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A road to understanding: A qualitative study into why learners drop out of a blended language learning (BLL) environment

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Abstract

This paper addresses the views of students of blended language learning (BLL) – a particular learning and teaching environment, that combines face-to-face (f2f) and computer-assisted language learning (CALL). In this instance, the 'blend' consisted of learners' independent self-study phases at a computer, with a CD-ROM, and traditional f2f classroom learning. This paper explores this BLL environment from the participants' perspective and focuses on three learners who left the class. The aim of the study was to understand the reasons behind those students' decision to leave, so that ideas might be developed for the successful implementation of BLL environments in the future that would appeal to all learners. The analysis showed that students left the class for three reasons: a perceived lack of support and connection/complementarity between the f2f and computer-assisted components of the 'blend'; a perceived lack of usage of the paper medium for reading and writing; and the rejection of the computer as a medium of language learning. The paper concludes by pointing out implications for the possible future of BLL.

Keywords: blended language learning, CALL, course-leavers, face-to-face learning, learners' views

1 Introduction

This paper forms part of a larger research project investigating the views of students and teachers within a particular learning and teaching environment that combined traditional classroom-based, instructor-led learning with technology-based learning. Such combinations of two or more approaches to learning are nowadays often referred to as blended learning (BL) (Neumeier, 2005), sometimes as hybrid or mixed learning (*Blended learning,* 2004; *Blended learning,* 2006; see also Driscoll, 2002; Harvey, 2004 for a good overview of various definitions). BL is a fairly new term in education. It usually refers to a teaching and learning environment that utilizes computer technology, which has spread with the proliferation of computer technology in education. In the

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particular learning and teaching environment under study, the BL components consisted of learners' independent self-study phases at a computer, with a CD-ROM, and traditional f2f classroom learning.

The main research focus of the larger study is the exploration of a particular BLL environment from the participants' perspective. For this purpose, I surveyed and interviewed students and lecturers in French and Spanish classes for beginners at the Language Centre (LC) at the University of Münster, Germany. BLL was new for all learners and teachers involved in this research and constituted a major change compared to their previous language learning and teaching experiences and habits: in the classrooms under investigation *none* of the teachers or students had prior exposure to learning or teaching a foreign language with the help of a CD-ROM. Likewise, self-directed study phases at the computer, as an integral part of the learning environment, were a novelty.

This study deals specifically with the BLL environment, as opposed to the use of technology alone (compare Dewar & Whittington, 2004: 5, who emphasize this distinction as well as the lack of empirical studies addressing BL, as opposed to "some anecdotal evidence about how well participants liked blended learning"). At the beginning of the research, the term BL was not yet established, so the German expression *Verzahnung* ('linking' or 'combining') was used instead to describe the phenomenon under investigation in earlier publications. However, it now seems appropriate to adopt the term BL, as it accurately describes the particular learning and teaching environment and places the study in a broader research context.[1]

The goal of the larger study, and indeed this paper, is the exploration of a particular BLL environment from the participants' perspective. However, this paper concentrates on the perspective of a small subgroup of learners, who dropped out of a class combining computer-assisted self-study periods and f2f sessions (such a class being referred to herein as a BLL class or blended class). This group is without doubt underrepresented in studies into learners' views. The views of three students in the BLL classes, and the reasons why they dropped out, were of particular importance, as these students helped in understanding why the BLL class failed for them, and also in developing ideas about the steps required to avoid highly motivated learners leaving a BLL class in the future, by assisting them to appreciate such an educational environment.

This paper discusses, firstly, the theoretical background, and then introduces the methodology and the research design of the study. In the analysis section, a short summary of two major findings observed in the complete dataset of the broader study precedes the detailed discussion of the three case studies of the course-leavers. The paper concludes by elaborating some implications for the further planning of BLL environments.

2 Theoretical background

In this section, a short survey of research into BL in the area of language learning and

1. I agree with the suggestions of one reviewer who pointed out that, as a new frame of thinking, BLL should draw, for instance, on the use of different media and different modes of working. However, this study looks at an instance of practice as it presented itself, albeit limited, at the time.

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teaching and beyond precedes a discussion of the rationale behind the concept of BL.

2.1 BL as a research topic

BL was "high on the agenda" (Thompson, 2005: 162) in the second 2005 issue of *ReCALL*, in which a significant number of articles dealt explicitly with BL in language learning contexts. Neumeier (2005) states, correctly in my view, that the "approach of blending CALL applications with face-to-face (FtF) teaching is as old as CALL itself" and that "most language learners experience CALL within a BL environment" (*op. cit.*: 163). Neumeier (2005), among others, then highlights the practical applications of BL (compare also Hotter, 2005 and Lamping, 2004). Despite these studies, there is a striking lack of research into BL, an "obvious lack of theoretical conceptualisation, of a research agenda, and of qualitative research" (Neumeier, 2005: 164).

A brief look at BL in the broader context of education shows that the apparent gap between practice and theory that Neumeier (2005) observed for language learning and teaching seems less pronounced in education in general. In the *Handbook of blended learning*: *Global perspectives, local designs*, Graham (2006) states that BL "is being used with increased frequency in both academic and corporate circles". The current lively and highly critical discussion regarding the definition of BL (also putting into question the actual usefulness of the term), and the availability of such a handbook (see also Thorne, 2003) serve to illustrate that, in other areas of education, the concept has taken root and is practically applied as well as theoretically conceptualised (see, for example, Oliver & Trigwell, 2005).

