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# *A closer look at blended learning – parameters for designing a blended learning environment for language teaching and learning*

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**Abstract**

In the course of designing, writing and implementing CALL-supported material, it has become evident to me that a systematic investigation into the factors that shape the Blended Learning (BL) experience in the context of language learning and teaching is missing and urgently needed. The core question when designing a BL environment is: Which combination of modes provides the optimal basis for language learning and teaching given the particular conditions at hand? In order to tackle this question, course designers need a framework of parameters that help them decide on the individual, context-related implementation of BL. It is the purpose of this paper to put forward a definition of BL and a framework of parameters for designing a BL environment. In order to achieve a better understanding of the factors that shape the practice and the experience of BL, the main parameters which form a BL environment will be listed and specified. These parameters evolved from the experience of designing Jobline LMU (www.jobline.lmu.de) and will hopefully prove to be helpful for the process of designing other BL environments. If applied successfully, the idea of BL could serve as a bridge between the broader community of language teachers and learners and CALL experts and practitioners. BL offers the potential of broadening the scope and influence of CALL and of (re-)establishing it as an innovative component of general language teaching.

## 1 Introduction

The approach of blending CALL applications with face-to-face (FtF) teaching and learning is as old as CALL itself. In fact, most language learners experience CALL within a BL environment. Therefore, the influences that shape the learners' perception of CALL emanate from their experience gained from learning with a combination of CALL and FtF teaching. On the basis of this experience, learners develop attitudes towards learning with the assistance of computer technology that is highly influential on the future of CALL. Taking these obvious interdependencies into consideration, it is striking that BL as such has hardly ever been the focus of scientific investigation (Kerres, 2001;

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Reinmann-Rothmeier, 2003; see Conclusion of this paper for lectures on BL). The obvious lack of theoretical conceptualization, of a research agenda and of qualitative research on the one hand is contrasted by abundant application of this approach to teaching and learning languages on the other.

Up to now, the development of BL materials and complex BL environments was primarily *practice-led* as opposed to research-based. Even though basing material development on intuitions that are informed by experience has often proved to be a good starting point, a principled approach that "provide(s) a vision or conceptualization of design" (Levy, 2002: 60) in relation to BL is needed. This paper suggests a framework of parameters specific to BL as a starting point for designing BL environments for language learning and teaching. Such a framework is needed in order to understand and to make transparent the complexity of BL environments and subsequently to make good use of BL.

The list of parameters presented in this paper is the outcome of the process of designing *Jobline*$^{LMU}$. After giving a definition of BL (Section 2), the *Jobline*$^{LMU}$ programme is briefly described (Section 3). In the fourth section, the parameters thought to be relevant for designing BL environments are presented and illustrated by examples from *Jobline*$^{LMU}$ and other BL courses. I will conclude with the proposal of using the parameters as a series of principled steps and issues to be addressed when designing for BL (Section 5). It is hoped, that in this way the list of BL parameters can contribute towards developing the most appropriate BL design for certain contexts of use.

## 2 What is Blended Learning?

Before listing and describing the parameters that are specific to a BL environment, a clear definition of what is signified by the term BL is needed. The following definition encompasses the aforementioned ideas. It applies to any learning context that involves computer assisted learning. In the context of this paper, BL is defined as a combination of face-to-face (FtF) and computer assisted learning (CAL) in a single teaching and learning environment. The most important aim of a Blended Learning design is to find the most effective and efficient combination of the two modes of learning for the individual learning subjects, contexts and objectives.

According to this definition two major modes are involved in shaping the learning process: CAL and FtF interaction. Both of these modes can facilitate a huge variety of different communication models, tools and forms that allow for the implementation of different language learning methodologies and the formation of different social settings (see Section 4). In the CAL mode, different sub-modes like web-based self-access learning material, e-mail, chat, Multi User Dungeon Object-Oriented (MOOs), message boards, net meeting and Personal Digital Assistants (PDAs) – to mention but a few – find widespread use. As far as FtF is concerned, it would exceed the purpose and the scope of this paper to start listing the myriad possibilities of shaping the learning experience in a contact teaching situation. Having made this distinction, it has to be stated that at first glance, it seems to be easy to draw a line between the two major modes; CAL can be seen as learning with the help of computers and, in contrast, we can think of FtF learning and teaching as an instructional environment that works in a classroom-based or other setting, without the help of computers. By simply considering the way in which

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modern classrooms will eventually be equipped with highly integrative mobile technology (Lea & Nicoll, 2002: 2), it becomes obvious that this distinction becomes increasingly blurred as we interact with, around, at, in relation to and through computers (Crook, 1994).

