Learning Management: A New Approach to Structuring Hybrid Learning Arrangements

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Abstract

Partly due to economic reasons and partly due to pedagogic reasons, educational activities outside the classroom have recently begun to play an increasingly important role in the teaching and learning of foreign languages. The integration of self-directed learning and/or e-learning with classical classroom instruction especially fosters some highly desirable developments, such as more individualised and flexible learning. Yet, relatively new learning arrangements like these call for a pedagogic framework that accounts for the specific conditions under which learning best takes place. Learning management constitutes a general framework that conceptualises learning processes as learning projects. As a result, some of the well-established techniques of project management can be applied to structuring learning processes of the kind described above.

In this article, general characteristics of learning scenarios where one part is classroom-based and one or more parts take place outside the classroom are discussed first. The notion of hybrid learning is suggested in order to denote this kind of learning. The following section analyses in detail a hybrid learning environment at the University of Leipzig in Germany. The next section contains a brief introduction to the main ideas of project management. Building on these sections, it will then be shown how learning processes in which many protagonists and learning materials are involved can be efficiently planned, controlled and evaluated by means of learning management. This article will conclude with a final discussion of the pedagogic profile of learning management.

1 Introduction

In recent years, more and more institutions have added components to teacher-centred instruction that are located outside the classroom (Calvert, 2001; Hiemstra, 1994; Kerres & Jechle, 1999; Merriam & Caffarella, 1999), thereby creating more complex and richer learning environments. Integral elements of resulting pedagogic arrangements can be, apart from classroom instruction, print-based materials and documentation, online references, asynchronous web-based learning, email, learning management systems, online assessment and testing, in-person mentoring and tutoring, conference calls, learning content management systems, portals, synchronous web-based learning, electronic performance support systems, simulations, knowledge management systems, online mentoring or tutoring, self-paced CD-ROM based content, communities of practice, video broadcasts, virtual labs, chat rooms etc. (The eLearning Guild, 2004; see also Kerres & de Witt, 2003; Rossett, Douglis & Frazee, 2003). A recent survey shows that organizations have quite different intentions when they blend different pedagogic methods (The eLearning Guild, 2004, p. 4): satisfy the needs of learners (90% agreement with this statement), improve the quality of the learning experience (87.9%); decrease the time a learner needs to achieve a learning goal (82.1%); improve quality of the learning content and materials (73.2%); improve re-usability of the learning content and materials (73.2%); reduce cost of program delivery (71.1%); map learning components to objectives more effectively (62.1%); and reduce cost of program development (50.5%).

A typical example of the tendency to supplement classroom instruction are hybrid learning arrangements, where "seat time is reduced and some of the course activities – information transfer, exchange of ideas, essay writing – are distributed throughout the semester, with students accessing course materials and performing other tasks online" (Sands, 2002, para. 3). Related concepts are blended learning (Masie, 2002; Oliver & Trigwell, 2005; Graham, in press), distributed or integrated learning (Grabe & Grabe, 2001), and flexible delivery learning (Caladine, 2002). Waddoups and Howell (2002) describe a hybrid course at Brigham Young University, where "the instructor becomes just one of several sources of instruction available to the student: weekly class meetings; instructor conferences; peer-review workshops; mini-classes and tutorials from the Reading and Writing Centers; and a series of multimedia, online lessons that are standard for all sections of the course" (p. 11). Interestingly, this mix of teaching and learning methods (which is likely to be encountered at universities all over the world) is not a simple combination of classroom instruction with e-learning, but comprises a standard instructional setting (class meetings) as well as offline activities outside the classroom (tutorials, classes from other institutions on the campus, peer-review workshops), and computer-mediated learning (online lessons). As Waddoups and Howell (2002) stress, this is not a distance education course, in which the student and the instructor are naturally separated, but "a radical revision of how a […] program can use technology to redefine instructional space" (p. 12).

Preliminary research results indicate that hybrid learning arrangements may have, under certain circumstances, an enormous potential for optimising learning processes (e.g. Dean, Stahl, Sylwester & Pear, 2001; DeLacey & Leonard, 2002; Thomson Inc., 2002). This is most likely due to the fact that they can benefit from the advantages of the various kinds of learning involved (Young, 2002). For instance, teacher-centred activities could theoretically be considered a guarantee for high quality learning because the instructor is, among other things, an expert in the structure of the information to be learned, the most appropriate methods of knowledge and skill acquisition, teaching and learning materials, techniques for planning (the) learning path(s), ways to motivate students, and the evaluation of study outcomes. In contrast, learning outside the classroom often requires more responsibility on the part of the learner (see, for instance, Houle, 1988; Brockett & Hiemstra, 1991; Littlewood, 1997; Guglielmino, Long & Hiemstra, 2004), thereby stimulating his or her commitment to the learning process and motivation. When a learner may choose the learning methods and materials exactly to match his or her individual characteristics and needs, these kinds of learning emerge as being more learner-centred than classroom instruction; and if learners have the option to decide what, where, when and how they are going to learn, learning outside the classroom can be far more flexible than teacher-centred instruction (Penland, 1977; 1979; Sturtridge 1997). Furthermore, self-directed learning especially fosters knowledge of how one can efficiently organise and implement one's own learning processes (Oxford, 1990) and hence, the capacity for life-long learning (Candy, 1991). As Dillon and Gabbard (1998) report, the use of interactive media finally reduces the amount of time spent on learning and in consequence potentially lowers the costs for language courses.