However, it is true that, in the area of language learning and teaching, much work still needs to be done regarding the scientific investigation of BLL (compare Lamping (2004), who uses this term in her project report). Neumeier (2005) emphasizes the importance of students' attitudes towards learning with the help of technology, as these will be of great importance for the future of CALL. By investigating the attitudes of both students and teachers towards such a BLL environment, this research aims to reduce, to some extent, the observed gap between practice and theory.

2.2 The rationale behind BL

With regard to reasons why BL has been selected over other learning options, critical voices would say that its recent emergence is a consequence of the failure of many e-learning environments, that is those learning environments without any f2f component (compare *Blended learning* (2004)). This failure points to the irreplaceable human component in any learning experience that cannot be ignored, but must form part of the learning experience.

Taking a more positive approach, one can locate a number of good reasons why BL can be regarded as an effective learning and teaching environment. According to Graham, Allen & Ure (2003, as cited in Graham (2006)), there are three main reasons for choosing BL: "(1) improved pedagogy, (2) increased access/flexibility, and (3) increased cost effectiveness" . Not unexpectedly, corporate and academic circles will emphasize different reasons for their choice of course delivery (compare Namenwirth (1997), Reinmann-Rothmeier (2002)); educators will, without doubt, place the most

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emphasis on the pedagogical rationale for BL that lies in the encouragement of more student-centred approaches to learning.

It seems crucial to realize that "blended learning means different things to different people" (Driscoll, 2002) and that a definition of BL "depends upon the context and purposes of the developers" (Dewar & Whittington, 2004: 4). The purpose of this pedagogically oriented research was to study BLL by exploring the views of participants, students and teachers.

3 Methodology

This study has taken a phenomenological approach and is aimed at describing the participants' experience from their point of view. The investigation of the role played by the views, beliefs, and attitudes of students and teachers in Second Language Learning/Teaching constitutes today an increasing body of research literature, although it has arrived rather late in educational linguistics (Kalaja & Barcelos, 2003). Research into the views held by students and teachers on the issues investigated in this study – using technology in language learning, CALL, self-access, and so forth – is also slowly growing and is helping to expand our knowledge of the participants' point of view (e.g. Benson & Lor, 1998; Cotterall, 1995; Dhaif, 1990; White, 1999). This paper contributes to this earlier research on learners' views by focusing on a particular group of learners who disliked the BLL experience to such a degree that they left the class after a few weeks.

It is important to point out that this group of course-leavers is only a subgroup of all the students who participated in this project and attended the BLL classes. The interviews were conducted with this group of students, so as to ascertain their reasons for dropping the class. Such 'extreme' or 'critical' cases are interesting to study as they assist in the exploration of a field of investigation from its margins (Flick, 1995: 87; Strauss & Corbin, 1990). Understanding why students drop a BLL class has implications for the future planning of BLL environments.

The following sections offer background information about the research interest and setting, the software used, data collection and participants, and data management and analysis so that the reader may apply it to similar contexts.

3.1 Research interest

The research interest of this study is the exploration of the BLL experience from the participants' perspective. To understand its genesis: (1) As my position has changed from teacher, teacher/researcher to researcher, and given my lecturing in this particular context, the research interest (as well as the research methods used) *developed* over time; (2) the initial research interest into students' views was supplemented by an investigation into teachers' views on the BLL experience; and (3) finally, the first data-gathering instrument (questionnaire) was complemented by semi-focused interviews that turned out to be the more valuable instrument.

The two latter moves ensured both method and data triangulation. Such a development is by no means unusual in qualitative research, since insights gained during the research process lead "again and again to a revision and precision of original

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concepts and procedures" (author's translation of [„immer wieder zu einer Revision und Präzisierung der ursprünglichen Konzepte und Verfahren"], Müller-Hartmann & Schocker-V. Ditfurth, 2001: 3).

3.2 Research setting

In the mid 1990s, the LC installed its first computer laboratory. In 1994, I taught the first BLL class (Beginners' French). Between 1995 and 2001 more such classes in French and Spanish were introduced in addition to or instead of the conventional, coursebook-based classes. In these classes for beginners and intermediate learners, students with no or little prior knowledge of the language engaged in a f2f language class in a traditional seminar-style. Between these class sessions with their teacher, students were expected to work independently with the multimedia CD-ROMs *Think and talk French/Spanish or Learn to speak French/Spanish* in the computer laboratory.[2] After an initial introduction to the software, the students were advised to prepare for the following classroom session by working independently in the computer laboratory. Most teachers expected their students to prepare for a certain number of lessons from the CD-ROM for the next class meeting. The majority of language classes at the LC run over ca. 12-16 weeks (1 semester), with each session lasting 90 minutes.

As project leader, I recommended meeting with students every week for 90 minutes (like any other language course at the LC), but also alternating between compulsory and optional sessions, during which the focus would be on revision only. This arrangement was meant to allow students increased flexibility and was in consideration of their busy timetables. In addition, classroom sessions were recommended for communicative activities, as new information such as grammar or vocabulary had already been presented in the software program during self-study.

It seems important to keep in mind, however, that it was ultimately up to the teachers to decide how they wanted to direct the class, and there was substantial variety among the nine teachers who participated in the study (Stracke, 2004). However, classroom observation was not part of this research project in investigating the BLL experience from the participants' perspective. One cannot know what exactly happened in class for particular students and further research needs to address this issue.

3.3 The software

Two computer programs (CD-ROMs) were used in this project. Both programs are for beginners, written for self-study purposes, and present the material in a structured way. From today's point of view, they can critically be described as behaviouristic (Warschauer, 1996, as cited in Davies, Walker, Rendall & Hewer, 1999–2006: section 3),

2. The staff of the LC had the opportunity to attend workshops offered to make the teachers familiar with the new technology and most teachers took part in one or more of them. As for students, the availability of support staff in the computer laboratory was deemed to be sufficient to make up for any lack of technology-related knowledge on their part. Furthermore, it was the teacher's task to give a short introduction on how to work with the CD-ROM in the first class meeting.

