



BLENDED LEARNING EXPERIENCE IN TEACHER EDUCATION: THE TRAINEES' PERSPECTIVE

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Abstract: The article deals with blended learning in the context of pre-graduate English language teacher education. Firstly, the concept of blended learning is defined, then, the attention is focused on the online component of a blend, namely on the issue of interpersonal interaction including the challenges, which learning through online networking poses. Finally, results of a small-scale research are provided to offer insights into teacher trainees' perspective of the blended learning experience at the University of Pardubice, Czech Republic.

Zusammenfassung: Der Artikel behandelt blended learning im Kontext der angehenden Englischlehrer. Zuerst wird das Konzept des blended learning definiert, dann gilt die Aufmerksamkeit der Online-Komponenten, vor allem der Problematik der interpersonalen Interaktion, einschließlich der Anforderungen, die durch die direkte Arbeit im Netz entsteht. Zum Schluss wird ein kleiner Forschungsbeitrag zur Blended-learning-Erfahrung angeboten, der an der Universität Pardubice aus Tschechien, eine Perspektive der Studenten der Lehrerausbildung entstanden ist.

Key words: blended learning, interpersonal interaction, teacher education

1. Introduction

The unprecedented development of information and communication technology (ICT) in the last decades has influenced all spheres of present-day society. Though ICT has penetrated considerably into education, in the Czech educational context, however, it is still computer-mediated learner-content interaction, which is in the main focus. Content delivery in the form of an online course is a widely discussed issue. Interestingly, there are learning management systems, e.g. eDoceo, which lack proper technological features to support interpersonal interaction. Communication is considered to be a marginal activity of an individual who can send an e-mail to the tutor in case of emergency. This way of understanding the concept of e-learning may have some value in specific contexts but it is irrelevant for teacher education because of the specifics of learning to teach. Therefore, the potential of ICT, namely interactivity, coupled with social constructivism as a learning theory constitutes an empowering tool in the hands of teacher educators, which may add a new dimension to teacher education when used to design blended learning experience.

2. Theoretical background

Nowadays, we come across the term 'blended learning' quite frequently. It has become "a buzzword in corporate and higher education settings" (Graham 2006). Similarly to the term 'e-learning', it is not clear what it actually denotes as it has been recently used to denote multiple learning contexts. Our understanding of the term is in agreement with Graham, who proposes that "blended learning systems combine face-to-face instruction with computer-mediated instruction" (ibid.). For the purpose of this paper the presented definition will be taken as a basis for further considerations.

When studying the literature on blended learning one realises immediately that interaction is the most widely explored issue. Wagner (2006) suggests that interaction continues to be perceived as "the defining attribute for quality and value in online learning experience". Consequently, several schools of thought have emerged in the past two decades that explore interaction in the context of technology-mediated learning: interaction as transactions, interactions as outcomes, interactions and social presence, and interactions as experience (ibid.). The theory of interactions as outcomes seems to be the

most relevant for our situation. Wagner views interaction as “a strategy for achieving specific learning or performance outcomes” and provides a list of eleven targeted outcomes: interaction for participation and communication, interaction for feedback, interaction for elaboration, interaction for learner control and self-regulation, interaction for motivation and negotiation, interaction for team building, interaction for discovery, exploration, and clarification (ibid.). Considering the suggested outcomes, all of them are found relevant to certain extent for the described case.

Furthermore, interaction in the computer-mediated environment has its specific features compared to the interaction face-to-face. Graham (2006) proposes that there are four dimension of interaction in face-to-face and distributed learning environments (see Figure 1). Having in mind the blended learning experience discussed in this article, its computer-mediated part may be characterised as virtual, asynchronous, low fidelity, and more to the high-human end of the continuum of the humanness dimension.