As one can easily infer from the positive aspects of the different kinds of learning mentioned above, an extension of the traditional classroom setting could "support a combination of structured and unstructured learning interactions, support exploration of individual and group interests simultaneously and perhaps provide a mechanism for individuals and groups to explore their conversational learning and knowing processes beyond the acquisition and accumulation of pre-defined bodies of knowledge" (Sharma & Fiedler, 2004, p. 544). There are good reasons to believe that hybrid learning environments substituting some portions of seat time by other kinds of learning will become increasingly important and will probably "supplant others, especially for people who may need an alternative delivery format because of their busy schedules, but who also need the support structure of a traditional classroom" (Sands, 2002).

This article therefore addresses the question under which conditions learning arrangements, where one part is classroom-based and one or more other parts take place outside the classroom –

be it physical or virtual –, can lead to successful learning outcomes. After a discussion of hybrid learning arrangements, the article analyses in detail one particular hybrid learning scenario that was conceived at the University of Leipzig in Germany. It will be demonstrated that the learning arrangement at issue displays many of the features of a project in terms of project management. Building on a brief introduction into project management, its main principles are then applied to learning processes. The umbrella concept of learning management provides a rationale of how appealing hybrid learning arrangements can be efficiently planned, implemented, monitored and controlled.

2 Hybrid learning: General properties

There is a widespread opinion that hybrid learning comprises a blend of (usually redesigned) classroom teaching with one or more forms of e-learning (see, for instance, Australian National Training Authority, 2003), where the proportion of virtual learning often makes up at least 50 percent ("half 'bricks', half 'clicks' "; cf. Bleed, 2001, p. 18). This model evidently makes reference to the modes of information delivery: face-to-face or media enhanced. A related definition claims that "hybridization occurs when on-campus educators adopt distance education technologies and practices, and when distance education organizations adopt/adapt campus-based educational practices" (Waddoups & Howell, 2002, p. 2). Although many hybrid learning scenarios will, in fact, blend both classroom instruction and virtual learning, the "half bricks, half clicks concept" neglects the fact that many other kinds of knowledge and skill acquisition can be involved in hybrid learning. As the example from Brigham Young University has demonstrated, hybrid learning normally integrates further forms of learning outside the classroom that make no use of electronic delivery mechanisms, e.g. tutorials, study groups, or individual information retrieval in a library. Understanding hybrid learning as a mere combination of classroom instruction with e-learning or distance education hence seems too reductive (see also Oliver & Trigwell, 2005).

A widely disseminated definition of blended learning (Masie 2002; see also Driscoll, 2002; Singh, 2003; Rossett, Douglis & Frazee, 2003) presents a contrasting view of hybrid learning as "specific educational and training situations, where different instructional strategies and delivery mechanisms are combined" (Sharma & Fiedler, 2004, p. 544; see also Reinmann-Rothmeier, 2003). (As the terms "blended learning" and "hybrid learning" are mostly used synonymously, it seems legitimate to refer to blended learning here). This definition is far more general than the ones discussed before in that it only requires that different teaching and/or learning methods based on different modes of delivery be combined. Since this approach also accounts for kinds of learning that occur outside the classroom *and* that are performed offline, it appears more realistic than the reductive views cited first. This broader understanding of hybrid learning is adopted for the remainder of this article.

Because of the fact that hybrid learning in the broader sense often combines different kinds of knowledge and skill acquisition, pedagogic arrangements like these can vary in quite a large number of parameters. For instance, Schulmeister (2001) has suggested three dimensions to classify learning scenarios: 1) learning in the classroom vs. virtual learning; 2) information vs. cooperation; 3) instruction (heteronomous) vs. learning (autonomous). As this taxonomy only encompasses a few aspects, more parameters are discussed below. Since virtually every method of knowledge and skill acquisition can potentially form part of a hybrid learning arrangement, the following account of parameters must necessarily remain incomplete.