The focus in the definition given above is not on choosing "the right" or "the best", "the innovative" as opposed to "the traditional" media for presenting learning content; it is rather on creating a learning environment that works as a whole (Kerres, 2001: 277) by taking the learners' and teachers' dispositions, their aptitudes and their attitudes into account and considering the relationship of the protagonists in the learning process. These considerations serve as a starting point and a point of reference for formative evaluation in the design of a BL environment.

## 3 Jobline$^{LMU}$ – a Blended Learning project

At Munich University, a team of language teachers and multimedia designers developed CALL materials for the purpose of teaching students at German universities how to apply for a job in English. The project *Jobline*$^{LMU}$ provides job application training in English for students who want to apply for a job (internship, graduate traineeship and so on) in an English-speaking country. The programme offers a comprehensive package including basic information on the topic and language training modules. It also offers help with the written part of the application process and personal tutoring via e-mail.[1] The programme addresses all kinds of students at the tertiary level, regardless of their year of study, their focus of study and their mother tongue. Thus, we provide language training and factual knowledge input for a highly heterogeneous international group of students with only one common denominator, the interest in finding some kind of employment in an English-speaking country or company in the near future.

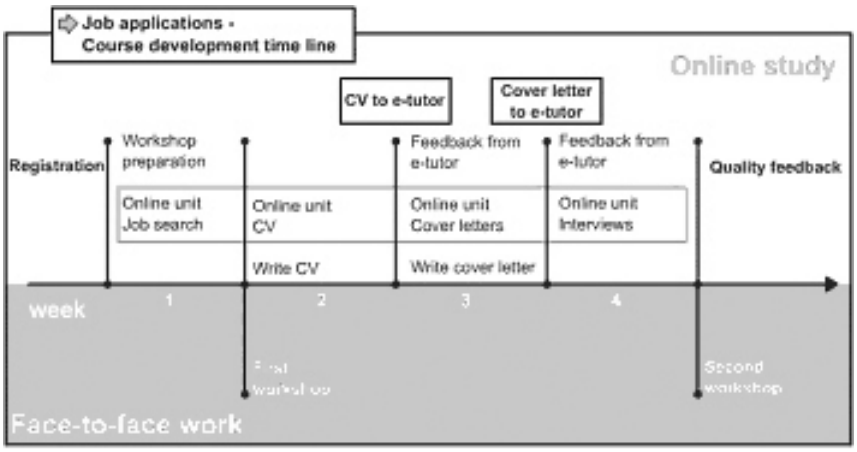



Fig. 1. "Job applications in English – overview of the learner path".

1. For further information, please see http://www.jobline.lmu.de.

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As part of our programme, we offer an introductory course "Job Applications in English". This course helps the participants to successfully apply for a job in English. The overview shown in Figure 1 illustrates the learning path that the participants take. In this diagram, the course is displayed on a time line. Each week of the course is given a number. The area on the white background is assigned to CALL. The tasks displayed in a box are self-access online-learning units. The area on the grey background denotes FtF workshops. In the first workshop, students are introduced to the topic by sharing their motivation to participate in the course and their previous job experience. They are given a short introduction to the concept of the course (BL) and participate in activities to prepare them for their job search and written application. In the online phases of the course the students receive online-training on how to write a CV and a letter of application. After completing the self-access learning phase, the participants are asked to write their own CV and letter of application. In turn, they receive advice and feedback by e-mail from an online tutor. The emphasis in this phase is not on correcting mistakes and improving the drafted documents but on enabling the students to improve their writing skills. After going online once again to be introduced to the topic of job interviews, the participants meet for the final FtF workshop, where they practise job interviews in English with the help of role play. At the end of 2003 about 500 students from different universities had taken part in the programme.