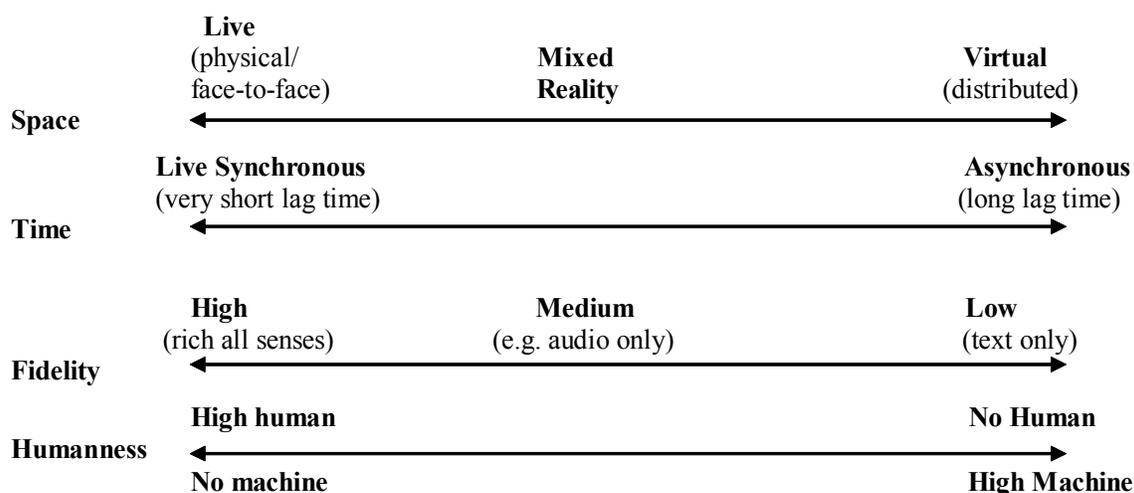


Figure 1. Four dimensions of interaction in face-to-face and distributed learning environments (Graham 2006:7)

As regards current trends, Graham reports convergence of the two environments and also greater emphasis on person-to-person interaction and increasing use of synchronous and high-fidelity technologies to mediate those interactions (ibid.). From this point of view, our emphasis put on interpersonal interaction is consistent with current trends. Synchronous events have not been implemented yet for practical reasons – it has been difficult to organise them because of the logistic constraints. Lastly, high-fidelity technologies are not available either to the tutors or to the trainees at present; therefore, technologically less demanding solutions are searched for.

Building on Charles Graham’s definition, the discussed blended learning experience comprises the following components: face-to-face sessions and online events, i.e. asynchronous text-based discussions, which are referred to as e-conferences. Both types of events are embedded in authentic teaching practice experience. This is an example of course-level blending; learners are engaged in distinct face-to-face and computer-mediated activities used as part of a course, in this case with no overlap in time (Graham 2006:11). The blend may be categorised as a transforming blend, which means that it allows for a radical transformation of pedagogy and enables intellectual activity that was not practically possible without the technology (ibid.). In our situation the technology enabled geographically dispersed trainees to get involved in online events spanning two face-to-face sessions. In teacher education, computer conferencing may be a valid tool for supporting teacher trainees’ professional learning as the pedagogical principles upon which the online environment is built, i.e. reflection, collaborative learning and social constructivism, “seem to be ideally suited to enhancing teacher development” (Mallows 2001:6). Moore and Kearsley argue that “computer conferencing is

ideal in courses aimed at professionals in which there is strong emphasis on the contributions which students can make from their own personal experience” (1996:93). This is especially relevant for periods of the teaching practice, during which trainees obtain real-life experience that they can immediately share.

As regards blending, Osgurthrope and Graham (2003 in Graham 2006) propose that designers of the blended learning systems should be seeking best practices for how to combine instructional strategies in face-to-face and computer-mediated environments that take advantage of the strengths of each environment and avoid their weakness. The following table summarises strengths and weaknesses of conducting discussions in face-to-face and computer-mediated learning environments; both types of discussion are relevant for the discussed case.

	COMPUTER-MEDIATED ENVIRONMENT (Asynchronous Text-Based Discussion)	FACE-TO-FACE ENVIRONMENT (In-Class Discussion)
STRENGTH	Flexibility: Students can contribute to the discussion at the time and place that is most convenient to them.	Human connection: It is easier to bond and develop a social presence in a face-to-face environment. This makes it easier to develop trust. Spontaneity: Allows the generation of rapid chains of associated ideas and serendipitous discoveries.
	Participation: All students can participate because time and place constraints are removed.	
	Depth of reflection: Learners have time to more carefully consider and provide evidence for their claims and provide deeper, more thoughtful reflections.	
WEAKNESSES	Spontaneity: Does not encourage the generation of rapid chains of associated ideas and serendipitous discoveries.	Participation: Cannot always have everyone participate, especially if there are dominating personalities. Flexibility: Limited time, which means that you may not be able to reach the discussion depth that you would like.
	Procrastination: There may be a tendency toward procrastination.	
	Human connection: The medium is considered to be impersonal by many, which may cause a lower satisfaction level with the process.	

Table 1. Strengths and weaknesses of conducting discussions in face-to-face and computer-mediated learning environments (Graham 2006:18)

Though the strengths of both environments have been identified clearly they are not guaranteed at any case, rather, they are quite challenging to achieve. Mason claims “that educationally beneficial, dynamic and all-inclusive discussions are far from commonplace events in face-to-face teaching” (Mason 1998:3) and, similarly, educational outcomes of asynchronous computer-mediated discussions are very much dependent on many factors, related to the process, tutor and learner (e.g. Harasim et al. 2001, Salmon 2002). The rationale for implementation of e-conferences in teacher education at the University of Pardubice, Czech Republic, will be briefly presented in the following paragraphs, for a detailed account and research-based evidence see a previous publication by the author of this text (Černá 2005). It should be noted here that in the Czech educational context the research data of a similar kind are rarely available. This may imply that instructional designs building on interpersonal interaction in the computer-mediated environment are either not extensively implemented or remain unresearched. Two recently defended dissertations offer some insights into this problem area;

Reimannová (2008) partly exploited the format of discussion forum in her research, Obenausová (2009) reports that in her context, English Language Teacher Education at Palacký University, Olomouc, attempts to utilise learning through computer-mediated discussions have not been successful up to now for two main reasons, which are, firstly, non-existent geographical dispersion of the students and, secondly, inactive role of the tutors who have not been trained to be online tutors and do not see themselves in this role.