A first aspect in which hybrid learning arrangements may differ concerns the persons playing an active role in a learning process. Any learning arrangement implies that there is at least a learner, and insofar as every learner is to be considered an individual, there are, strictly speaking, as many learning arrangements as there are learners. However, it does not happen as often as would be desirable that a learning arrangement is tailored to an individual learner. Nevertheless, a learning arrangement is always designed for a specific target group that can be defined in terms of

age, sex, instructional goals, native language, interests, prior knowledge etc. All these factors are, at the same time, dimensions in which hybrid learning arrangements can be different. Of course, the larger the group, the more difficulties there will be in adapting pedagogic activities to the needs and characteristics of individual learners and to select individually matching learning materials.

The social character of learning is an issue, too. Be it inside the classroom or outside, learning can proceed in isolated settings, in learner dyads, or in smaller or larger groups. Whenever hybrid learning arrangements are conceived, it is particularly important to decide whether a learning objective can best be pursued by a single learner or jointly by two or more learners. Although foreign language teaching has somewhat neglected collaborative kinds of learning, recent research has stressed the usefulness of learning in "knowledge building communities" (Scardamalia & Bereiter, 1994, *passim*), especially in the context of self-directed learning activities (see, for instance, Brookfield, 1986; Brockett & Hiemstra, 1991; Hiemstra, 1994; Candy, 2004). Apart from the cognitive aspect, collaborative learning in groups also strengthens social competence and leads to a deeper processing of the learning content (Kerres & Jechle, 1999).

One aspect that cannot be separated from the social nature of language learning is interactivity. Of course, hybrid learning arrangements can be interactive to a very different extent (Schulmeister, 2001). Albeit apparently innumerable teaching and learning methods exist, many researchers in the field complain that, up to now, language instruction has not focused enough on meaningful interactions during the learning process (see, for instance, Long, 1996; Foster, 1998; Pica, 1994; Swain, 1985). The degree to which a teaching or learning method is interactive does not, for the most part, depend on the place where it is performed. For instance, some kinds of classroom activities are considered highly interactive, such as group discussions, project work, role plays etc., while others are less interactive, such as lectures, individual reading, gap-filling exercises etc. The same holds true for self-directed study outside the classroom, e.g. keeping a learning diary is less interactive than participating in tandem activities. Similarly, three degrees of interactivity can be discerned for e-learning (Reinmann-Rothmeier, 2003, p. 32): 1) *e-learning by distributing* (i.e. media are used solely to make information accessible); 2) *e-learning by interacting* (i.e. learners receive feedback while interacting with a technical system); and 3) *e-learning by collaborating* (i.e. learners at different places are collaborating to solve a common problem in the virtual space). In the case of e-learning, the interactivity of a specific learning method is directly related to the question whether synchronous or asynchronous media are used (Wegerif, 1998).

Apart from the learner(s), there are normally one or more instructors in a hybrid learning arrangement who largely determine its character (e.g. by means of teaching style, choice of activities and materials). Further persons may be involved directly or indirectly such as fellow learners, tutors, tandem partners, language advisers, examiners, educational authorities, authors of teaching and learning materials etc. Each of the protagonists shapes the character of a learning arrangement by lending his or her individual personality and competencies to the learning process. It seems clear that the larger the number of participants in a learning process, the more coordination is necessary to ensure a coherent and successful pursuit of the learning process.

Another relevant point regarding the persons involved in a learning process is the responsibility they take (see also Schulmeister, 2001). While teachers are usually supposed to carry the greatest burden of responsibility in the classroom, the idea of self-directed learning implies that the student is for the most part responsible for his or her learning (Houle, 1988; Brockett & Hiemstra, 1991; Littlewood, 1997; Guglielmino, Long & Hiemstra, 2004). In the case of e-learning activities, issues of responsibility mostly depend on the nature of the learning device. For instance, behaviourist computer programs leave little space for an individual to take care of his or her learning process; the opposite is true for more interactive and collaborative electronic learning environments (e.g. synchronous chat).

A further parameter refers to the location where a learning method needs to be performed (see also Schulmeister, 2001). Classical teacher-centred instruction is normally restricted to the classroom as a physical space. As a consequence, this kind of learning is not very flexible in terms of

place and time. Furthermore, commuting to schools or campuses often results in considerable costs for the students (according to Bleed, 2001, p. 18, in 1998, 87% of all students in the US were non-residential). In contrast, e-learning activities generally tend to allow for more flexibility (Kerres & de Witt, 2003). Finally, the locations involved in offline activities outside the classroom depend above all on the resources required (e.g. libraries, fellow learners). As a rule of thumb, these kinds of learning can be considered less subjected to temporal and local constraints than teacher-centred instruction.