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as the computer basically plays the role of tutor in delivering materials to the learner. Both are also earlier CALL software. In this research, the actual situation as it presented itself at the research site was investigated and, hence, drew upon resources (i.e. software programs) available at the time, as opposed to what might or should have been available, and what one might consider desirable, be it at the time or with today's knowledge.

Furthermore, this research addresses specifically the BLL environment, as opposed to the use of technology or specific software alone. The data shows that the software used has, to a certain extent, influenced the views of learners and teachers on the broader issue of the BLL experience, but both distinguished clearly between their views on the software and their overall BLL experience (Stracke, 2005).

3.4 Procedure

The total database consisted of student questionnaires (N = 190) and semi-structured interviews (35 interviews with 32 students; 22 interviews with 9 teachers). These interviews present the primary data for this project.

3.4.1 Participants

The students involved in the project were located at the University of Münster, Germany between the summer semester of 1994 and the winter semester of 2000–2001. They were enrolled in at least one of the French and Spanish classes surveyed. Biographical data was collected from the 32 students interviewed (22 female, 10 male). Most were undergraduates in their early twenties and, indeed, most students in all classes at the LC, including the classes surveyed, fall into this broad category. Student motivation to attend the class differed widely, which added to the mixed nature of the sample: some students needed a language component to fulfil the requirements of their major, others attended out of personal interest, such as for the purpose of travel.

The teachers interviewed (6 female, 3 male) were between 30 and 50 years old and most had between five and fifteen years of teaching experience in tertiary and/or adult education. All teachers were casual staff, like the vast majority of teaching staff at the LC.

3.4.2 Data collection

In Step 1 of the data collection procedure, learner questionnaires were used to investigate the students' views. The questionnaires were collected between the summer semester of 1994 and the winter semester of 2000–2001. Semi-focused interviews were conducted: student interviews between February 1996 and September 2000, and teacher interviews between October 1997 and December 2000.

Brief description of questionnaire

Given that a questionnaire was the initial research tool used to gain an insight into the views of learners in the BLL environment, it was comprised of a mixture of closed and open-ended questions (Nunan, 1992: 143). The open-ended questions were aimed at investigating the respondents' broad views on the BLL environment (e.g. "You have been participating in this French course for several months now. What is your overall impression?") Other questions dealt with more specific aspects of the learning environment and focused on the software or the self-study phases (e.g. "You have been

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working with the software *Think and talk French* in the computer lab […] What do you think of this kind of preparation/self-study in the computer lab [….]"?)

Selection of interviewees and description of interview guideline

In my classes, students were asked whether they wished to participate in an interview. In all other classes, the questionnaires contained a short paragraph in which the respondents were invited to speak with me regarding their learning experience in this language class and were asked to provide their contact details.

The opportunity to conduct interviews with the three students who left the class after a few sessions came about due to my presence in the LC's computer laboratory that provided me with an opportunity to get in touch with one of the three interviewees, who mentioned the other two course-leavers. Two interviews were conducted f2f, while one interview was by telephone, as the student's timetable did not allow for a f2f encounter. The interview atmosphere was always relaxed and open, and all three students frankly expressed their point of view.

The interview guideline was comprised of open questions so as to ensure that the research partners could express their views on the BLL experience both in general and as regards the more specific aspects of their choice. Questions from the student interview guideline were, for instance: "What is your overall impression like? What kind of experiences have you made over the course of the semester? […] What was maybe particularly irritating? And was there also something exceptionally good?" or "How would you evaluate the linkage of self-study in the computer lab with the classroom sessions?"

3.4.3 Data management

The questionnaire data was entered into a database and the interviews transcribed.

Questionnaires

The questionnaire data was processed in a database, using *Filemaker Pro 4.0*. Each questionnaire was numbered so that access to the information in individual questionnaires was easy to track. Based on the questionnaire items, the information provided was entered under specific headings into separate fields such as semester, class, overall impression, usage of materials, regular attendance, and so on. The information given in the individual fields yielded useful lists presenting the data for each question in an unstructured way.

Interviews

The interviews were transcribed verbatim. Each transcript was labelled indicating the interviewee (given a pseudonym) and the date when the interview was conducted (e.g.: Iv/Anna/030398).

3.4.4 Data analysis

The questionnaire and the interview data underwent separate analysis.

Questionnaires

The open-ended questions yielded verbal answers of differing length from the students.

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The free-form lists prepared with the help of *Filemaker Pro 4.0* permitted a focus on the individual question. Due to the nature of the open-ended questions asking explicitly for an evaluation, the data was quantified in order to discover how many of the collected answers would mirror a mainly positive, a negative, or a critical attitude towards self-study in the computer laboratory, the software used, and the BLL environment in general. A critical attitude was characterized by the student's careful evaluation and judgement of the perceived positive and negative aspects. As inserting answers in one of the three categories was not clear-cut, a second rater quantified the data. Interrater reliability (Nunan, 1992: 15) was high (see Stracke, 2005 for details). It remained to reduce the long list of free-form data to manageable portions (Nunan, 1992: 145), which then led to the generation of categories. The processing of the closed questions likewise yielded lists, with students' answers, that were analyzed by looking for general tendencies.