First of all, the Model of Teaching and Learning Online through Computer Mediated Conferencing by Gilly Salmon (2000:26) should be introduced (see Figure 2) as it suggests five stages through which the participants of an online event are likely to go through. Each stage requires participants to master certain technical skills and calls for different moderating (online teaching) skills (Salmon 2000:25). The level of interactivity is variable, being highest at stage four. Conference participants will not reach stage four, knowledge construction, unless they have gone through the preceding stages with necessary support and facilitation. However, it should be noted that in blended learning the situation may slightly differ, for example, participants may skip stage two (online socialisation) as they have developed interpersonal relationships in the preceding face-to-face sessions.

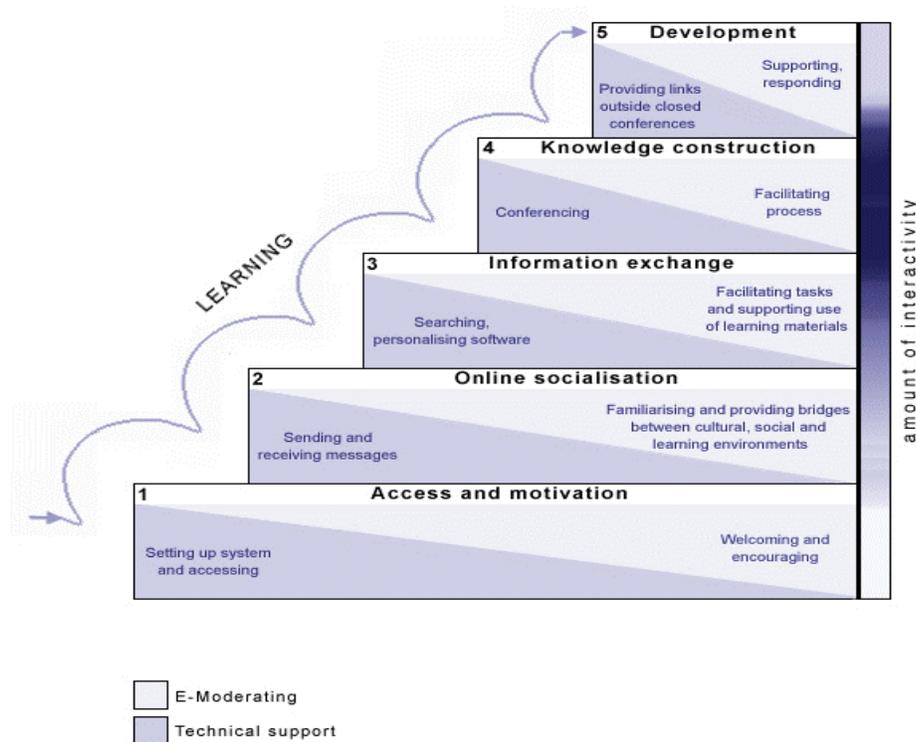


Figure 2. Model of teaching and learning online through CMC (Salmon 2000:26)

Cox et al. examined several group conferences and found that “none made substantial progress beyond Salmon’s stages 2/3” and only “few examples of depth and critical perspective in the messaging required for evidence of knowledge construction” (Cox et al. 2000) were found. The authors discuss these findings in relation to the role of the online tutor. They conclude that the role is unique, as the tutor’s skills influence the effectiveness of online discussion groups.

Secondly, achieving a high level of learner involvement and active participation is a central issue in considering the educational potential of computer conferencing. The aim is to achieve stage four of Salmon's model, i.e. construction of knowledge, or, in terms of the revised edition of Bloom's taxonomy of educational objectives, higher-order learning (Anderson, Krathwohl, 2001). It is the tutor's responsibility to encourage active learner participation through the effective use of grouping techniques, pacing techniques, tasks and strategies in managing communication.

The technique of grouping as well as the size and composition of student groups vary for different learning activities. Techniques of group formation in the online environment are generally similar to those applied in face-to-face education, but technological limitations have to be respected as well as the fact that people may behave differently in face-to-face and computer-mediated discussions. This is our long-term observation that trainees who were silent during in-class discussions very often initiated online discussions and contributed considerably. From this perspective, blended learning offers opportunity to every learner to make use of her/his full potential. Regarding the number of students in online groups, opinions differ. The size of a group also depends on how many contributions are expected from each student weekly, and also on the type of task the group is expected to accomplish. While Mason (1998) advocates small groups of students with fewer than ten members, Harasim et al. claim that conferences and discussion groups of about fifteen to twenty-five work best in general but complex projects would require teams of two to four people (2001:180). Our experience is consistent with the above-mentioned findings as Table 2 presents; the number of students is adjusted so that the aim of the e-conferences may be achieved.

