used in the 1980s, we are observing a revival of using classroom recordings in teacher training. The full potential of multimedia is still being experimented with.

The MELT project, carried out by Butzkamm, Klippel and Siebold, focuses on teaching methods, Decke-Cornill (2004) analyzes interactions in the English classroom for early beginners and Ziegenmeyer (2004) presents a multimedia-based case story approach, which focuses on the learner, the prospective teacher and his or her way of approaching teaching practice and reflecting upon it. These three approaches use different perspectives, yet complement each other.

Case stories as a didactic tool in teacher education can contribute to a closer and more reflective relationship between theory-driven and practically-oriented aspects of teacher education (Dirks & Feindt, 2002; Messmer, 2001; Shulman, 1992; Thonhauser, 1996). They offer manifold links between scientific knowledge and the complexity of teaching and learning situations such as Merseth's suggested categories: "cases as exemplars, cases as opportunities to practice analysis, and cases as stimulants to personal reflection" (1996:728).

Our research is concerned with the potential of a case story approach within a task-centred blended learning module. According to Jarz *et al.* (1997:44) the use of multimedia technology supports the multiple representation of theoretical or practical knowledge and therefore "can significantly improve the quality of case studies, especially with regard to their presentation of reality" (Jarz *et al.* 1997:23). They furthermore argue that "the multiple presentation possibilities of multimedia technology approximate reality better and are thus able to improve the quality of education" (1997:43). The design of our modules not only emphasizes multiple presentation possibilities but also ensures that various approaches to the embedded materials are possible.

## 3  Development and use

### 3.1  Classroom recordings and multimedia-based case stories

*Goals and content*

The sample module "Working with Words" was designed so that students gain knowledge about teaching vocabulary and realize the practical relevance of this knowledge. Student activities include applying techniques for introducing new words as well as ana-

lyzing and reflecting upon how the teacher introduced these words. Our sample module consists of the following components:

1.  an integrated multimedia-based case story as a situational anchor from teaching practice that introduces a group of year 10 students and their teacher who will work on vocabulary with the help of a word cluster related to the topic of "shoplifting"(see Figure 4a and 4b),
2.  theoretical foundations about the modular mind and vocabulary learning (both linear texts and hypertexts),
3.  additional video recordings of teaching practice working with words related to various school types and levels of proficiency and
4.  tasks for observation/reflection, reading/discussion and application.

*Task design*

The students worked with the case story in two scenarios. The majority followed a guided approach (see Figure 3). They were given a theoretical text to study and a problem-solving task, which was based on the real teaching context in the case story, as well as a printed and linear version of the case story.

The task included making suggestions on how to introduce the new words the teacher had planned to introduce as part of a word cluster in class. Furthermore, students were to compare their suggestions with how the teacher introduced the new words in the video-recording.

A smaller group of students worked on the computer-based learning module. They approached the topic in rather idiosyncratic ways and constructed the case story whose elements were presented as a hypertextual network individually. Both the problem-solving task and the theoretical resources were integrated directly into the hypertext.

Figures 4a and 4b present some elements of the case story. The design of the computer-based learning module allowed individual variation based on the students' learning styles. Three types of learners could be distinguished: students who mainly *create and apply experiences*, students who mainly *study the theoretical resources*, and students who create with *focused selection of resources*.
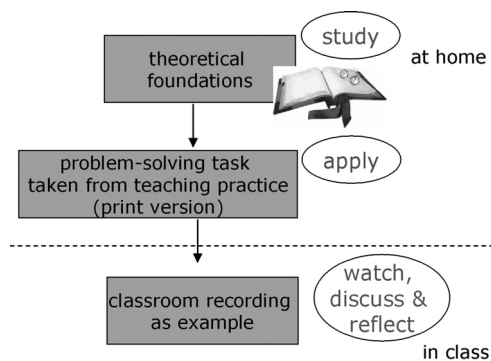


Fig. 3. Guided approach to the learning module.

Fig. 4a (left). Case story "Working with words": information about the teaching context.
Fig. 4b (right). Case story "Working with words": word cluster prepared by the teacher indicating new lexical items

### *3.2  E-interview*

#### *Goals*

The e-interview was designed to offer a link to an expert who is an experienced grammar school teacher to promote an exchange between theory and practical teaching, to offer experience with the format (e-learning) and to offer three students the opportunity to work as a moderator.