## 4 Parameters for designing a BL environment

The parameters listed in this section represent a selection of key criteria for designing BL environments for language learning and teaching. The considerations on BL and the parameters for BL design presented in this paper were derived from and influenced by the research and development project *Jobline*$^{LMU}$ at Munich University.

The following section deals with the parameters that can be used for guiding the process of creating a BL environment. At the beginning of the section, an overview (Table 1) of the individual parameters is given. In the overview the individual parameters are grouped into different categories. In the course of the next section I will describe the individual parameters and refer to SLA and CALL theory. In order to illustrate the points made, I will give examples from the *Jobline*$^{LMU}$ course "Job applications" and other BL environments. I will also make suggestions for best practice that are informed by student and teacher evaluation and feedback on the *Jobline* $^{LMU}$ course programme.[2]

### *4.1 Mode*

*Focus on mode*

In most BL environments, one of the two major modes dominates the learning process and experience. According to CAL theory, determining the lead mode is essential in securing a clear layout and a transparent structure of the course design (Kerres, 2001:

2. For evaluating Jobline LMU we have made extensive use of student and teacher feedback and statistical evaluation.

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276). The choice of the lead mode has to be made after a careful assessment of the learning aims, the learning subjects (students and teachers) and the infrastructural resources at hand. An unambiguous choice of the lead mode serves as a basis for clear communication of the overall learning aims, the organization of learning and the individual activities to all the participants involved in the learning process. Kerres lists the following criteria for determining the lead mode (Kerres, 2001: 277) of a learning environment. According to Kerres,

- the learners are guided through the learning process by the lead mode.
- the sequencing and organization of content or negotiation of content is done and presented in the lead mode.
- often the learners spend most of the time in the lead mode.

Following Kerres' recommendations on defining a lead mode in creating a BL environment can result in a very focused and structured learning environment. Therefore, focussing on one mode in the way described can act as a good means of creating and communicating the instructional clarity and focus that both learners and teachers need. Therefore, in developing CALL materials that require the use of different communication tools and settings, the designation of the lead mode in the BL environment has to be worked out firstly on the basis of the learners' and teachers' needs and capabilities and secondly on the requirements of the curriculum. For that reason, it is of paramount

Table 1 *Parameters describing and conceptualizing a BL environment for language learning and teaching purposes*

| Parameter | Individual descriptors |
|---|---|
| 1. Mode | • Focus on mode<br>• Distribution of modes<br>• Choice of modes |
| 2. Model of integration | • Sequencing of individual modes<br>• Level of integration |
| 3. Distribution of learning content and objectives and assignment of purpose | • Parallel or isolated |
| 4. Language teaching methods | • Use of teaching methods in each of the modes employed |
| 5. Involvement of learning subjects (students, tutors and teachers) | • Interactional patterns: individual vs. collaborative language learning activity<br>• Variety of teacher and learner roles<br>• Level of autonomy |
| 6. Location | • Classroom, home, outdoors, computer room, institutional settings |

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importance to form an image of one's learners (i.e. through the use of questionnaires or observation) before engaging in the course design in order to secure "learner fit" (Chapelle, 2001: 55).

While implementing *Jobline*$^{LMU}$ it has become obvious that most of our learners and teachers need to learn how to successfully work in a BL environment. This requires development of learning skills and strategies by careful guidance (i.e. through learner path, see Figure 1), and e-tutoring, training and opportunity for practice. Consequently, the proposed focus on one major mode recommends itself as a way to increase accessibility by reducing complexity, which could in turn help to further establish BL in the community of language learners and professionals. In future, we might be able to successfully deliver more complex learning environments that offer a higher degree of learner autonomy. For the moment, though, we have to keep in mind our learners' ability and willingness to deal with co-existing modes and sub-modes to inform, advance and shape the learning process. It would be well worth investigating how many different (sub-)modes within one BL course an individual learner can handle and productively use for fostering successful language learning.