Interviews

All interviews were individually analyzed, starting with the repeated reading of all transcripts, so as to ensure a good overall sense of the complete dataset. As the research interest was designed to understand the participants' views, no work was undertaken with any *a priori* categories when analysing the data. For each interview, there was a short description of the case that included biographical data, and, most importantly, the 'typical statement'– the motto of the case. The data was analysed by identifying salient and repeated themes, subsequently grouped, for each case, into categories.

Strauss & Corbin's (1990) paradigm model, as well as Flick's (1995) thematic coding, proved very helpful in the analysis (see Stracke, 2006 for further details). Strauss & Corbin's proposal for staying focused on the phenomenon under investigation by asking questions like: "What is this data referring to? What is the action/interaction all about?" (Strauss & Corbin, 1990: 100) was extremely valuable, allowing for a constantly high level of concentration. Flick's (1995: 206 ff) proposal for 'thematic coding', a multi-step procedure, proved a useful guide for the data analysis.

Major categories in the data from both students and teachers were ascertained by examining all the cases together. Finally, the comparison of students' and teachers' views revealed interesting matches and mismatches between the two groups.

The overall results of this study were presented in Stracke (2005) and are summarized in section 4.1 below. Section 4.2 examines the three case studies, the results of which will be discussed and subsequently related to the overall findings of the larger study.

4. Findings

It seems useful to stress that the analysis of the complete dataset showed a *predominantly positive nature of the students' views on this particular BLL environment* (Stracke, 2005). However, in this paper, the principally negative view of the three course-leavers prevails.

4.1 Overall findings of larger study

Two major differences transpired when comparing the views of students and teachers on

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their BLL experience. Firstly, the reaction to the CALL self-study periods and the software used differed considerably. "Whereas students deal critically with [i.e. carefully evaluate] their learning process during self-study, teachers do not always show much awareness of their students' self-study periods at the computer" (Stracke, 2005: 416). Moreover, whereas the vast majority of students dealt likewise critically with the software, identifying positive and negative aspects (often comparing it with a course-book), most teachers focused on the software's weaknesses.

Secondly, the attitude towards the BLL environment of the two groups differed. While the great majority of students clearly expected, recognised and accepted the learning environment with its complementarity of self-study and class work, some teachers struggled with the integration of the self-study period into their teaching (refer to Stracke, 2005 for an interpretation of these results).

4.2 Case study findings

The three course-leaver cases are covered below. A short profile focusing on the interviewees' language learning biography, their present study, and background information regarding their decision to attend the BLL class precedes the discussion of their reasons for dropping the BLL class.

4.2.1 Case study 1: Anna

Anna, 26, is an experienced and very successful second language learner (L1 = Croatian; L2s = German, English). Indeed, she passes easily as a native speaker of these L2s. Anna migrated to Germany in her early twenties from the former Yugoslavia. At the time of interview, she was studying English for a Master's Degree. In her part-time job as an assistant in the LC, she belonged to the team of student support staff in the computer laboratory. This reflects her high interest in IT, a subject she had studied at her former university.

Anna identified her main reason for dropping out as being the lack of support she experienced in the BLL class. An additional reason was the lack of printed materials for self-study, particularly regarding grammar learning.

Lack of support

The unacceptable lack of support led to her 'giving up' on this class:

Example 1

Und zwar eh, ich glaube, ich hatte eh immer noch Hoffnung bis zu Lektion achtzehn, zwanzig oder so. […] Und ehm, da sich das gar nicht mehr geändert hat und für mich überhaupt wirklich schwierig war, dann eh ja alleine zu lernen und gar nicht eh unterstützt zu werden in dem Kurs, eh habe ich dann wirklich aufgegeben.

Translation

And that is eh, I think, I had eh still some hope up to lesson eighteen, twenty or so. […] And eh, as nothing had changed and as it was really difficult for me, to learn eh yes by myself and not to be supported at all in the course, eh then I really gave up (Iv/Anna/030398, 47-50).

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Anna pointed out that she was quite happy with the software but, especially as a beginner learner, she wished to be supported more. As a consequence of her unfulfilled expectations, she neglected the self-study periods, as she thought it did not really matter whether she worked with the CD-ROM or not. She subsequently fell behind and finally dropped the class.

When reflecting upon possible reasons for this development, she referred to her way of learning. She described herself as a learner who needed more support – a 'firm path' ("einen festen Weg", Iv/Anna/030398, 435) – when undertaking self-study, and expected the teacher to repeat and discuss with clarity what had been covered during the preceding self-study periods. The desire for more support can therefore be interpreted as a need for complementarity between the two components of the blend that, for her, did not fit together.

Furthermore, she thought that more teacher control and pressure were important, both for her and the whole class. Lists of attendance and regular tests, for instance, would have been beneficial:

Example 2
Wir waren ja alle so. Wenn man das nicht muß, dann macht man das auch nicht.

Translation
We were all like that. If you do not have to [do it], then you simply don't do it (Iv/Anna/030398, 397-398).

Lack of print materials

Anna's feelings of discontent were reinforced by the perceived lack of print materials for reading/studying in this class. Even though there were various options available for students to use print materials,[3] and Anna also took notes during classroom sessions, she felt that she had nothing she could rely on in her notes:

Example 3
ich hatte nichts Richtiges im Heft.

Translation
I had nothing real in my notebook
(Iv/Anna/030398, 171).

She particularly missed typical conjugation and declension tables and exercises to complement the perceived insufficient presentation of grammar in the software, as she saw herself as a cognitive learner who wanted to understand the structures she was using and not just repeat them. Again, she explained this by referring to her own background in language learning during which she had experienced 'proper school teaching' ("richtig schulischen Unterricht", Iv/Anna/030398, 148), based on a grammar approach to learning the language, especially at a beginner's level. Anna was also aware of her

3. All the teachers who taught these classes also regularly provided their students with handouts in addition to the materials available from the CD-ROM. Additionally, a folder with printouts of all texts and exercises on CD-ROM was available for photocopying.