#### *Task design and management*

Contact with the grammar school teacher and the schedule had been established by the university professor. The e-interview was scheduled for a phase of three weeks, after the students had seen the expert in a classroom recording and after a longer phase of theoretical input on skills and knowledge in TEFL. Samples of e-interviews were provided.

The three moderators volunteered for the e-interview activity. They had no experience in this area and studied the samples provided. They prepared the interview by re-reading the texts as well as comparing various texts and positions. In their written reflections the moderators explained that their major interest was to relate theory and practical teaching, to get tips from the teacher for their own teaching and to learn from the teacher's experience – they became involved in an intensive process of constructing knowledge.

The moderators were to decide whether and how to combine a discussion (asynchronous) and chat (synchronous).They negotiated the discussion plan in a lengthy exchange via e-mail and decided after a while to have three exchanges per week and a chat as a final highlight.

In the discussion forum the moderators organized the schedule of the e-interview, selected theoretical aspects and explained their goals which were to link theoretical issues with the expert's experience.They related theoretical input from their study of various texts to their observations of the recorded expert lesson about teaching grammar, i.e., they autonomously linked various course components together. The expert on the other hand welcomed the discussion plan suggested by the students, confirmed what the course had found out and considered the pros and cons of the approach in a sensitive

and convincing way.

The one-hour chat was scheduled by the moderators for one Saturday afternoon. It did not function at the beginning; the expert could not enter the chat room. Students were patient and the tutor worked behind the scenes, offering alternative forms of communication via the discussion forum or phone. Yet, after an hour the expert could enter the platform and the group then chatted for half an hour. In the chat the moderators felt that the teacher gave them practical examples which illustrated the theories that they had studied before the e-interview.

### *3.3  Mini-practice*

#### *Goals*

The mini-practice was designed to link theory with practice within a small-scale project. It offered guided insights into analyzing teaching materials, hands-on experiences with lesson planning and the experience of acting as a teacher in a an authentic classroom context. Furthermore, the mini-practice is meant to help the students broaden their perspectives on "English lessons at school" and change their perspective, that is, from a pupil's to a prospective teacher's.

#### *Task design and management*

The students worked in groups. They were to analyze a textbook unit about New York with regard to vocabulary, grammar, reading, writing, listening and speaking and to develop a mini-practice (approximately 20 mins) for a year 8 group at a grammar school with the help of a lesson plan. Due to the limited capacity of the partner school this was originally planned only for the group with the best lesson plan. However, in the end three groups out of eleven total groups had this opportunity. These three groups taught the mini-practice and reported back to the course using video recordings of their mini-practices.

### 4  Method of investigation

The study was conducted in the 2004 summer semester with 34 course participants as a pilot study to form hypotheses. As we were professor/tutor and researchers at the same time, we conducted this classroom research as action research. The study combined qualitative and quantitative data and integrated multiple perspectives on the teaching and learning scenarios as data was collected from various sources. The students participating in the course were asked to take part in the various activities throughout the semester and to complete two online questionnaires with both closed and open questions as well as reflect on their learning process in three guided learner diaries.

Our research design is being developed and aims at finding out how the learners perceive our learning arrangement. These perceptions are part of the subjective theory paradigm developed by Grotjahn: "Subjective theories are very complex cognitive structures: they are highly individual, relatively stable, and relatively enduring" (1998:33). Furthermore, Grotjahn distinguishes between a communicative and an explanatory phase in his research design. Scheele and Groeben (1998) elaborate on the phases and distinguish between two stages: In stage one a pattern is drafted as a result of

interviews, and in stage two a cognitive pattern is described and the findings are negotiated with the research partner, i.e. the learner.

From the learner diaries we discovered how the individual learner perceives our tasks and activities. This corresponds to Scheele and Groeben's first stage described above. The final online questionnaire then confronted the learners with these perceptions at a more generalized level. Moreover, the active course participants reflected upon their learning in their term papers, which will be considered here as well. This procedure could be compared to a communicative validation of the subjective theories as the researchers perceived them, see Scheele and Groeben's second stage. The data processing still needs further development.