Another tool used to structure the process of computer-mediated discussion is pacing, as the benefits of asynchronicity, namely liberating learning from the constraints of time and place, have turned out to be "a double-edged sword" (Sengupta 2001) – anytime and anywhere may also mean never. Pacing involves setting deadlines for task completion, denying access to information before completing previous tasks. It may also be supported by assigning tasks that urge coherent pacing within groups. This strategy proved to be relevant for the needs of our context (see Table 2).

As regards learning tasks to be completed through networking, there is a general agreement in the literature that they should be authentic (e.g. Allen 2003) and collaborative (e.g. Harasim et al. 2001). There have also been attempts to provide a framework to conceptualise the field. Two examples may be mentioned: framework for enhancing active and participative online learning ("e-tivity") by individuals and groups (Salmon 2002) and paradigm grid for online learning (Coomey, Stephenson 2001). As the latter was found more suitable for our situation, it will be described in detail. The authors focused on variations in the locus of control and on task specification, which may be regarded as features of learning activities. In graphical form (see Figure 3), the horizontal axis of the framework represents a continuum from teacher-controlled to learner-managed activities. The vertical axis constitutes a continuum from specified to open-ended tasks.

The authors suggest that much of current experience falls within the following four quadrants (Coomey, Stephenson 2001:41):

- teacher-controlled, specified learning activities (A);
(the teacher tightly specifies the activities and the outcomes, little space is provided for learner initiative)
- teacher-controlled, open-ended or strategic learning (B);
(the teacher provides overall direction, the learner has freedom to explore)
- learner-managed, specified learning activities (C);
(tasks and goals are specified but learners have control of the process of achieving them)
- learner-managed, open-ended or strategic learning (D).
(the learner is in control of the overall direction of the learning including learning outcomes).

Type B tasks are deployed most frequently in online events at the University of Pardubice (see Table 2); they seem to suit the given context most of all and at the same time help the tutor structure the process.

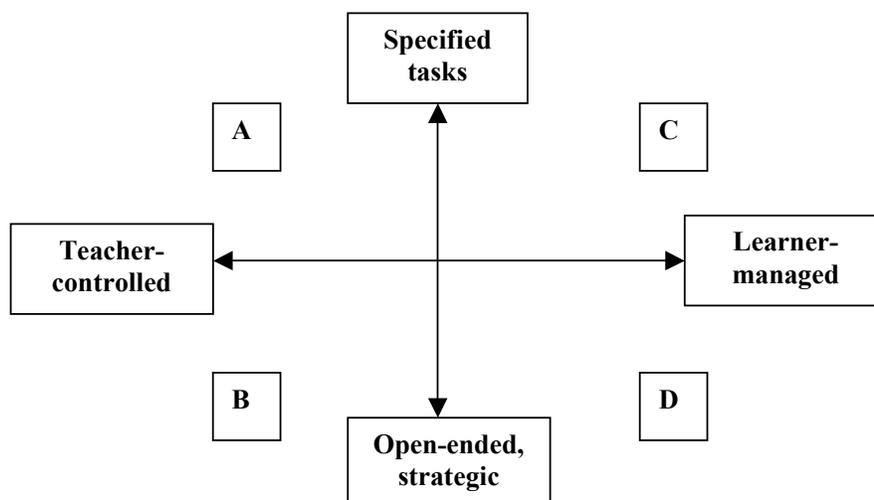


Figure 3. *Online paradigm grid* (Coomey, Stephenson 2001:41)

Lastly, strategies in managing communication will be discussed. There has been a high level of agreement in the literature that an online tutor's effective use of weaving and summarising is likely to facilitate students' learning through involvement in discussions. However, the literature on computer conferencing or online networking provides data reflecting educational contexts of many countries but not the Czech one. Various authors (Cox et al. 2000; Salmon 2000, 2002; Harasim et al. 2001) propose that one of the most significant tasks of the online tutor is summarising and weaving. However, for unknown reasons, this seems not to apply in our educational context.

Our team of (online) tutors, being aware of the underlying principles and reflecting the specifics of the educational context at the University of Pardubice, attempted to use various strategies, including summarising and weaving, to achieve the highest possible level of active learner participation in e-conferences. Interestingly, the participants responded very well, i.e. by action, to an initial "e-tivity", active and interactive online learning (Salmon 2002), assigned by the tutors but were usually silenced by any kind of the tutors' interventions. Furthermore, there appeared students who naturally took over the responsibility for summarising and giving feedback and made tutors feel redundant. This pattern of behaviour, reasons of which can be merely hypothesised, was observed repeatedly with different groups of students and different tutors who interfered either directly or indirectly into the process of e-conference. Consequently, the students became responsible for summarising, which is also an option suggested in the literature (Harasim et al. 2001); the tutors restricted their role to that of manager and monitor of the process ready to interfere namely if misconceptions started to develop. This strategy enabled the tutors to delay judgement deliberately, which is, according to Michael Allen, one of the "seven magic keys to motivating e-learning" (2003).