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peers' general high appreciation of the BLL class and, at one moment in the interview, expressed a little regret that she was not able to learn that way. She thought of herself as not being spontaneous enough for the blended class, which she regretted, and which sometimes even annoyed her. However, it should be recalled that her previous very successful language learning background does not indicate a need for her to change her way of learning.

4.2.2 Case study 2: Karen

Karen, in her mid-twenties, is an experienced language learner (L1 = German, L2s = English, Russian). During the winter semester of 1997–98, she was studying German with the goal of becoming a secondary school teacher. She first heard of the blended Spanish classes during her work as a research assistant for computer-based data transcription in the LC. She was keen to do this particular Spanish class because of its CALL component, as she was curious to get to know this kind of learning. Karen arrived well prepared, with notes, for the interview. She had prepared a list of issues she wanted to mention, as she knew beforehand that I wished to hear about her reasons for dropping the class.

Her first reason was a strongly perceived lack of connection between the self-study phases and the classroom teaching. Secondly, she was very critical of the perceived lack of usage of print materials for reading/studying and, in particular, writing.

Lack of connection

Karen described her discontent with the lack of connection between the f2f and the CALL component in her notes:

Example 4

2. Stunde: Gramm[atik] der Lekt[ion] wurde relativ schnell abgehandelt -> neues Thema behandelt/auf inhalt[liche] Lektionsvorbereitung wurde fast gar nicht eingegangen -> Motivation sank -> mir fehlte der Bezug zwischen der Arbeit am Computer u[nd] der Unterrichtsstunde.

Translation

2nd classroom session: Grammar of lesson [of *Think and Talk* software] was relatively quickly dealt with -> new topic was treated/there was almost no reference to the contents of the lesson -> motivation sank -> I missed the connection between the work at the computer and the classroom session
(Notes/Karen/27/02/98).

She missed a connection or thread ("der rote Faden", Iv/Karen/270298, 350) that would allow her to make sense of the blend. The communicative exercises the classroom sessions focused on, even though very much appreciated, did not help her with making this connection. It is interesting to observe that, in contrast to Anna, Karen emphasised that she greatly enjoyed working on her own at the computer:

Example 5

Also weil mir die Arbeit am Computer schon großen Spaß gemacht hat. […] Ich

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fand das auch schön, daß man dann so ein bißchen für sich alleine da saß, und einfach - alleine schon, daß man den Kopfhörer auf hatte - so ein bißchen in eine andere Welt versetzt worden ist. Das fand ich eine ganz tolle Erfahrung. […] Weil ich so noch nie eine Sprache gelernt habe.

Translation
Well because I really had great fun when working at the computer after all. […] I also found it beautiful that you could sit there, a little by yourself, and simply – just because of wearing the headphones – be a little transported into another world. I found that was a really great experience. […] Because I have never learnt a language this way before
(Iv/Karen/270298, 471-78).

She wished the relationship between the two components to be one in which the computer work complemented and supported the classroom teaching, and not vice versa. She differed from Anna in so far as she did not have many questions after having worked through the lessons on the software. For her, complementarity could be realised if the teacher assigned precise tasks for the self-study periods that would then be taken up in the following classroom session, and she suggested concrete examples.

Like Anna, she also explained her decision to drop the class by referring to her way of learning. She described herself as a learner who needed clear tasks set by her teacher:

Example 6
Aber ich habe in dem Sinne keine Aufgabe gekriegt. […] Also für mich ist es wichtig, daß ich genau weiß, was ich machen soll.

Translation
But I have not received any real task. […] Well, for me it is important that I know exactly what I am supposed to do
(Iv/Karen/270298, 133-135).

Lack of print materials

Her second reason for dropping the class was the strongly perceived insufficiency of printed materials with regard to studying and reading as well as writing. The following statement sums up the importance she put on what she called ‘traditional learning’, writing by hand on paper and reading from paper materials:

Example 7
Nee, nur brauch ich auch dann dieses ehm traditionelle Lernen, immer noch dieses Schriftliche vor mir haben. [...] Aufschreiben und zu Hause dann nochmal angucken.

Translation
No, I also need this eh traditional learning, still this written stuff in front of me. [...] Take notes and have a look at them again at home
(Iv/Karen/270298, 381-383).

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Karen stressed that she photocopied the above-mentioned printed materials (see footnote 3) at the very beginning of the class, a clear sign for her that she needed something in print on paper, 'something solid' ("etwas Handfestes", Notes/Karen/27/02/98) for her work at home:

Example 8
Ich kann es nicht nur am Computer machen, sondern ich brauch etwas schriftlich vor mir liegen, was ich dann mit nach Hause nehmen und mir dann vielleicht zu Hause nochmal durchlese.

Translation
I cannot only do it at the computer, but I need something written in front of me, that I can take home and which I can have a look at again at home
(Iv/Karen/270298, 360).

Karen regretted even more the related lack of writing opportunities, such as writing by hand on paper. Writing helped her to memorize the material better:

Example 9
Aber ich fand es nochmal interessant, das auch nochmal mit der Hand zu schreiben einmal. […] Genauso habe ich mir auch die Vokabeln mit der Hand rausgeschrieben.

Translation
But I found it interesting to write this down again by hand. […] That way I also noted the vocabulary by hand
(Iv/Karen/270298, 399-402).