*Overview of data elicitation methods*

- The initial questionnaire was filled in online after the first class. It asked for the students' experience with and attitude to multimedia-enhanced learning, their perceptions of their computer and Internet habits and skills, their experience with classroom observations, their expectations of the course as well as biodata (sex, age, semester, etc.).
- The guided learner diaries after each course unit aimed at encouraging the students to reflect on the insights they had gained and the way the different course elements and methods had supported their learning.
- The second questionnaire served as a course evaluation at the end of the semester. It contained Likert-scale questions and open-response questions. Students were asked to express their (dis)agreement with a selection of statements on a five point scale and to comment on their ratings. The statements had been derived from the categorial analysis of the learning potential of a given activity as perceived by the learners, that is, from their subjective theories.

Furthermore, data was gathered in the context of the various course activities.

- Students who worked on the multimedia-based case story were observed and interviewed after the activity.
- Documents produced by the mini-practice groups and the e-interview group (recordings of their mini-practices, forum and chat contributions, both the student teachers' and the moderators' written reflections on their activity) were analyzed; interviews were conducted, with a focus on blended learning.

The professor kept a teaching diary in addition to the lesson plans. The tutor collected field notes throughout the seminar and the fieldwork at school.

## 5  Results

### 5.1  Results from the course evaluation

In this section we will first present and compare the results from selected items from the course evaluation to produce a descriptive framework of the students' perception of the

learning potential of the various activities. We will then examine these results and relate the findings to the paradigm of subjective theories.

We will compare the activities working with multimedia-based case stories that centre around viewing the classroom recordings, conducting an e-interview, and developing and teaching a mini-practice with regard to the following selected research questions: how do these activities help the students to support their learning in general, to study TEFL topics in particular, and to broaden their perspectives on learning and teaching English?

### *5.1.1 Activities and knowledge construction*

More than 75% of the students agree that the multimedia-based case stories that centre around the video recordings have supported their learning and nearly 60% of them feel similarly about the mini-practice. However, hardly any students agree that the e-interview supported them. The moderators do not share this view (see Figure 5). These more general findings are underlined by the answers to more specific questions about whether the various activities have supported the students when studying new topics and/or
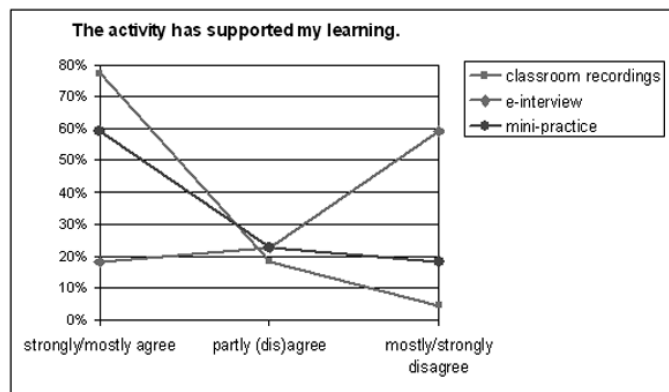


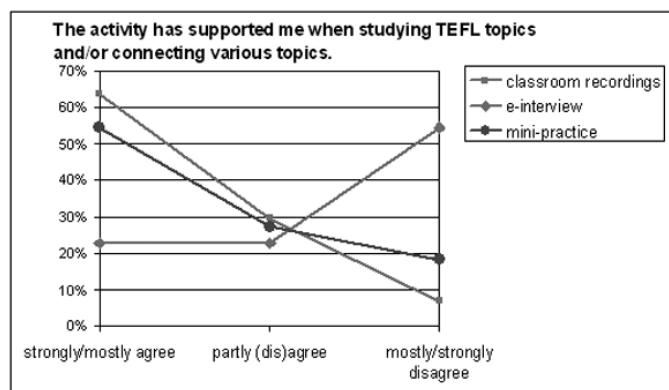Fig. 5. Activities and knowledge construction (1).



Fig. 6. Activities and knowledge construction (2).

connecting various topics (see Figure 6). Again 64% agree and 30% partly agree for the classroom recordings. Nearly 60% agree for the mini-practice, 27% partly agree and about 20 % disagree. For the e-interview though, approximately 25% agree, about 20% partly agree and half of the course disagrees.

The three activities support learning to different degrees. The multimedia-based case stories and the mini-practice are appreciated most in terms of their potential to support the individual's learning process, in particular in terms of studying new topics and connecting various topics. Both activities are well accepted and function as learning tools. The e-interview, however, functions as a learning tool mainly for the moderators. This format was less accepted by the other course participants as their role was not clearly defined in the e-interview tasks.