Looking at the *Jobline* $^{LMU}$ course (Figure 1), it becomes clear at first glance that the lead mode is CALL with different sub-modes (self-access online-learning, guided web quest and e-mail). The learners are guided through the learning process via the online learning path and the online instructions given in each phase of the course. The FtF phases offer opportunities for role play and speaking practice. They do not provide systematic orientation throughout the course and should not act as a "repair shop" for lack of instruction and guidance within the CALL components of the course.

### *Distribution of modes*

The distribution of modes is an important parameter in the design of BL environments. It quantifies the use of the modes in relation to the whole process of instructed learning and shows which percentage of the learning process was spent in the individual modes. The most obvious way of quantifying the distribution is to consider the average amount of time that is purposefully spent in a particular mode. This point refers back to one of the criteria in determining the lead mode: the estimated amount of time a student spends working in a particular mode. In the course "Job applications in English" (graphic overview in Figure 1) we find the following distribution of average working time (Table 2).

Table 2 *Distribution of modes in Jobline LMU course*

| Face-to-face modes | CALL modes |
|---|---|
| Two workshops: 9 x 60 minutes | Self-access online-learning: 15 x 60 min.<br>E-assignments and communication with tutor: 3 x 3 x 60 min |
| 27% of total 33 hours | 73% of total 33 hours |

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There are a number of factors that informed the choice of distribution in the *Jobline*$^{LMU}$ programme. Three areas were carefully considered: firstly, questions that concern the curriculum (course content and aims); secondly, the students' and teachers' capability and readiness to work with certain technological tools; and thirdly, the institutional infrastructure and support. In our case we were certain we had the institutional support and funding to implement the CALL components of the course. After a phase of profiling, it became clear to us that our students and teachers were quite inexperienced in using CALL in general.[3] For this reason, we opted for FtF contact right at the beginning of the course and we paid great attention to the design of an online user guide. On top of that, we offered extensive teacher training and easily accessible material and information online. How curricular issues influence the creation of a BL environment will be illustrated in the next sections of this paper.

### *Choice of modes*

Most teaching situations subdivide the complex process of learning in a BL setting into two major modes: FtF and CALL. It is a highly complex decision to decide which components of FtF teaching and which components or sub-modes of CALL (i.e. online or offline self-access learning, synchronous and asynchronous communication, whiteboards) should be implemented to achieve the goal of successful BL.

In the CALL phase of the *Jobline*$^{LMU}$ course referred to in this paper, we make use of web-based self-access learning material to prepare for speaking and writing practice and online-tutoring via e-mail to teach the written part of the job application process. In the FtF phase of the course we offer opportunities for extensive role play and speaking practice for telephone and FtF-interviews. For evaluation of the course and the modes used, we looked at the development of student participation as one means of evaluating the students' acceptance of this voluntary course. Taking into account that especially the CALL components demand a high degree of learner autonomy (self-discipline and organizational skills) and motivation, the participation of the learners has exceeded our expectations. Within the course of the first two years about 350 students had participated in the programme. 68% of the participating students finished the course with the second workshop. This high rate of participation was probably due to a multitude of factors like clear focus on mode, careful sequencing of the individual phases, use of a variety of methodological approaches and other aspects of BL which will be illustrated in the following points.

## *4.2 Model of integration*

Once the choice of modes has been decided on, the adoption of a model of integration plays an important role in shaping the character of the BL environment as the sequencing of modes and their level of integration into the learning process determine the 'feel' of the course.

3. In a survey conducted in 2001, 255 (68%) out of 375 students from 7 different universities did not have any previous experience with CAL or CALL.

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*Sequencing of modes*

In theory, the only restriction on the number of sequencing patterns is the number of individual sub-modes chosen for the design of a learning environment. In practice, there is a limit on what can be done to achieve a 'positive impact' (Chapelle, 2001).

There are a number of ways to put different modes in a purposeful order. This can range from simply putting FtF phases in alternating succession with only one CALL sub-mode (i.e. e-mail or chat) to developing an elaborate succession of different sub-modes. The course "Job Applications in English" can serve as an example of an elaborate BL design. The individual modes must not only be sequenced one after the other; they can also be used in overlap or parallel to each other. In this kind of arrangement, one of the sub-modes (e.g. message board) can be made available constantly, running parallel to all the other processes. The message board can serve as a backup for communication. This might prove beneficial for maintaining contact and keeping up a direct line of communication. Particularly novices in e-learning and students whose autonomous learning skills do not match the level of expertise in learning required by the course will find this useful. Empirical research is needed into the effects on learner behaviour and learning outcome of combining and sequencing different modes in the BL environment. Chapelle's criteria for empirical analysis (Chapelle, 2001: 54f) would provide a good framework.