Apart from summarising and weaving, providing feedback in the computer-mediated environment is also an issue. Both students and instructors have to learn to manage their expectations regarding the quality and quantity of online tutor feedback not to turn "anytime convenience" into an "all the time workload" (Hara & Kling 2000). The online tutor must also resist the temptation to provide feedback immediately to enable learners to (re)construct the knowledge through computer-mediated interpersonal interaction.

Finally, learner-related determinants will be summarised. Anticipated learning outcomes may only be achieved if the tutor is able to address students having different learning styles, personality features, degrees of autonomy, and different attitudes to ICT as well as variable affective barriers to learning. Any of these may be in conflict with the requirement of compulsory participation in e-conferences. However, most theoreticians believe that non-contributing (lurking, browsing) should be challenged,

rather than accepted as a norm. Our team shares the same opinion; therefore, the tutors try to minimise non-participation by designing appropriate learning activities and by making decisions about effective grouping and pacing techniques as presented above.

3. The Clinical Year Project

The framework for the research is defined by The Clinical Year Project, which is a unique approach to teaching practice as a component of teacher education programmes in the Czech Republic in terms of its philosophy, allocated time, content and actions (Černá & Píšová 2002b:9). A brief description will be provided in the following paragraphs, though publications dealing with aspects of the Clinical Year have already been issued (Píšová 2005, Píšová & Černá 2006).

The Clinical Year, i.e. year four of the five-year English Language Teacher Education study programme at the University of Pardubice, is built on a close partnership between the University and a range of primary and secondary schools. The aim is high-level provision of real-life school experience. The Clinical Year refers to a long period of teaching practice, for which a student is placed in a particular school of his/her choice. The teacher trainee's position at the school is that of an assistant. S/he is expected to cooperate with an experienced teacher, a mentor, who provides advice, guidance, help and support throughout the year and who also evaluates the trainee's development in areas of professional competence.

Assistants' cooperation with the university tutors is of a different nature than in the preceding phase. It is centred around six reflective projects (e.g. observations, video recording analysis, action research) that the assistants are obliged to complete within the school year. Tutors attempt to facilitate the assistants' professional learning not only by assigning tasks and projects, but also by providing support, which is individualised in amount and form. To achieve this, emphasis is put on communication. Tutors meet assistants in face-to-face sessions, which have a format of half-day seminars at the University held at intervals of approximately six weeks. To facilitate interpersonal interaction in-between these sessions, the mediated mode of communication is deployed. Consequently, the MAT Forum system was designed in response to the specific needs of the given context. Since that the system has been used to provide a platform for communication for all the Clinical Year Project participants (Mentors, Assistants, Tutors), and to host online events, i.e. five e-conferences scheduled throughout the Clinical Year, which complement the face-to-face sessions and individual work on reflective projects. Examples of e-conferences are provided in Table 2.

E-conference:	Observation sheets	Teaching English at my school	Action research
VARIABLES:			
GROUPS (size; organisational principle)	2 groups (19 members) - students' preferences	4 groups (8-10 members) - tutors' intentions (principle: type of school, heterogeneous groups)	7 groups (4 – 6 members) - tutors' intentions (principle: topic of action research project)
PACING	- time limit (4 weeks) - assignments urging coherent pacing	- time limit (8 weeks)	- time limit (7 weeks) - assignments urging coherent pacing
TASK	Type B (teacher-controlled, open-ended) Students are expected to discuss design, implementation and evaluation of observation sheets (focus: teaching language skills and sub-skills)	Type B (teacher-controlled, open-ended) Students are expected to inform each other about curricular development in the area of ELT in their schools; compare their findings; draw conclusions	Type B (teacher-controlled, open-ended) Students are expected to introduce the project; provide feedback, suggestions, advice; provide progress reports; provide feedback; discuss the format of presentations
MANAGING COMMUNICATION	- obligatory participation (2 messages per week)	- obligatory participation (2 messages per week)	- obligatory participation (2 messages per week)

Table 2. Examples of e-conferences in the Clinical Year 2006/2007

4. Research methodology

The aim of the research is to find out how teacher trainees perceive the computer-mediated component of the blended learning experience, which consisted of six face-to-face sessions and five e-conferences in the course of one school year (in the Czech Republic it covers the period from the last week in August to the end of June). As the nature of trainees' perceptions was the focus, qualitative methodology was opted for. A questionnaire was used to elicit required data. It was a complex tool administered at the end of the Clinical Year, but for the purpose of this text only Part IV, MAT Forum as a channel of communication, was analysed. The questionnaire was distributed to the total number of 47 students, 36 students in June 2007 and 11 students in June 2008; all of them answered the questions anonymously. Content analysis of answers to open-ended questions was conducted and then followed by subsequent categorisation of obtained items. The frequency of occurrence of categorised responses is provided in Chart 1 and Chart 2.