### *5.1.2 The course as a whole and broadening perspectives*

The course evaluation showed that the course as a whole fundamentally contributed to the broadening of perspectives on teaching/learning situations. The category *broadening perspectives* in Figure 7 comprises three items from the questionnaire related to the learner's prior knowledge and experience as a pupil learning English, to their perception of teaching/learning English from a more informed point of view, and finally their perception of English lessons more from a teacher's perspective.

The multimedia-based case stories and the discussions in class supported the change or even the broadening of perspectives distinctly. The guided learner diary which had been designed as a learning tool to encourage individual reflection on the course content (apart from being an instrument for data elicitation) helped only a smaller proportion to reflect about their perspectives on teaching and learning. They complain that the learner diary required a lot of work or even too much work. The overall gain was minimal considering the effort made.

In sum the course is more than its components, and the majority of students feel supported by the course as a whole in broadening their perspectives.
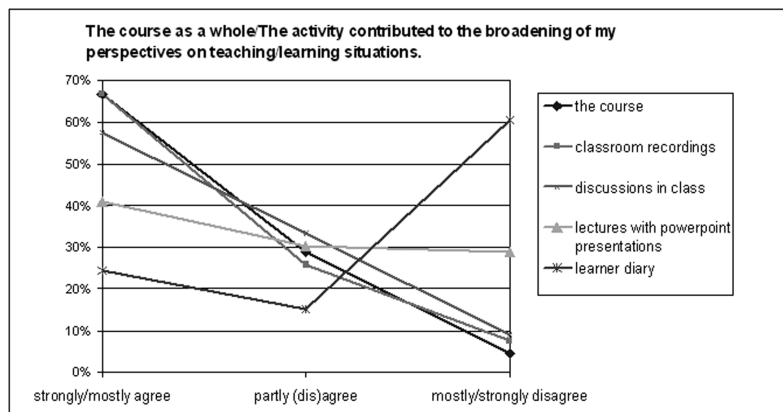


Fig. 7. Activities and broadening perspectives.

### *5.2 Findings seen in the context of the paradigm of subjective theories*

The positive perception of the classroom recordings and multimedia-based case stories as a learning tool became obvious through the quantitative analysis and is supported by the students' reflections in the learner diaries. A preliminary categorial analysis of these reflections led to the forming of five categories of students' perceptions of their learning potential.

### *Understanding theory better*
The learners think they understand theory better with the help of the visual component. The classroom recordings help to deepen existing theoretical knowledge or may function as gateway to theoretical concepts.

*Die Aufzeichnungen der Unterrichtseinstiege unterstützen die Theorie mit ihrer visuellen Komponente. (BAS0105)*

*Die in den Texten angesprochenen Ideen konnte ich an den Unterrichtsbeispielen reflektieren. (HAN0105)*

*Beim Lernen direkt unterstützt, wäre zuviel gesagt, aber ich finde es hilfreich um in ein Thema hineinzukommen und sich direkt damit auseinanderzusetzen. (SCF0105)*

### *Relating theory and teaching practice*
Students appreciate that (recorded) teaching practice is present in methodology courses. One student stated that the recordings bring real situations related to teaching to our seminar.

*[S]ie bringen die Realitätsbezüge zum Thema Didaktik direkt in unseren Seminarraum. (SCS0105)*

### *Learning from examples*
Students experience, understand and recall topics and information better when examples are given.

*Es ist immer einfacher, ein Thema, in dem es um Verhaltensweisen und Handlungsformen geht, über konkrete Beispiele zu erfahren, zu verstehen und zu behalten! (SCS0105)*

### *Broadening perspectives*
They gain a new understanding of the complexity of a lesson and the variety of decisions a teacher has to make.

*Als Schüler macht man sich darüber ja kaum Gedanken, aber das nun aus der anderen Perspektive mitzuerleben und verschieden Alternativen aufgezeigt zu bekommen, bietet Anschauungsmaterial und Anregungen für das eigene Unterrichten und Organisieren von Unterricht. (BRN0105)*

### *Developing guidelines for students' future teaching*
Students collect ideas for their own teaching.

*... für mich selbst als Beipiel dienen können. ... So kann ein gezeigter gut gelungener Stundenanfang beispielsweise als Orientierungshilfe für die eigenen Unterrichtsvorbereitungen und Entwürfe ... sehr hilfreich sein. (EHA0105)*

This preliminary analysis needs further investigation. It illustrates already how quantitative and qualitative data might complement each other to yield an intricate understanding of students' preferred ways of learning.