A concept referred to in the context of BL by Pennell and Seidel (2003) might prove to be helpful in targeting an appropriate line of sequencing: the degree of transactional distance. The concept of transactional distance was developed by Moore and Kearsley (1996). According to them, transactional distance is the "[…] physical distance that leads to a communication gap, a psychological space of potential misunderstandings between the behaviour of instructors and those of the learners…" (1996: 200). In their view, distance is a pedagogical phenomenon that manifests itself in the structure of a course and the opportunity for person-to-person communication within a course. In this context, "…structure expresses the rigidity or flexibility of the course's educational objectives, teaching strategies, and evaluation methods, it describes the extent to which course components can accommodate or be responsive to each learner's individual needs." (Moore & Kearsley 1996: 203). It offers the opportunity to attribute a certain degree of transactional distance to the individual use of modes and sub-modes of learning. For example, it would be correct to state that working with CD-ROM-based material with little social or collaborative character and no involvement of artificial intelligence, which could facilitate individualised feedback, would probably result in a high level of transactional distance. Communication tools that can facilitate collaborative work might, on the other hand, have the potential of reducing the distance experienced by the learning subjects. When considering the sequencing of modes, the criteria of the overall level of transactional distance can serve as a guideline for good BL design. Course developers can, for example, counteract dips in student motivation that are caused by a learning phase with a high degree of transactional distance by carefully combining modes of different socio-affective character.[4] After a phase of working with CD-ROM-based material with little social or collaborative character, an activity of high

4. For further investigation into the socio-affective conditions of SLA see Chapelle 2001: 50.

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connectivity with other members of the learning community (synchronous computer-mediated communication or FtF session following a communicative methodology) can be scheduled. One of the prime aims of Pennell and Seidel's work as course designers was to "minimise the level of transactional distance". This should be achieved by "ensur[ing] that they [the learners] would never feel isolated in their learning or uncertain about any of their activities" (Pennell & Seidel, 2003: 2). For developing *Jobline*$^{LMU}$, this notion has proven to be very useful in achieving good BL practice.

*Level of integration*

One of the often praised advantages of learning with the aid of computers is the amount of flexibility it can offer to the individual learner. One aspect of this flexibility is the opportunity to let students decide whether they consider an online-activity worth engaging in or not. The use of learning material or communication channels available in a course can be made optional or obligatory. Consequently, some modes within a particular BL environment can show a high level (obligatory use) or a low level (optional use) of integration into the whole course. In BL environments, FtF phases are often obligatory as they require human resources. The same applies to asynchronous interaction over the web. As shown, the level of integration of elements in a BL environment can vary considerably and, therefore, it needs to be clearly communicated to those involved in the teaching and learning process.

In the *Jobline*$^{LMU}$ programme, a lot of factual information on the job application process (e.g. bureaucratic procedures) is available online and online-training of specific vocabulary is offered. This kind of information and also the language items themselves are specific to the country the student wants to apply to. For that reason, it was an obvious choice to put the components of the course that deal with this topic area online and design them for optional use. As a consequence of this low level of integration, it must be assumed that individual students have differing knowledge in the area and a common ground of knowledge cannot be presupposed in the following FtF teaching phase. Viewed from the students' perspective on the course, study of these areas lies within their own responsibility, which leads directly to the question of learner autonomy (see section 5). Looking at the course as a whole, the overall level of integration has to be carefully considered. It can be speculated that, particularly when teaching inexperienced CALL users, a lot of free-floating course components might influence the learning experience and outcome in a negative way.