4.2.3 Case study 3: Clara

Clara (21) also had previous language learning experience (L1 = German, L2 = English). At the time, she was in her fourth semester, preparing for a Masters in Political Science. Clara enrolled in the blended class without knowing beforehand about the CALL component. She had expected a conventional Spanish class and was keen to attend in preparation for her upcoming practicum in Chile.

Whereas the interviews with Anna and Karen had taken place shortly after the semester, this interview took place some months later. Clara sometimes struggled to remember details, but still conveyed unmistakably her main reason for dropping the class: a general dislike of the computer component. It is interesting to speculate whether the greater distance between the interlocutors in a telephone interview, compared to f2f, allowed for her frankness. Whereas Anna's and Karen's reasons for dropping out of this class were, to a certain degree, comparable, Clara's reason was unique. She said explicitly that she found working with the computer 'really difficult' ("echt schwierig", Iv/Clara/150798, 45) and would have preferred teacher-led sessions all the time. She assessed the software program as basically good, except one step (Step 4, *Think and talk Spanish)* that requires the learners to repeat and record their voice. She described doing this exercise in the computer laboratory as 'embarrassing' and 'unpleasant' ("peinlich", 74, 80; "unangenehm", 83).

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Rejection towards learning a foreign language at the computer

Her overall attitude indicated a strong rejection towards learning a foreign language at the computer:

Example 10

Also, ich fand das einfach/ das war einfach nicht so nett, am Computer zu lernen so. […] Ja, daß/ ach, daß man da so halt am Computer sitzt, und versucht, so eine Sprache zu lernen. […] Das ist irgendwie so, steril und unpersönlich und […] Das ist vielleicht eh/ also, ich fand nicht, daß das die richtige Umgebung für eine, für eine Sprache so war, um das zu lernen.

[…] Ich glaube, ich finde das generell blöd mit den Computern. Ich fand s/ also ich hätte s echt besser gefunden, wenn wir da unsere Lehrerin gehabt hätten, und sie hätte das so alleine gemacht.

Translation

Well, I simply found/ that was not as nice, to learn at the computer. […] Yes, that/ah, that you sit there at the computer, and you try to learn a language like this. […] This is somehow so, so, sterile and impersonal and […] This is perhaps eh/ well, I found that this was not the right environment for a, for a language, to learn it.

[…] I think I find this in general stupid with the computers. I found s/well I would have found it really better, if we had had our teacher, and she would have done it on her own

(Iv/Clara/150798, 236-249).

It is interesting to note her usage of emotionally coloured adjectives, like 'not as nice', 'sterile' and 'impersonal', to illustrate her aversion. Her description of the CALL phases can be interpreted as a perceived lack of meaningful interaction with a medium to which she did not relate as a medium for language learning. The concept of 'transactional distance', as summarized in Neumeier (2005), can also be applied to Clara's case and it could be argued that, for her, the level of transactional distance was far too high. Like Anna and Karen, Clara reflected upon other possible reasons for her dropping out, and blamed, to a certain extent, her lack of self-discipline as well as stress caused by the workload of other classes. What is more, Clara's lack of information about the nature of the BLL class – she had expected a traditional class – might have contributed to her reluctance to accept the computer component.

5 Discussion

The case studies yielded three main reasons for dropping this class: lack of support/ complementarity between the two components, lack of print materials, and dislike of the computer medium. In the following, they will be briefly related to the overall findings presented in section 4.1. Special attention will be given to the importance of print materials.

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5.1 Lack of support/complementarity

Complementarity was a major category in the complete dataset. The importance of a successful combination between the different components of the BLL environment was highlighted repeatedly in the students' critical evaluations (compare second major difference in 4.1). Students wanted the classroom sessions to be complementary to the computer sessions. Whereas Anna and Karen had named the lack of complementarity and, especially in Anna's case, teacher support as important factors for leaving the course, for the majority of students surveyed and interviewed complementarity was a major issue. It was highly desirable and often achieved.

It appears that complementarity depends very much on the individual student's expectations. Whereas for the course-leavers the degree of complementarity was insufficient, it was appropriate for many others. With regard to their development of a mixed-mode learning setting for language learning, Strambi & Bouvet (2003) pointed out that their learners' positive attitudes were very much dependent on the teacher's efforts to establish a positive relationship and to provide both flexibility and support. The students in the larger study attested the importance of the human factor as well as of an appropriate support system. However, more research is needed to understand the factors that shape the *individual* student's positive or negative attitudes so that in future BLL classes *all* students receive the support they need for successful language learning to ensure that the combination of the components works for all of them. An action research project that would include both interview data *and* classroom observation might be able to shed more light on this issue.

5.2 Lack of print materials

With regard to the lack of usage of the paper medium as stated by Anna and, in particular, Karen, the overall data confirms the importance of print materials (compare first major difference in 4.1). The students' desire for a course-book and other print materials for learning at home, to complement the CALL, was a major theme in the complete data set. Here it should suffice to point out that many students missed these materials simply because they were used to them. They referred to them as conventional, traditional, and normal. They missed them, firstly, with regard to studying and reading and, secondly, with regard to writing by hand. In the following, these views will be illustrated by quotes from the complete data set.

5.2.1 Studying and reading

Having a book often seems to offer a more convenient way of having information available for studying and reading:

Example 11
Ähm ja, das finde ich schon ganz gut, obwohl ich auch ganz gerne ein Buch hätte, dabei. [...] Dass ich so halt zu Hause immer das so alles so schön komprimiert hab [...].

Translation
Ehm yes, I like it, but I would also like to have a book with it. […] So that at home I

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have everything nicely compressed
(Iv/Asta1/140296, 13-15).