### 5.3 Hypotheses

Students appreciate their role as student teachers when planning and even more when teaching a mini-practice. They acknowledge the learning effect of both teaching and sharing their experience with those students who could not teach a mini-practice. The latter students learn indirectly from their peers' video-recorded lessons, which function as situational anchors. Yet learning by sharing experience is less accepted in the e-interview format due to the fact that the e-moderators were more involved than the other students and their roles were more clearly defined.

The multimedia case story approach uses a situational anchor from teaching practice. The question is to what extent individual learning styles and/or the level of a learner affect how a learner works with the material, for example which path is chosen, either theory first and the recorded teaching practice second or vice versa. The "novice" tends to prefer a bit of theory before dealing with a case story to find a focus for the observation and background for the reflection. Moreover, the more advanced a prospective teacher is the better he/she can seemingly learn from case stories autonomously.

### 6 Discussion

The learning potential of multimedia-based case stories and classroom recordings. Multimedia-based case stories and classroom recordings

- are a well-accepted and useful contact and e-learning course component
- support an understanding of planning lessons and reflecting upon them in the context of basic TEFL issues
- help the students to broaden their perspectives and see lessons from a teacher's perspective.
- offer the potential to blend
- various learning spaces, such as university, home and school
- contact and distance learning and
- theory and practical teaching.

### The learning potential of the e-interview

The e-interview is a useful e-learning course component as it supports the understanding of TEFL issues by combining studying texts and reflecting the knowledge against the background of the expertise of an experienced grammar school teacher. It supports developing media literacy at the same time. Obviously the moderators learned most as they worked autonomously and constructed knowledge. The expert's answers helped to

illustrate various theories and to relate theory to the practice of EFL teaching. Furthermore, this e-learning component required the students to use and develop their communication skills. The moderators acquired new basic skills for organizing and leading a discussion forum and had some experience with a chat. They also gained practical insights, for example, how to organize a trial run to ensure that all media function and can be used as planned.

The role of the other course participants has to be clearly defined in future courses. In the learner diaries some students explain that they did not participate due to an "overload" of opportunities to learn. At the EUROCALL conference in 2004 Felix also discussed the phenomenon that in a constructivist approach this kind of overload is frequently experienced by the learners. Other reasons for our students' rather reluctant participation were that the chat took place on a Saturday afternoon and that their role was vague.

The effectiveness of the e-interview depends on the role or rather the involvement of the participants. The moderators worked autonomously and developed new literacies, whereas the other course participants needed more support and will get more specific tasks in future courses. Obviously we have to reconsider whether the participation in the e-interview should be compulsory or how we could encourage more students to come up with questions for the expert, thus making them interested in the e-interview.

*The learning potential of the mini-practice*

A mini-practice

- is a useful project and contact course component
- supports the integration of declarative and procedural knowledge
- supports the development of professional knowledge and skills by integrating various facets of knowledge and skills and
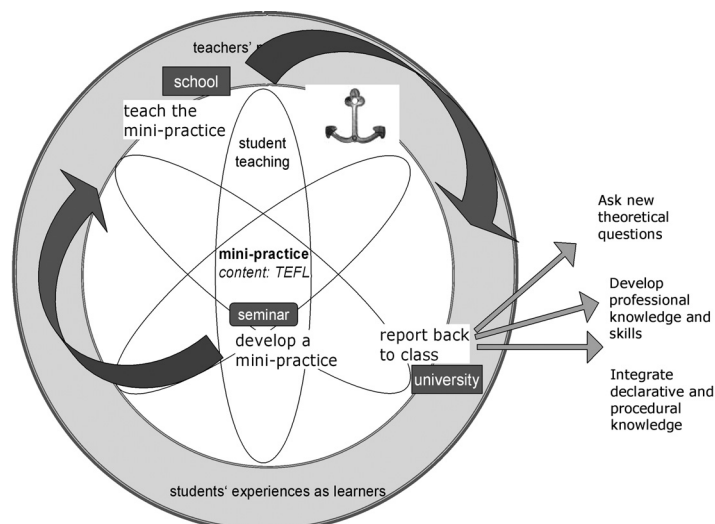


Fig. 8. Learning space: a mini-practice.