The history of foreign language pedagogy has seen several educational paradigms, each favouring specific instruments and methods (see, for instance, Larsen-Freeman & Long, 1991; Schulz 1991; Lightbown & Spada, 1999; Cook, 2001). It thus comes as no surprise that hybrid learning arrangements differ with regard to their underlying pedagogic theories (Driscoll, 2002), e.g. being more in the style of behaviourism, cognitivism or constructivism. Learning arrangements may also display features of related pedagogic methods (Kerres & de Witt, 2003), e.g. grammar-translation method, audio-lingual method, (neo-)communicative approach etc. Nowadays, where scepticism against a "one and only" method prevails, pragmatic mixtures of methods from different paradigms are realised more and more often. It should, however, be noted that some methods or instruments exclude the use of other methods or instruments in terms of the underlying theoretical assumptions.

Another parameter concerns the delivery mechanisms combined in a hybrid learning arrangement. Delivery mechanisms can either be distinguished by the criterion whether they use information and communication technologies or not (Department for Education and Skills, 2003) or whether they are synchronous or asynchronous (see, for instance, Dennis & Valacich, 1999). Teacher-centred instruction can be regarded as a prototype of synchronous interaction, e.g. allowing for interactivity, giving immediate feedback to the learners, and creating an atmosphere favourable to learning. Co-presence between a teacher and a student or between several students can also be facilitated with the help of technology, e.g. in the form of interactive video conferencing, telephone conferencing, synchronous chat, whiteboard features, or application sharing (Peters, 2000). Yet Waddoups & Howell (2002) point out that "this synchronicity may increase the contact between teacher and student; but it also decreases the efficiency and flexibility of distance learning" (p. 3). Asynchronous communication is particularly suited for activities where a learner is supposed to learn at his own pace and according to his needs (Sharma & Fiedler, 2004). The distinction between synchronous and asynchronous communication yet appears somewhat artificial, insofar as new technologies such as email or discussion boards have rendered asynchronous communication more interactive (Wegerif, 1998).

A final aspect in which hybrid learning arrangements can differ is whether they are pre-structured or not. For instance, some learning arrangements intrinsically impose a structure on the whole ensemble of learning methods by means of an electronic learning platform; some learning arrangements organise hybrid learning by means of learning consultations; and some learning arrangements will be just relatively loose accumulations of learning methods. The less autonomous a learner is, the more he or she will probably gain from pre-structured learning environments.

The parameters discussed in the previous paragraphs are only illustrative in that many other dimensions may exist in how hybrid learning arrangements can vary. Thus, one thing becomes very clear: due to the large number of parameters, virtually innumerable hybrid learning arrangements can be conceived, each potentially providing effective learning opportunities for different kinds of learners and purposes, and relying on different resources. The next section contains an analysis of how one particular hybrid learning model works and which problems it faces. As this learning arrangement is reflective of the typical characteristics and needs of a university language centre, the discussion will hopefully be useful for similar institutions.

3 Hybrid language learning at the University of Leipzig

Documents in the context of the Bologna Process (a political process aiming at a stronger convergence of the rather fragmented European educational systems; see European Union, 2000) recommend, among other things, that European university students acquire at least two foreign languages up to a certain level of proficiency. The respective political guidelines were also implemented by the University of Leipzig in Germany, which was at once committed to dramatically expanding its language learning opportunities. In detail, the university's Language Centre is supposed to accommodate twice as many students as before in courses for languages such as English, French, Spanish, Italian, Russian, Norwegian, Swedish, Finnish, Norwegian, Hungarian and Latin. As no additional instructors could be hired, the only way to continue to provide high-quality learning opportunities was to radically restructure the prevailing classroom-based instruction.

The heart of the new pedagogic concept is a hybrid learning arrangement which substitutes between 30 and 50 percent of classroom instruction with learning activities outside the classroom. This proportion is realised by omitting every second or third lesson, the gap leaving the student a kind of institutionally defined space for self-directed study or e-learning. How much time is actually dedicated to learning in the classroom largely depends on the learning content. For instance, adult learners can perfectly acquire and automatise linguistic knowledge such as morphology and syntax by means of self-directed study (e.g. learning verbal or nominal paradigms by heart, performing gap fill exercises) or e-learning (e.g. a grammar pattern trainer). Vocabulary and cultural or historical items can be learned in a similar way (e.g. learning vocabulary by flash cards, reading textbooks, using vocabulary trainers, performing web quests, filling out electronic crossword puzzles). Even linguistic skills can be developed by means of collaborative self-directed study (e.g. face-to-face tandem, project work) or e-learning (e.g. interactive chat, e-mail tandem, blackboard). In contrast, classroom instruction is primarily needed in order to give students an overview of learning content, to provide corrective feedback, to actively guide learning processes and to motivate students (see also Kerres & Jechle, 1999). Another factor determining the proportion of seat time is the learners' already acquired level of proficiency. Beginners usually need more instruction and feedback than advanced learners. The latter are often able to practice linguistic skills more autonomously, be it individually or in groups of fellow learners.