### *4.3 Distribution of learning content and objectives and assignment of purpose*

There are two ways of incorporating learning content and objectives into a BL environment: parallel or isolated. In the case of parallel incorporation of a certain skill or an element of the language system (for example the teaching and learning of speaking skills) both modes are used for teaching and learning. With regard to course design, this means that the teaching of a specific language function (i.e. introducing a new topic into conversation) could be presented online and then practised in a FtF role-play or introduced in a FtF phase and then practised during a synchronous chat session. In the case of isolated incorporation, the skill would exclusively be acquired within one of the two major

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modes. In the *Jobline*$^{LMU}$ courses the practice of speaking skills is dealt with only FtF. The preparation for speaking practice and the teaching of factual knowledge is mostly restricted to web-based self-access learning.

Another aspect to look at when planning or assessing a BL course is the assignment of a specific purpose or aim in the process of language learning to an individual task. Purposes or aims can be the introduction of new language and content or revision work, acquisition of intercultural competence, testing and assessment, to name just a few. Most modes offer a relatively neutral container that can be used to achieve a variety of teaching aims or purposes. For example, browser-based applications run on a PDA can be equally used for training new vocabulary or for testing purposes.

### *4.4 Language teaching methods*

In addition to the learning aims and objectives, the underlying learning and teaching method(s) likewise has/have a tremendous influence on the character of a course. In the context of CALL this is even more so because of the limiting nature of some CALL environments on communication, which leaves very little room for a spontaneous change in approach and procedure. In comparison, FtF learning can be much more flexible and open to changes in teaching methods. In courses that follow a BL design, the issue of method(s) becomes highly complex, as there can be three major sources of influence on the approach and the procedure of language teaching: i.e. the self-access online-material, the online-tutor and the FtF teacher. Considering the issue of methodology in the context of CALL, Levy states that "the methodology used in CALL is predominantly expressed through the design of the computer programme" (Levy, 1997: 109). In FtF teaching in the classroom the methodology is determined by the teacher's informed beliefs, subjective theories about learning, reflected experience and assessment of the actual situation and only then by a pre-determined choice of material that is put to use (Klippel, 2002). Teachers can choose from a wide variety and combination of teaching and learning methods and approaches (e.g. Communicative Language Learning, Grammar Translation Method, Community Language Learning, Task Based Learning, Problem Based Learning, Silent Way and Total Physical Response, to mention but a few) in order to meet the needs of their learners. Particularly, the further development of Problem Based Learning (PBL) holds a potential for innovation as far as methodology is concerned (Felix, 2002: 5).[5]

In a BL environment, the methodological approach within individual modes needs to be investigated bearing in mind the limitations on flexibility just mentioned. Either the same or a similar methodological procedure can be applied in both major modes. The use of a certain method can also be restricted to one of the modes. Even today, CALL is often associated with strongly guided methods that produce a rather rigid structure. Many BL environments try to counterbalance this methodological restriction by offering language learning that follows a communicative methodology in the FtF components of a course. More recent examples of BL have succeeded in broadening the

5. Look at http://www.medililingua.de for an example of how to apply PBL to learning medical English in a BL environment.

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methodological scope of the two modes towards a variety that caters better for different learners' needs. A good example for such an endeavour is *Prime Time* (Pennell & Seidl, 2002). *Prime Time* is a BL course designed to train primary school teachers to teach English to children. In order to enable synchronous communication a virtual classroom is introduced. This offers the participants and tutors the opportunity of communicative language teaching and learning not just during the FtF phases, which proved to be difficult to organise given geographic and organisational obstacles.

In order to cater for different learners' needs, achieving methodological variety across different modes could be one of the focal points of BL design. We might even find a new methodology that is highly specific to CALL and BL about to emerge.

### *4.5 Involvement of learning subjects (students, teachers and computers)*

*Interactional patterns*

The form of communication between the individuals involved in the process of learning shapes and determines interactional patterns. Individual work, pair work and group work are established forms of communication in a FtF teaching context. These interactional structures can also be found in CALL, though with other characteristics and the important agent, the computer (intelligent tutoring systems and feedback options), added. The interactional patterns that revolve around, through and with the computer can be listed as follows:[6]

Interaction through computers/networks (synchronous/asynchronous)

1. Student to student
2. Student to group of students
3. Group of students to individual student
4. Teacher/tutor to student
5. Teacher/tutor to group of students
6. Teacher/tutor to teacher/tutor