- supports an individual approach to the understanding of TEFL issues as the student teachers grasp professional needs and ask new theoretical questions.

Students who taught their mini-practice had the experience of being a student teacher. They obviously constructed knowledge by connecting and integrating various topics central to EFL teaching and became more motivated to study to become a teacher ("I can do it"). The mini-practice functions as an anchor *per se* as it helps students to understand practical issues they might study in their further university courses more purposefully.

Students who planned a mini-practice constructed knowledge by connecting and integrating various topics central to EFL teaching. Furthermore, they learned from their peers who reported back to class with the video recordings of their mini-practices. These video-recordings again functioned as anchors for the others and made them consider forms of address as well as practical issues like the importance of taking a wrist watch.

We find that this is anchored instruction per se, and teacher trainers should organize this experience as early as possible, for example, even at BA level. The student teachers took responsibility and felt empowered by experiencing that they can teach in a classroom.

Interestingly enough, students learned a lot from their peers when the student teachers reported back to class and showed video recordings of their mini-practices. These recordings then functioned as situated anchors with a personal, emotional dimension as they help students see practical issues their peers were confronted with. Consequently students might learn more purposefully in their university courses after the event.
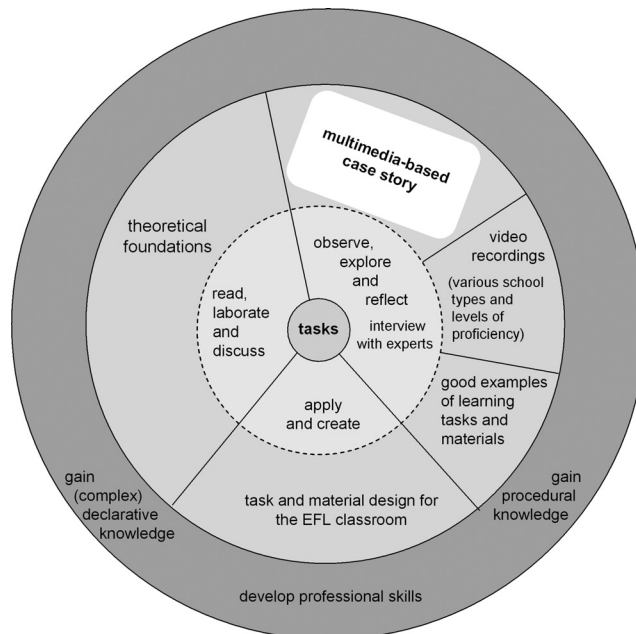


Fig. 9. Design of task-centred blended learning modules

*Learning modules*

We show above that the learners construct their knowledge and develop skills guided by the tasks. They use the materials in rather individual and flexible ways, and we suppose that materials that support self-guided study can be loosely and purposefully organized in modules. The learning modules can be used in various scenarios, i.e. self-guided/computer-based or in a traditional teacher-guided context. In both the self-guided and the rather traditional learning scenarios the students apply theory and understand theory better when working with the problem-solving tasks taken from teaching practice and when reflecting upon the video recordings more and more as prospective teachers. The learner/reader constructs the story and (hopefully) knowledge in this process. Furthermore, the design of the computer-based learning module makes individual variations possible because of the material's hypertextual structure. The approaches of our learners vary from rather practically oriented to theory-driven. However, the learning modules, the materials and the task design need further investigation, and the usage needs to be evaluated in greater detail.

From a pedagogical point of view it becomes quite obvious that the stronger the involvement of the learner, the better the result becomes. The moderators in the e-interview, the student teachers in the mini-practice and the case story learner are typical here. The multimedia-based case stories and the mini-practices are well accepted activities and function as learning tools for all course participants. They are formats that blend e-learning and contact in a directed, interactive way. The e-interview, however, functions as a learning tool mainly for the moderators. The use could be possibly improved for the other course participants if their participation was intensified. Consequently we conclude that in a teacher training course integrated interactive e-learning and contact learning (IIECL) are fundamental.