A typical hybrid course at the Language Centre of the University of Leipzig comprises at least the following components:

- Classroom lessons conducted by a professional instructor that alternate with slots for e-learning or other forms of learning outside the classroom,
- classroom sessions directed by a tutor (most commonly a teaching assistant),
- e-learning activities of all kinds (i.e. e-learning by distributing, e-learning by interacting, and e-learning by collaborating),
- other activities outside the classroom such as self-directed study, either by a single learner (e.g. information retrieval in the library, individual project work, rehearsal of learning content) or a group of learners (e.g. group work, face–to–face tandem, peer examination),
- a session with a learning coach who helps students identify learning goals, develops realistic learning plans, makes them aware of learning strategies etc., and
- an elaborate system of tests in order to measure the introductory level of proficiency, interim results, and the overall outcome of a course.

Obviously, this learning arrangement has the main advantage of hybrid learning environments, namely their "ability to support different modes of communication and interaction" (Sharma & Fiedler, 2004, p. 545), whereby learning is partly controlled by an instructor and partly by the learner. Additionally, further persons are involved, such as a learning coach, a tutor, fellow learners, examiners, possibly tandem partners etc. By combining classroom instruction with other forms

of learning, the learning arrangement at issue can be located somewhere in the middle of a continuum between completely collective and completely individualised study.

In the classroom component, students ideally receive the same elaborate, high quality instruction from their expert teacher. The most striking disadvantage of teacher-centred instruction, namely the difficulty of adapting instruction to the individual needs and characteristics of a single learner, has yet to be overcome by additional study components. Based on the learner's individual goals, his or her prior knowledge, learning style and individual characteristics (e.g. sex, age, ethnicity, level of education etc.), appropriate and efficient activities and resources for e-learning and self-directed learning outside the classroom are selected (see also Hofmann, 2001).

Of course, some problems are associated with this specimen of hybrid learning as well. First of all, since many persons make contributions to the learning process, it cannot be guaranteed *per se* that all of them will be pursuing the same goals. Possible reasons are that they have overtly diverging goals and in consequence do not cooperate, or that they simply have not developed common objectives due to a lack of communication. Whatever the reason may be: for the sake of successful learning processes, hybrid learning arrangements require that learning objectives be shared. A first prerequisite would be that common objectives be negotiated.

A second shortcoming may be that a learner often has neither an overview of the persons who may be involved in the learning process and how they can be contacted, nor of the responsibilities or competencies they have. Also, learning materials and communication devices shared by a group of learners have to be coordinated, e.g. computers, learning software, connections to the Internet, books, audio and video tapes, samples of language tests and so on. To achieve successful learning outcomes, much more planning and control are required than for classroom instruction alone.

Each person involved in a learning endeavour – learners as well as teachers – generally possesses a set of personal beliefs about learning: subjective theories that guide learning and teaching activities. Subjective theories in the field of language pedagogy are best defined as everyday theories about learning that are deeply rooted in personal experiences and often deviate from actual scientific research. For instance, Krumm (1996) found that many foreign language learners consider teacher-centred instruction more effective than other ways of learning. Regarding one group of foreign language teachers, Caspari (2003) observed that their subjective theories were, to a large extent, determined by their own language learning experiences; and Schocker-von Ditfurth (2001), who, after questioning students taking part in a teacher education program, discovered that language learning was often regarded to be a monotonous and boring process without relevance to everyday life. It is probably because of their very origin in personal experiences that subjective theories are so difficult to alter. Empirical evidence for this assumption comes from Karavas-Doukas (1996) and Lamb (1995), who found no positive effects of teacher training on their regular classroom instruction. Subjective theories pose a serious problem for hybrid learning insofar as the number of (potentially detrimental) theories directly increases with the number of persons involved. Moreover, the less professional knowledge the persons concerned have, the less optimal the learning that takes place will be.

Since the Leipzig learning environment allows for more individualization than classroom instruction alone, significantly more materials and media need to be used. Particularly the integration of new media potentially has positive effects on learning (Sullivan & Pratt, 1996; Lys, 1999; Tschirner, 1999). For instance, interactive learning materials better match the individual needs of the learner; hypertexts allow for more individual, non-linear learning; learners have more choices with regard to learning content and methods; learners are able to communicate worldwide with fellow learners, tandem partners, instructors or learning coaches; the motivation of learners potentially increases; learning environments are rich in information; and authentic learning materials can be used. However, as more media, materials, and teaching or learning methods are involved, more coordination is also needed. Besides, all these materials have to be purchased or produced.