The results were further validated in individual semi-structured interviews which were conducted by four tutors at the end of the final face-to-face session after the completion of the questionnaires. Furthermore, trainees' personal charts providing information about the time allocated to different types of activities during the Clinical Year were exploited as a secondary source of data. Similarly, all trainees' contributions to all the e-conferences were available for reference.

5. Research results

First of all, perceived positive aspects of computer conferencing will be introduced. To enable the reader to "listen" to the voice of trainees, authentic comments are provided in inverted commas. The most frequent aspect, listed by 28 trainees out of 47 (60%), was **getting new information**, i.e. ideas, suggestions, and opinions of others, in the course of the e-conference ("different kinds of opinions, information, tips for teaching, literature", "relevant advice; lots of opinions"). **Sharing**, mainly experience but also ideas and problems, was reported to be a benefit of computer conferencing by 22 (47%) respondents: "you can share and tackle the same problems with other colleagues". Twenty trainees (43%) viewed the e-conferences as a valuable **source of support** "available whenever needed" ("a kind of support – I knew that I was not the only one who had difficulties"). Eight people (17%) liked the discussed **topics** and the same number of people appreciated one of the **aspects of asynchronous communication**, e.g. asynchronicity, 24/7 availability ("accessible any time of the day and night"), this channel of communication as such ("quick reactions", "being in contact with other students and the tutors"). One person could not find any positives.

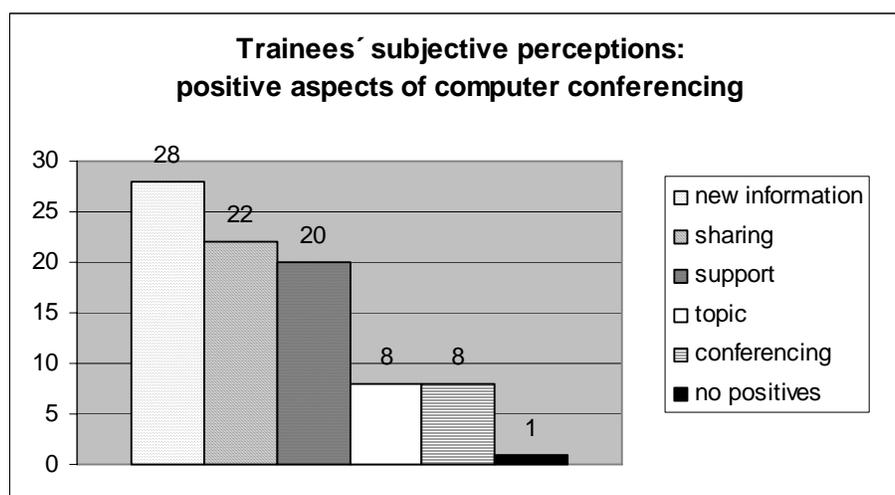


Chart 1. Positive aspects of computer conferencing

As regards perceived negative aspects, it is the **time factor**, which was mentioned most frequently. 23 out of 47 trainees (49%) commented namely on the fact that “it is time consuming to read all the messages before writing a new message” and they felt stressed to reply in time to meet the requirements (“it was stressful to contribute in time”). Fourteen people (30%) perceived negatively that each participant was **required** to pose a certain **number of messages per given period**, usually two messages per week (“sometimes you must write just for the sake of it”, “the necessity to contribute even when having nothing special to say”). Apart from compulsory participation, it was also the **quality of contributions**, which was recognised as a problem by eleven trainees, i.e. 23% (“many people just repeated themselves”, “I had nothing much new and interesting to share”, “one issue was discussed for a long time”). **Access-related problems** were by mentioned as a perceived negative by five people, i.e. 11% (“I did not have sufficient access to the Internet”). Two trainees did not like the layout of the screen (“the layout should be changed so that the contributions can be seen without clicking”) while the same number of people did not list any negatives. There was only one person, who criticised “**tutors’ silence**”.