The effectiveness of the course could be supported by the results of the written test. However, whilst there was no significant difference compared to the previous exams, at least the learning arrangement worked for the normal course participants. The active participants, though, who might have learned differently, were exempted from taking the exam, thus we cannot consider their results here. The exemption was planned as a bonus, but perceived rather critically. One course participant wrote in her learner's diary that the student teachers were rewarded twice. They could practice teaching and were not required to take the test. This is an aspect that deserves more attention and should be modified in future courses. Furthermore, the contents of the test were TEFL issues and did not consider the other goals of the course at all. Although learners should also be given feedback on the more subtle issues (e.g. broadening perspectives) it is difficult to incorporate them in a written exam.

In sum, we propose that interactive e-learning and contact learning should be integrated.

The way of blending, though, is task and goal specific. A blended learning approach can support the integration of declarative and procedural knowledge, thus supporting the learner when constructing professional knowledge and skills.

## 7 Further development and research

We will offer the course every semester and continue to develop the following aspects.

i.  We will develop more case stories. Topics such as 'Content Teaching in English', 'Theories of Language Learning' and 'Intercultural Learning' will be considered. The task design needs further investigation.

ii.  We will develop new assessment procedures. We will design a new written examination, which considers TEFL content and the other dimensions of the course as well.

iii.  We will design tasks for the e-interview which emphasize the participation of all course members and define how they should participate in an e-interview.

In terms of research we are currently conducting case studies in the same course setting and we will expand on the qualitative analysis.

## References

Butzkamm, W., Klippel, F. and Siebold, J. (2003) Das MELT-Projekt zum mediengestützten Englischlehrer-Training. *Paper presented at the 20th congress of the DGFF*, Frankfurt am Main.

Cognition and Technology Group at Vanderbilt (CTGV) (1990) Anchored Instruction and Its Relationship to Situated Cognition. *Educational Researcher*, **19**(6): 2–10.

Cognition and Technology Group at Vanderbilt (CTGV) (1993) Anchored Instruction and Situated Cognition Revisited. *Educational Technology*, **33**(3): 52–70.

Decke-Cornill, H. (forthcoming) Interaktionsanalyse einer medial unterstützten Englischstunde in einer 1. Klasse. *7th Conference on Language Teaching and Learning Processes with (New) Media*, Hannover, Germany, 2004.

Decke-Cornill, H. (in press) Unterrichtsverfilmungen als Medium der Entwicklung eines kritischen Blicks auf Schule und Unterricht. In: Blell, G. and Kupetz, R. (eds.), Fremdsprachenlernen zwischen 'Medienverwahrlosung' und Medienkompetenz. Beiträge zu einer kritisch-reflektierenden Mediendidaktik. Frankfurt a. M.: Lang, 205-215.

Dirks, U. and Feindt, A. (2002) Fallarbeit als Brückenschlag zwischen Theorie und Praxis. In: Dirks, U. and Hansmann, W. (eds.), *Forschendes Lernen in der Lehrerbildung. Auf dem Weg zu einer professionellen Unterrichts- und Schulentwicklung*. Bad Heilbrunn: Klinkhardt, 37–45.

Felix, U. (2004) E-Learning Pedagogy in the Third Millenium: The need for combining social and cognitive constructivist approaches. *ReCALL*, **17** (1): 85–100.

Freeman, D. (1996) The 'unstudied problem': Research on teacher learning in language teaching. In: Freeman, D. and Richards, J. C. (eds.), *Teacher learning in language teaching*. Cambridge: CUP, 351–378.

Geertz, C. (1987) *Dichte Beschreibungen. Beiträge zum Verstehen kultureller Systeme*. Frankfurt a. M.: Suhrkamp.

Gerstenmaier, J. and Mandl, H. (1995) Wissenserwerb unter konstruktivistischer Perspektive. *Zeitschrift für Pädagogik*, **41**(6): 867–888.

Grotjahn, R. (1991) The Research Programme Subjective Theories: A New Approach in Second Language Research. *Studies in Second Language Acquisition*, **13**: 187–214.

Grotjahn, R. (1998) Subjektive Theorien in der Fremdsprachenforschung: Methodologische Grundlagen und Perspektiven. *Fremdsprachen Lehren und Lernen*, **27**: 33–59.

Jarz, E. M., Kainz, G. A. and Walpoth G. (1997) Multimedia-Based Case Studies in Education: Design, Development, and Evaluation of Multimedia-Based Case Studies. *Journal of Educational Multimedia and Hypermedia*, **6**(1): 23–46.