When a student is supposed to acquire learning content outside the classroom, he or she most often needs to act autonomously to a certain degree (Kerres, 2000). For instance, the learner has to

develop a precise idea about his or her individual needs; to choose relevant learning content and appropriate learning methods; or to evaluate interim results continually (Hiemstra, 1994). As experience has shown, not every learner is able to perform these activities sufficiently well without the help of others. This is in part due to what could be termed the "learner paradox": learners have to build their knowledge of a domain, the structure of which they still ignore. Learners, moreover, are not usually experts in learning methods or in the evaluation of learning outcomes, and therefore the risk of failing is high. Hybrid learning arrangements requiring a higher degree of learner autonomy must therefore provide devices where language professionals help their students to optimise their learning in various ways (Schulmeister, 2003).

In addition, it must be assumed that learning arrangements comprising a larger proportion of e-learning or forms of offline learning outside the classroom presuppose a specific learning culture. The key issue is that learners must become competent in "diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluation of learning outcomes" (Knowles, 1975, p. 18). In research literature, these aspects are often treated under the umbrella concept of learning strategies. Research has accumulated evidence that "good" learners apply a large variety of learning strategies, such as *meta-cognitive strategies* that "provide a way for learners to coordinate their own learning process" (Oxford, 1990, p. 136), e.g. centring, arranging, planning and evaluating one's own learning; *affective strategies* such as lowering one's own anxiety and encouraging oneself; *social strategies*, e.g. asking questions, and cooperating and empathizing with others; *memory strategies*, for instance creating mental linkages, applying images and sound, reviewing, and employing action; *cognitive strategies* such as practicing, receiving and sending messages, analysing and reasoning, creating structure for input and output, and others (Oxford, 1990, p. 17; for further classifications, see O'Malley & Chamot, 1990, and Friedrich, 1995; for a comprehensive overview over strategy research, see Chamot, 2004).

Evidently the learning culture outlined above does not only concern learners: if instructors transfer some responsibility to the learners, an altered understanding of their role is necessary as well. As an extension to the famous notion of Rogers (1969) in which the teacher is conceived as a "facilitator", a teacher in hybrid learning arrangements also has to regard himself or herself as a "helper, guide, consultant, adviser, coordinator, idea person, diagnostician and co-communicator" (Oxford, 1990, p. 10; see also Benson, 2001). Strands of work for the teacher in hybrid learning arrangements could be – in addition to classical teacher-centred activities – dialoguing with learners, securing resources, evaluating outcomes and promoting critical thinking (Hiemstra, 1994). It would seem clear that this teaching role demands intensive teacher training.

A further aspect of the hybrid learning scenario discussed here is that the sheer number of persons, materials and media involved increases the probability of non-satisfactory learning outcomes. As yet, research has rarely dealt with reasons for failed or at least non-optimal learning processes. Bärenfänger (2004a, b) therefore suggests the application of risk management to the field of foreign language teaching and learning. This type of risk management systematically accounts for factors which can potentially threaten successful learning outcomes, such as teacher behaviour, learner behaviour, characteristics of the learning environment, learning infrastructures, the combination of learning methods etc.

Finally, there are some practical problems with the hybrid learning scenario at the University of Leipzig (see also Otto, 1999; Candy, 2004). First, appropriate materials have to be made available. Unfortunately, not much of the existing materials (computer programs) perfectly matches the idea of self-directed learning and is often expensive. In addition, teachers must be able to create high quality materials for e-learning and/or offline learning outside the classroom. Another point is that all learners need to have access to hardware, software, and telecommunications infrastructures at affordable rates; they also need digital competence, i.e. the capacity to deal with computers and the Internet; they need to have confidence in the consistency of the technology as well as in the credibility of the information and the confidentiality of sites and transactions; and many learners

must get used to the social nature of learning in hybrid learning arrangements. Moreover, learners need an easily accessible clearing point where they can retrieve materials for self-directed study: a multimedia cabinet. Of course, establishing a multimedia cabinet – be it physical or virtual – implies high costs for infrastructure and maintenance as well.

When considering the different aspects of the specific hybrid learning arrangement outlined above, one problem turns out to be the most serious: those who are most responsible for learning in classical forms of instruction have little knowledge about what learners do in order to reach their learning objective(s) in hybrid learning scenarios. The risk of non-optimal or ineffective learning processes hence cannot be neglected. Any educational concept aiming for organizing a respective learning arrangement therefore has to solve the issue of coordinating

- divergent objectives in a learning endeavour (learners, teachers, tutors, testers, curricula, institutions, fellow learners etc.),
- multiple methods of knowledge and skill acquisition in accordance with characteristics of the individual learner (individual prior knowledge, learner types, cognitive styles),
- multiple learning resources,
- multiple persons involved, whereby each of them has specific competencies and responsibilities with respect to the learning process, and
- effective instruments to evaluate whether the goals pursued have actually been reached.