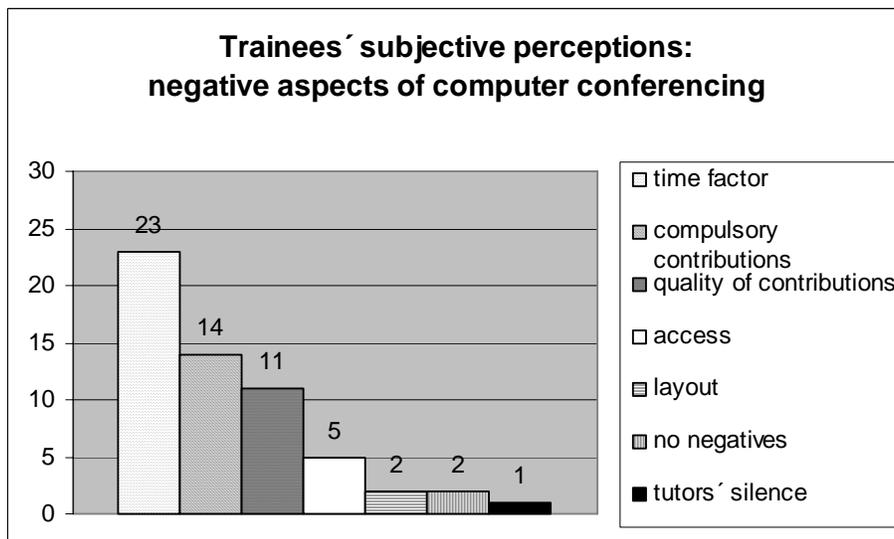


Chart 2. Negative aspects of computer conferencing

6. Discussion of the results

Considering the results, they are consistent with the literature to the considerable extent. Perceived positive aspects correspond to reasons for which asynchronous computer conferencing is valued – opportunity for reflection, for collaborative construction of knowledge available anywhere anytime. However, there are two unexpected findings. Firstly, though the medium was text-only, i.e. low fidelity or weak social presence, it was perceived as a source of support by 46 percent of respondents. Hara and Kling (2000) propose that time and expressive abilities are needed to create a strong social presence in a written medium. Probably, the time the trainees have spent on collaborative tasks either face-to-face or online has played its role, in other words, the positives of blending were utilised. Secondly, benefits of asynchronicity were not acknowledged as expected, perhaps because there are high fidelity media of communication, which may be alternatively used by the trainees. Having discussed issues informally in media-rich environment they may be less willing to discuss them in a formal, text-only setting. It is interesting that one person appreciated short lag time though asynchronous communication is claimed to be characterised by long lag time compared to synchronous events. Individual differences most probably account for this.

In concord with positive expectations, which were raised by the quality of trainees’ contributions perceived by the tutors during e-conferences, positive comments outweighed negative comments, 86 compared to 56. Moreover, it is important to emphasise that more than one third of respondents

expressed, either explicitly or implicitly, that they had not perceived negatively the whole experience but only a part of it. Four respondents stated clearly which e-conference they referred to (e.g. “too many [required] contributions in the last conference”) whereas twenty respondents used “some” or “sometimes” to imply limited validity of the statement (e.g. “some messages were not relevant”, “discussions were sometimes off-topic, because there was nothing more to discuss”, “sometimes participants wrote just to fulfil the tasks”, “sometimes I had nothing much to say but had to”). The same strategy was observed only once when analysing positive aspects (“sometimes good to hear opinions of others”). A straightforward explanation of this tendency might be that the respondents, for some reasons, adopted a mild critical approach. However, validity of answers in the remaining parts of the questionnaire contradicts this statement.

As regards perceived negative aspects of computer conferencing, the time factor will be discussed first. Though 49 percent of trainees claim that the process of conferencing is time-consuming, the analysis of personal charts revealed that the trainees had spent on conferencing one hour per week on average. Compared to other activities carried out during the Clinical Year, the time allocated to e-conferences is negligible; however, the question remains why this activity is perceived like time-consuming.

Another issue to discuss is related to whether to state a compulsory number of contributions. 30 percent of trainees perceived this requirement negatively but active participation of learners is the alpha and omega of computer conferencing. Without obligatory participation there is no e-conference or after a promising beginning the momentum is difficult to sustain. Similar findings are reported by Reimannová (2008) who claims that a discussion forum with non-obligatory participation was used by three students only at the initial phase of the event; the tutor was the only person who answered students’ posed questions. Therefore, the tutors’ decision was not to tolerate non-participants though they were aware of possible consequences of insisting on compulsory participation, i.e. formal contributions or threat of triviality. These phenomena were perceived negatively by 23 percent of respondents.

Taking into consideration that the research was carried out in 2007 and 2008 it was surprising that 11 percent of trainees reported access-related problems. They either did not have Internet access at home or had difficulties to reach a computer connected to the Internet at their schools. The second case suggests that on the one hand it may be a matter of colliding schedules; on the other hand it may imply that the number of computers connected to the Internet at schools is not sufficient yet.

The last comment concerns the issue of tutor roles in the e-conferences. For the reasons stated above, the tutors did not play an active role in the discussions. However, one person viewed the tutors’ silence as a negative. S/he probably shared different expectation of the tutors’ role or missed the tutor as an authority.