Interaction with computer/networks

1. Student and teacher/tutor to computer
2. Computer to student
3. Student to computer to different student

Interaction at computers/networks

1. Student and student in collaboration at the computer
2. Student and teacher/tutor in collaboration at the computer

Because of its added possibilities, computer-mediated or, in some cases, computer-generated communication has changed our idea of interaction that is shaped by direct human-to-human interaction. In a BL environment FtF interaction and synchronous or asynchronous computer-mediated interaction coexist and blend into each other. The learning subjects (students and teachers) communicate with each other in varying

6. Adapted from Crook (1994)

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combinations. Therefore, different cognitive and socio-affective processes are triggered and influence learning. When describing a BL environment, the analysis of the communication patterns involved is essential for understanding the workings of the learning process in a BL environment as a whole. But further research is needed to investigate the special conditions of computer-assisted communication and its potential for language learning in general. Only then can we start to investigate the effects of combining human-to-human and human-to-computer interaction in a BL setting on language learning.

For the time being, the enormous variety of interactional patterns gives the course designer the opportunity to combine and explore collaborative and individual forms of interaction in both major modes. This situation calls for heightened attention towards offering different kinds of interactions at the individual stages of the learning encounter. In order to keep the interaction manageable for the users, it is essential to be aware of the multifaceted web of communication patterns that might ensue and, as sometimes has happened in the case of unmoderated message boards, turn into an unmanageable component of a course that might offer only little opportunity for language learning.

### *Variety of teacher and learner roles*

The chosen type or pattern of interaction and the use of technology greatly influences the roles of the learners and teachers. According to Lam and Lawrence, "a role can be defined as what one does or is expected to do in a given environment" (2002: 299). In a BL setting, the use of FtF phases and CALL creates the environment. This environment determines whether the teacher acts as an instructor, a resource, an aid, a partner or a facilitator within the learning process even to the extent of a decentralized position (Civello, 1999). A similarly diverse scope of roles applies to the learners: they can act as recipients, as partners in an activity or as peer teachers and experts in a certain domain of the learning process and content. The switch from one role to another can be immediate and dynamic. Even though empirical research by Lam and Lawrence has shown that "the shift in classroom roles was not as significant as expected and was largely reminiscent of more traditional teacher-student roles observed in a communicative classroom" they also noticed an "increased awareness of the fluidity of their classroom roles" among students and teachers (2002: 295). What does this research finding imply for BL environments? It could imply that the learning subjects are faced with a much greater scope and variety of roles than if their actions were only restricted to one mode of learning. Consequently, the learning subjects need to have a great level of autonomy in the learning process. Therefore, the clear communication of the demands inherent in the interactional patterns is paramount. This applies particularly to the instructional creation of a BL environment in which the students, for example, might have to switch from a relatively passive role as participants in a highly structured self-access course component in which the course content has been pre-determined and organized into sizeable chunks, to that of an active participant in a collaborative problem-solving task or in a role play. An example from the teacher's point of view is the change of role from classroom teacher to online-tutor. If the tutoring of online-students is to be kept manageable as far as resources are

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concerned, the role of the online-tutor needs to be restricted in its functions. In the *Jobline* $^{LMU}$ courses, for example, the online-tutors are only asked to give students feedback on their written work in the course (e.g. CVs and cover letters). In order to maintain a certain role with limited functions, teachers need extensive training (Doff *et al.*, 2002).

*Level of learner autonomy*

It has been shown that BL environments are complex in many respects. In order to benefit from this new form of learning, students have to be able to succeed within settings that can hugely differ from each other. Particularly when learning in a BL environment, students have to know when to take action and when they can hand over responsibility. In order to do so, they not only have to be able to act as autonomous language learners but they also have to be able to handle different degrees of responsibility over the process and the content of learning.

For Moore and Kearsley (1996) the careful consideration of the issue of learner autonomy is central to the success of a learning environment: "What determines the success of distance teaching is the extent to which the institution and the individual instructor are able to provide the appropriate structure of learning materials, and the appropriate quantity and quality of dialog between teacher and learner taking into account the extent of the learner's autonomy." (1996: 205f). It needs to be added that the maintaining or restoring of motivation is of key importance to the success of any learning process.