Another student recommended the reintroduction of a course-book to rely on, so that 'you really have something in your hand' ("daß man wirklich auch was in der Hand hat", Iv/Anneliese/150798, 461) when learning. Others stressed that a book allowed them to work anywhere, on the train, at home, or even in bed. Referring to a small French course-book she sometimes worked with, this student appreciated not only that she could work with it at home, but also take it with her to bed and learn in a comfortable way:

Example 12
Aber das ist halt so • ganz nett. Das ist halt so klein und dünn. [...] Kann man immer so mal im Bett so einmal kurz reingucken.

Translation
But this is really nice. It is small and thin. You can take it with you to bed and always have a short look at it.
(Iv/Asta2/140296: 172-175).

For these learners, one of the great advantages of computer learning, the often-mentioned temporal flexibility (the computer allowing learners to learn when they want to and at their individual pace) was contrasted by its spatial inflexibility.[4]

It is interesting to note that the importance of having paper materials available for reading and studying was related to the possibility of taking printed materials, like sheets of paper and books, in one's hand. In the following example, the student underlined this aspect of actually touching the materials, as she missed rummaging through her papers and browsing through a dictionary:

Example 13
Ich weiß nicht, ist halt total anders, und so kann man dann halt in seinen Papieren da rumkramen, und dann irgendwie da mal kurz gucken, dictionary holen und dann da rumblättern.

Translation
I don't know, it's completely different, and so you can rummage through your papers, and then somehow have a quick look at something, get a dictionary and browse through it.
(Iv/Katja/140296, 230).

These students obviously very much appreciated the 'seizable', 'tangible', physical side of the paper medium for reading and writing, which is obviously lacking when using a computer.[5]

4. I am indebted to my colleague Jae Jung Song for helping me find this useful label during a presentation of a preliminary version of this paper.
5. When I presented an earlier version of this paper, a (to me unfortunately unknown) colleague raised the interesting question whether these findings could also be transferred to learning at touch-screen computers. I am not aware of any research in this area and would appreciate any feedback with regard to this matter.

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This physical aspect of the paper medium, which I call its 'tangibility', is remarkable; it is a category that emerged as a surprise finding. I simply had not questioned the students' attitude in this respect. Many students did not cope well with the lack of a traditional course-book and its substitution by a CD-ROM. The fact that the software contents were printable did not make up for the absence of traditional paper materials. Additional materials in paper form, be it their own notes, a reader or course-book, seem to be essential for successful learning; paper materials give language learners a sense of possessing something and thus a feeling of tangible reassurance.

5.3.2 Writing

The obvious fact that one can write by hand on paper but not on a computer screen points to the importance of paper materials, as put forward by Karen in Case Study 2. Writing by hand is considered to be more efficient than typing. In example 14, both students expressed their preference for writing by hand instead of typing on the computer keyboard because they could, like Karen, remember words more easily that way:

Example 14
Und das mit dem Schreiben, ich meine das jetzt find ich, dass ich/ ich kann mir besser merken, wie man etwas schreibt, wenn ich das mit einem Stift in der Hand auf einem Blatt Papier mache [...].

Translation
And concerning writing, I mean I think I/I can remember better how to write something, if I do it with a pen in my hand on a sheet of paper […].
(Iv/Renate1/140296, 43).

Ich fand, eh so wenn ich jetzt zuhause Übungen für mich gemacht habe, auf dem Zettel und so, daß, daß ich es mir dann irgendwie auch besser einpräge, als wenn ich das am Computer mache.

Translation
I found, eh when I did exercises for myself at home, on paper, that, that I was somehow able to memorize things better than when I do it at the computer.
(Iv/Suse/120296, 138).

In summary, for writing as well as for reading and studying, the paper medium seems to be of vital importance for these learners.

Research conducted outside our discipline supports these findings. Dillon (1992) summarized ergonomics research regarding reading from paper versus screens and points to the fundamental difference between them – text manipulation. In this context, 'reading' refers to what the learner gets from the text, and covers outcome measures such as speed and accuracy, as well as process measures that are "more concerned with how the reader uses a text and include such variables as where the reader looks in the text and how s/he manipulates it" (1299). Dillon (1992) acknowledges the existence of two schools of thought on the subject of electronic texts. Some of his thoughts remind

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us of what the above students had expressed:

> The first [school of thought] holds that paper is far superior and will never be replaced by screens. The argument is frequently supported by reference either to the type of reading scenarios that would currently prove difficult if not impossible to support acceptably with electronic text, e.g., reading a newspaper on the beach or a magazine in bed, or the unique tactile qualities of paper […]. The second school favours the use of electronic text, citing ease of storage and retrieval, flexibility of structure and saving natural resources as major incentives. (1297)

Dillon (1992) looks critically at the reported differences between the two mediums; it is neither his goal nor mine to prove the superiority of one medium over the other, but to understand the crucial issues underlying the usability of the medium. What seems important is to become much more aware of the difference between reading from paper versus computer screens when designing materials that are meant to be read and studied with the help of computer technology and thus via the screen. A neglected issue in formal investigations is, according to Dillon (1992), the

> natural flexibility of books and paper over VDUs [visual display units], e.g., paper documents are portable, cheap, apparently 'natural' in our culture, personal, and easy to use. The extent to which such 'common-sense' variables influence user performance and preferences is not yet well understood. (1304).

As noted above, the 'naturalness' of paper documents, was also addressed by some of the learners surveyed in this study. Such 'commonsense' factors require additional research; not only with regards to Dillon's discipline of ergonomics, but also in our discipline. The voices of the course-leavers in the study remind us of their importance. There seems to be a need for an increased focus on the reading process – understood to mean reading to learn or comprehend. Without doubt, image quality has considerably improved over the past few years, but it appears from this study that reading and learning a language from screen is entirely different from learning and reading from paper.