The next section shows that acquiring knowledge and skills in a learning environment as outlined above displays many of the features of a project in terms of project management. The following description of the project approach is intended to provide a conceptual basis for determining the elements of project management which can be adapted to the specific conditions of hybrid learning.

4 Project management

Rocco Martino (1964), one of the founders of the project approach, defines a "project" as follows:

> A project is any task which has a definable beginning and a definable end and requires the expenditure of one or more resources in each of the separate but interrelated and interdependent activities which must be completed to achieve the objectives for which the task was instituted. (p. 17)

When comparing features of projects in general with the properties of the hybrid learning environment described above, many parallels become obvious: firstly, objectives need to be defined that refer, taken as a whole, to the overall project task. Goals and objectives represent a kind of major organizing principle – virtually all relevant project or learning activities are based on them. Similarly, in the field of pedagogy that probably any educational activity starts with the formulation of learning objectives (e.g. Gagné & Briggs, 1979; Rosenshine, 1995; Slavin, 2003).

It can further be assumed that the project approach is only appropriate for non-routine situations. Defining goals and objectives and coordinating resources and activities are so time-consuming that it is only feasible in the case of complex tasks that are characterised by their uniqueness (Baker & Baker, 1992) in terms of objectives, persons and resources. The same holds true for learning processes that are, to a large extent, determined by characteristics of the individual learner (Skehan, 1991; Robinson, 2002; Dörnyei & Skehan, 2003).

Another aspect of projects is their definable beginning and completion. More precisely, a project starts when the persons involved are invited to work on achieving the project objectives. A project ends when the project task is clearly accomplished (Wideman, 1995; Litke, 2004). In the case of learning processes, completion is often verified by means of tests or other kinds of evaluation.

The most important feature of a project is that a certain number of interrelated activities can be distinguished, for each of which one or more limited resources (human or non-human) have to be expended (Wideman, 1995). Learning processes in particular consist of such a large number of activities that it is sometimes difficult to maintain a complete overview. It can therefore be concluded that both projects and at least some kinds of hybrid learning share with the same fundamental requirement: the effective coordination of resources in order to accomplish a complex task. It is precisely this coordination of resources that is called project *management* in the field of work and organization sciences (Baker & Baker, 1992; Wideman, 1995).

Different types of project management have developed over time and most of them have similar principles. In any project, four major phases can usually be defined (Litke 2004): (1) an initial phase, (2) a planning phase, (3) a monitoring and control phase, and (4) a completion phase.

The initial phase serves to define the project goals and objectives that are, in turn, ordered hierarchically. Further, the organisation of the project is established, i.e. it is made clear which persons will take an active part in the project and which competencies and responsibilities they will have. All relevant information is documented in a project file that is successively completed during the course of the project. It is quite common that all persons involved meet for a kick-off meeting, during which they familiarise themselves with the project objectives, learn about each other's specific competencies, and negotiate rules for their co-operation.

In the planning phase, a work breakdown structure displaying all relevant activities to achieve the overall objective is created (Wideman, 1995), as well as a time schedule and a plan of costs (Baker & Baker, 1992). It is also in the planning phase that the work breakdown structure is analysed in detail with regard to potential risk factors which call into question the successful outcome of the project (risk analysis).

During the monitoring and control phase, project work is continually assessed with regard to its conformity to the original planning (project monitoring). In the case of significant deviations, appropriate countermeasures are taken and the project breakdown structure is modified. Monitoring and control are best conceived as elements of a circular process that continues until all objectives of the project are realised.

The final phase of a project consists of both verifying whether the objectives stated at the beginning have actually been achieved and concluding the project documentation. A final meeting as the counterpart of the kick-off meeting visibly concludes the project work.

From a historical point of view, project management is a relatively new approach for the organization of complex work processes. Since the 1980s, it has been used in many private enterprises as well as in public organizations, for instance in the automobile, aviation and space industries, construction, pharmaceutics, public health, public administration, and even the UN. The fact that project management is so widespread today is probably due to its many benefits (assuming that it is correctly implemented):

- Project management is guided by objectives: as a result of precisely stated objectives, each person involved knows the aim of the results.
- Project management is highly specific: project planning and control are exclusively tailored to one unique set of goals. As preconditions and available resources for any project are individual, no routine solutions can be provided.
- Project management is efficient: The coordination of resources guided by one major organization principle, the project objective, leads to an efficient use of work and materials; costs and time required therefore decrease.
- Project management strives for transparency: the work breakdown structure, the core of any project, contains information about all necessary steps needed to accomplish the project objectives. On this basis, a reliable estimate of costs is feasible.