Thus, the notion of learner autonomy in BL and its possible inconsistencies and contradictions in practice have not yet been sufficiently investigated. One step forward is Françoise Blin's forthcoming work on learner autonomy and CALL. Blin explores "learner autonomy as a multidimensional construct, which encompasses social and individual constructs" and proposes "cultural-historical activity theory" to provide an analytical framework (Blin, 2003). With the help of this new approach to viewing CALL she lays open contradictions in the supposed level of learner autonomy and the actual possibilities for autonomous learning built into course material and designs. It will be exciting to see how this analytical model can help to analyse the complex manifestation of learner autonomy in BL environments.

### *4.6 Location*

There are a number of locations where learning can take place: in a classroom, at home, outdoors, in a computer room, at a students' residence, at a bus stop and many more. Future applications (e.g. for PDAs, mobile phones or a device that merges the two) will further broaden the spectrum of possible learning locations. But the credo that learning can take place everywhere and anytime has come under scrutiny. Locations where learning takes place successfully are social and individual artefacts that are an integral part of a learning culture. They are loaded with information that influences habit formation and offers continuity as a positive prerequisite for learning. Therefore, it is essential to offer participants locations of learning that they are either already familiar with, or with which they can become familiar. The frequent

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use of metaphors of learning spaces like 'the campus', 'the library' and 'the study' in virtual learning environments pays tribute to this spatial dimension of human understanding.

In a BL environment there are always a number of locations involved in setting the scene for learning. At some stage of the learning process the participants will meet in a classroom which can be a traditional classroom or a classroom that is equipped with computers. In contrast to that, the participants will also spend a substantial amount of time learning with the help of computers, which can take place at home, at a computer facility provided by the organising institution or at any location where appropriate technology is accessible. Again, further research is needed into the influence of locally flexible, mobile learning on the outcome of learning. In the *Jobline*$^{LMU}$ training programme, the students met FtF in a classroom that is equipped with computers. But the course also allows for the FtF workshops to take place without computer facilities at hand and is therefore adaptable to the resources of the organisation that provides the training. Even though this array of locations looks fairly comprehensive, the organisers of the course have to pay close attention to the logistics of it and to view the course from the participant's perspective. It might be beneficial to build a local anchor point along with determining the lead mode (see Section 1) in order to bring in a stable sense of space and location.

## 5 Conclusion

Faced with the many possibilities of combining individual learning elements in a BL environment one might easily feel like a child in a toy shop. We are confronted with an amazing variety on the one hand and a very complex task on the other. BL courses are only going to foster successful language learning if they are carefully designed on the basis of an analysis of the participants' needs and abilities. From this point of departure, the parameters presented in this article can provide a flexible framework for a user-friendly and effective design of a BL environment for language learning. This could help course designers and practitioners to move closer to answering the initial question of which combination provides the optimal basis for language learning and teaching given the particular conditions at hand.

In the realms of BL there is still a lot of undiscovered territory to be explored and mapped out. BL will play an important role in the future of CALL and its implementations in everyday teaching practice. Therefore, we need to learn more about its workings. This paper has outlined a framework for designing and then describing BL environments with a focus on requirements that are specific to the teaching and learning of languages. It has been stated that further research is needed in order to enhance the quality of BL environments. The application of Chapelle's SLA-led criteria for CALL qualities ('language learning potential', 'learner fit', 'meaning focus', 'authenticity', 'impact', 'practicality') could provide a good starting point for achieving this goal (Chapelle, 2001).

7. List of presentations with an explicit focus on BL in alphabetical order: Gabriele Abermann, Sabine Braun and Kurt Kohn, Petra Neumeier, Dieter Wolff and Siew-Rong

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Governments, educational institutions and educational professionals should start to think of e-learning as one element of successful learning environments. At the 2003 EUROCALL conference the concept of BL served as a point of focus for a keynote lecture, many papers and presentations.[7] Hopefully, this indicates that a future area of investigation within the broad domain of CALL and general research and practice of language learning and teaching is about to emerge.

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