Based on this, Bax's (2003) statement that CALL has not reached the stage of "normalisation" (23) holds true. This is evidenced, as Bax (2003) points out, "by the use of the very acronym 'CALL' – we do not speak of PALL (Pen Assisted Language Learning) or of BALL (Book Assisted Language Learning) because those two technologies are completely integrated into education, but CALL has not yet reached that normalised stage" (23). Moreover, based on the insights gained from research into ergonomics, the differences between the two mediums might explain this discrepancy and thus need further exploration with regard to the learning and teaching of languages.[6]

6. Picking's (1997) study into reading music from paper versus screen offers interesting insights into the benefits of animation for reading assistance, especially for weaker readers of music. It would be worthwhile conducting similar research in reading for language learning purposes by, for instance, taking various screen displays, but also the various skill levels of individual readers into consideration.

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5.3 Rejection of the computer

With regard to Clara's rejection of the computer as a language learning medium the overall data shows that the majority of students did not share her concerns. Negative comments that can be found in the complete dataset focus on the difficulty of working on the computer screen. Students often described it as stressful to work on the monitor and, to a lesser degree, with the headphones on – in contrast to Karen's very positive comments (see example 5 above). The questionnaire indicated that the duration students enjoyed working with a computer monitor, before they found it too tedious, ranged between 60 and 90 minutes at most. As noted, image quality has considerably improved in recent years (see Dillon, 1992), and I would expect somewhat more positive comments in future research in this area.

6 Implications

When planning for BLL, it seems important to address the areas of concern discussed in this paper. As for the lack of support and complementarity, it would appear that teachers involved in BLL need to be aware of this crucial issue in order to make the links between the components more transparent to all learners in the class. This issue is not trivial; indeed, it presents a considerable challenge for the teachers involved (see Stracke, 2004), as in many classrooms teachers do not provide a rationale for what they are doing, how the learning environment is structured, or why.

It is important for the teacher to offer the right amount of guidance and support to suit the needs of each student. Strategies for successful teaching have been developed in the area of education and point to the importance of connecting f2f interactions with the technologically supported components of the course (Sands, 2002). Sands' explicit recommendation, "the most important tip" for teachers in this context is: "Plan for effective uses of classroom time that connect with the online work".

This points to the importance of this issue for model building for BL, as suggested by Neumeier (2005). Dewar and Whittington's (2004) summary of Hocutt's ideas of BL (2001, as cited in Dewar and Whittington, 2004) emphasize the importance of mutual awareness of BL components, consistency in language style and technique, and a seamless transition from one component to the other (op. cit.: 10). Interestingly, instead of complementarity between the two components, the fourth idea is the appropriate redundancy of the BL components. This concept might allow for a high(er) degree of choice, flexibility, and thus responsibility/autonomy on the learners' side, as it would allow them to choose, decide, and so forth at a higher level. Neumeier's (2005) parameters include the second parameter of "model of integration" (op. cit.: 167), and it could be argued, based on the students' comments (and also on the research surveyed) that this might be the most important parameter for further investigation.

Print materials should be available in BLL settings in order to cater for all learners. The paper medium provides 'tangibility' and greater flexibility as regards the place of learning. Continuing developments in computer technology may produce computers that overcome these difficulties; at this stage, however, this does not seem to be the case. Equal access for all learners to the latest technology remains another issue to be addressed. A sensible balance between the paper and the computer medium needs to be

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achieved. As Davies *et al*. (1999-2006) put it: "It is no accident that we talk about 'computer *assisted* language learning'"(op. cit.: section 1).

As long as students perceive the differences between reading (and learning) from paper as opposed to screens as disadvantageous, it seems reasonable to assume that their complaints about the inconvenience of working on a screen could be reduced if they received relief through the use of print materials.

However, a general dislike of the medium for language learning, as seen in Clara's case, could take considerable time to overcome, and students like her are, at present, better suited to a more conventional class.

Even though the number of participants of the larger study and the small number of cases of course-leavers does not allow for any broad generalisations, the findings of this exploratory research into views on a BLL environment have highlighted important factors to consider and demonstrated the need for research on a larger scale in these areas. From a methodological point of view, a recommendation could be made that 'extreme cases' (Flick, 1995: 87; Strauss & Corbin, 1990) be examined, as they may shed light on the subject matter under investigation and lead to unexpected findings.

7. Conclusion

This article presented learners' views from a particular BLL environment. It presented three case studies of students who dropped a BLL class after a few weeks and the various reasons for their decision. The differing views, beliefs and attitudes of students are an integral part of any learner-centred approach and must be taken into account. Ignoring them when introducing an innovative educational environment, such as that described, ensures that prior beliefs will lead to resistance and thus encourage reluctance and ineffectiveness.

This paper has shed some light on the "psychological and cognitive make-up" (Nunan, 1997) of three course-leavers in blended classes, and therefore contributes to the growing body of qualitative research requested and required in the area of CALL (compare Bax (2003); Motteram (1999)). This research into the views of students and teachers concerning BLL needs to be supplemented by further research in which classroom observation plays a crucial role. In addition, further investigation is needed before results from this specific German university context can be compared with other contexts and cohorts where: (a) learners might differ in their psychological and cognitive disposition; and (b) contexts might differ with regard to both the cultural, social, and educational background of students (Nunan, 1997: 192) and the degree to which technology is being used in the respective society and educational context.

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