Klauer, K. J. (2001) Situiertes Lernen. In: Rost, D. (ed.), *Handwörterbuch Pädagogische*

*Psychologie* (2nd ed.). Weinheim: PVU, 635–641.

Kerres, M. (2002) Online- und Präsenzelemente in Lernarrangements kombinieren. In: Hohenstein, A. and Wilbers, K. (eds.), *Handbuch E-Learning: Expertenwissen aus Wissenschaft und Praxis*. Köln: Deutscher Wirtschaftsdienst, 1–19.

Kupetz, R. and Ziegenmeyer, B. (2005) Hannoveraner Unterrichtsbilder als Lehr- und Lernmittel zur Konzeptualisierung von ausgewählten Problemfeldern des Sachfachunterrichts auf Englisch. In: Mühlhausen, U. (ed.), *Unterrichten lernen mit Gespür*. Barthmansweiler: Schneider Verlag Hohengehren, 67–86.

Mandl, H., Gruber, H. and Renkel, A. (2002) (3rd rev. ed.) Situiertes Lernen in multimedialen Lernumgebungen. In: Issing, L. J. and Klimsa, P. (eds.), *Information und Lernen mit Multimedia und Internet*. Weinheim: Beltz, 139–148.

Merseth, K. K. (1996) Cases and Case Methods in Teacher Education. In: Sikula, J. (ed.), *Handbook of research on teacher education: a project of the Association of Teacher Educators*. (2nd ed.) New York: Macmillan Library Reference USA, 722–744.

Messmer, R. (2001) Lernen aus Fallgeschichten in der Lehrerinnen- und Lehrerbildung. *Beiträge zur Lehrerbildung*, **19**(1): 82–92.

Niegemann, H. M. (2001). *Neue Lernmedien konzipieren, entwickeln, einsetzen*. Bern: Huber.

Powell, R. (2000) Case-based teaching in homogenous teacher education contexts: a study of pre-service teachers' situative cognition. *Teaching and Teacher Education*, **16**: 389–410.

Reinmann-Rothmeier, G. (2003) *Didaktische Innovation durch Blended Learning: Leitlinien anhand eines Beispiels aus der Hochschule*. Bern u.a.: Huber.

Richards, J. C. and Nunan, D. (1990) *Second language teacher education*. Cambridge: CUP.

Scheele, B. and Groeben, N. (1998) Das Forschungsprogramm Subjektive Theorien. Theoretische und methodologische Grundzüge in ihrer Relevanz für den Fremdsprachenunterricht. *Fremdsprachen Lehren und Lernen*, **27**: 12–32.

Shulman, L. S. (1992) Toward a Pedagogy of Cases. In: Shulman, J. H. (ed.), *Case Methods in Teacher Education*. New York: Teachers College Press, 1–30.

Siebold, J. (in press) MELT – ein multimedialer Baustein für die Englischlehrerausbildung. In: Blell, G. and Kupetz, R. (eds.), *Fremdsprachenlernen zwischen 'Medienverwahrlosung' und Medienkompetenz. Beiträge zu einer kritisch-reflektierenden Mediendidaktik*. Frankfurt a. M.: Lang, 217–219.

Spiro, R. J. *et al*. (2003) Cognitive Flexibility Theory: Hypermedia for Complex Learning, Adaptive Knowledge Application, and Experience Acceleration. *Educational Technology*, **43**(5): 5–10.

Thonhauser, J. (1996) Fallgeschichten als didaktisches Instrument. In: Schratz, M. and Thonhauser, J. (eds.), *Arbeit mit pädagogischen Fallgeschichten: Anregungen und Beispiele für Aus- und Fortbildung*. Innsbruck: Studien-Verlag, 61–90.

Wallace, M. J. (1991). *Training foreign language teachers. A reflective approach*. Cambridge: CUP.

Wolff, D. (2003) Web-based teaching and learning: A research perspective. *EUROCALL 2003*, Limerick, Ireland.

Woolfolk, A. E. (1998) *Educational Psychology*. (7th ed.) Boston: Allyn and Bacon.

Ziegenmeyer, B. (in press) Multimediale Fallgeschichten in der Englischlehrerausbildung. In: Blell, G. and Kupetz, R. (eds.), *Fremdsprachenlernen zwischen 'Medienverwahrlosung' und Medienkompetenz. Beiträge zu einer kritisch-reflektierenden Mediendidaktik*. Frankfurt a. M.: Lang, 221-232.