7. Conclusion

In spite of a small-scale character of the research and a limited possibility to generalise the results, it may be concluded that the discussed blending learning experience proved to be a valid design for the specific context. Though the implementation of computer-mediated discussions poses high demands on online tutors in terms of time and expertise, the educational outcomes are worthwhile as confirmed by the research. Considering improvements for the future, possibilities for the use of synchronous events may be searched for to compensate for low fidelity of text-based interaction.

To conclude, there is one more aspect to highlight in relation to teacher education and to the vision that in the future the majority of learning systems will be blended (Graham 2006:6). By going through experiential learning future teachers gained real-life experience, which may be utilised one day in the “blended” future.

Literature

- [1] Anderson, Lorin W., and David R. Krathwohl, eds. 2001. *A Taxonomy for Learning, Teaching and Assessing. A Revision of Bloom's Taxonomy of Educational Objectives*. London: Longman
- [2] Bonk, Curtis J., and Charles R. Graham, eds. 2006. *The Handbook of Blended Learning: Global perspectives, Local Designs*. San Francisco: Pfeiffer
- [3] Černá, Monika. 2005. *ICT in Teacher Education: Extending Opportunities for Professional Learning*. Pardubice: Univerzita Pardubice
- [4] Černá, Monika, and Michaela Pišová. 2002. *Teaching Practice Guide for Assistants in the Clinical Year Project*. Pardubice: University of Pardubice
- [5] Coomey, Marion, and John Stephenson. 2001. Online learning: it is all about dialogue, involvement, support and control – according to the research. In Stephenson, J. (ed) *Teaching & Learning Online: New Pedagogies for New Technologies*. London: Kogan Page
- [6] Cox, Sam E., Clark, Wendy P., Heath, Hazel, and Ben Plumpton. 2000. Key Facilitation Skills for Effective Online Discussion Groups: Herding Cats through Piccadilly Circus. [online] Available from World Wide Web: <<http://www.com.unisa.edu.au/cccc/papers/refereed/paper11/Paper11-1.htm>> [cited 7 January 2003].
- [7] Graham, Charles R. 2006. Blended Learning Systems: Definition, Current Trends, and Future Directions. In Bonk, Curtis J., and Charles R. Graham, eds. *The Handbook of Blended Learning: Global perspectives, Local Designs*. San Francisco: Pfeiffer, s. 3-21.
- [8] Hara, Noriko, and Rob Kling. 2000. Students' Distress with a Web-based Distance Education Course: An Ethnographic Study of Participants' Experiences. [online] Available from World Wide Web: <<http://www.slis.indiana.edu/CSI/Wp/wp00-01B.html>> [cited 17 January 2003].
- [9] Harasim, Linda, Hiltz, Starr R., Teles, Lucio, and Murray Turoff. 2001. *Learning Networks. A Field Guide to Teaching and Learning Online*. Cambridge, Massachusetts: The MIT Press
- [10] Mallows, David. (2001) On-line Teacher Training. *The Teacher Trainer*. 15 (3): 3-5
- [11] Mason, Robin. 1998. Models of Online Courses. *ALN Magazine*. 2 (2) [online] Available from World Wide Web: <http://www.aln.org/alnweb/magazine/vol2_issue2/Masonfinal.htm> [cited 27 January 2003].
- [12] Moore, Michael G., and Greg Kearsley. 1996. *Distance education – A systems view*. Belmont, CA: Wadsworth
- [13] Obenausová, Světlana. 2009. *Možnosti využití ICT ve výuce cizích jazyků, s důrazem na e-learning*. Olomouc: PdF UP (unpublished dissertation)
- [14] Pišová, Michaela. 2005. *Klinický rok: procesy profesního rozvoje studentů učitelství a jejich podpora*. Pardubice: Univerzita Pardubice
- [15] Pišová, Michaela, and Monika Černá. 2006. *Pro mentory projektu Klinický rok. Vedení pedagogické praxe*. 2. přepracované vydání. Pardubice: Univerzita Pardubice
- [16] Reimannová, Irena. 2008. Využití informačních technologií ve výuce odborného anglického jazyka. Blended learning v cizojazyčném vyučování. (in press)
- [17] Salmon, Gilly. 2000. *E-moderating: the key to teaching and learning online*. London: Kogan Page
- [18] Salmon, Gilly. 2002. *E-tivities: The Key to Active Online Learning*. London: Kogan Page
- [19] Sengupta, Sima. 2001. Exchanging Ideas with Peers in Network-Based Classrooms: An Aid or a Pain? *Language Learning & Technology*. 5 (1): 103-134
- [20] Stephenson, John, ed. 2001. *Teaching & Learning Online: New Pedagogies for New Technologies*. London: Kogan Page
- [21] Wagner, Ellen D. 2006. On Designing Interaction Experiences for the Next Generation of Blended Learning. In Bonk, Curtis J., and Charles R. Graham, eds. *The Handbook of Blended Learning: Global perspectives, Local Designs*. San Francisco: Pfeiffer, p. 41-55.

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