- ▪ Project management helps to deal with critical events: due to the graphical representation of work processes and their duration, temporal restrictions can be identified. By that, critical events can be avoided or at least their impact can be reduced from the beginning.
- ▪ Project management comprises monitoring components: systematic evaluation devices allow for an early identification of problems. Possible consequences can be assessed as well.
- ▪ Project management increases the reliability of work processes due to the compulsory definition of objectives, instruments to control costs and the high transparency of work processes.
- ▪ Project management yields high motivation: as the persons involved generally identify with their work more than is the case with other forms of work, they mostly display a high degree of motivation.

Since many parallels between the project approach and learning within the hybrid environment at the University of Leipzig clearly exist, one question inevitably arises: is it reasonable to conceptualise hybrid learning as projects in the sense of Martino's definition? At least some of the well-established techniques and instruments of project management could then be used to plan, control and evaluate hybrid learning.

Applying the project approach to the domain of learning processes would require that each individual hybrid learning arrangement would have to be regarded as a learning project. As early as the 1970s, Alan Tough (1971) introduced the notion of the 'learning project' in adult education, stressing differences between self-directed adult learning and classroom instruction. Tough defined a learning project as "a series of related episodes, adding up to at least seven hours" where "more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skills, or to produce some other lasting change in himself" (p. 7). Although Tough (as well as many other scholars praising project-based learning; cf. Stoller 1997) acknowledged the project nature of many kinds of learning, he did not go so far as to propose techniques of project management for the organization of learning processes. This step is undertaken in the following section.

5 Learning management

When organizing learning processes according to the idea of project management, the following elements can be identified:
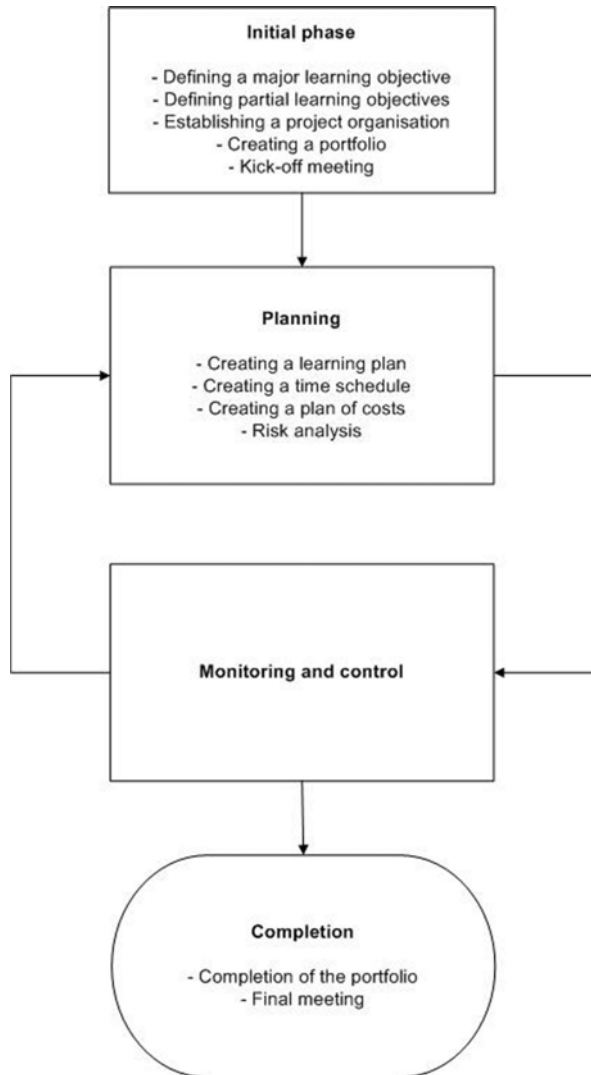
Initial phase

- Defining a major learning objective
- Defining partial learning objectives
- Establishing a project organisation
- Creating a portfolio
- Kick-off meeting

Planning

- Creating a learning plan
- Creating a time schedule
- Creating a plan of costs
- Risk analysis

Monitoring and control

Completion

- Completion of the portfolio
- Final meeting

Fig. 1: Elements of Learning Management

5.1 Initial phase

The initial phase of a learning project is crucial in that it is the point where the project goal is formulated. Such a long-term goal in the field of language learning may, for example, be the acquisition of elementary competence in Russian during a semester. This main goal can be broken down into several partial objectives, such as acquiring the receptive use of block letters and handwriting, productive use of handwriting, the pragmatic abilities to greet, to introduce oneself or somebody else, to buy things etc.

As this article has emphasised, in the context of projects in general, clearly stated goals and objectives are central to a learning project insofar as they are the guiding principle for the organization of resources and activities. In learning arrangements as the one described before, explicitly stated objectives are necessary for all persons involved to effectively coordinate their efforts. Furthermore, precise and detailed descriptions of objectives constitute a necessary precondition for any curricular planning, for only on this basis can learning content and appropriate learning meth-

ods be identified and chosen. Finally, learning objectives conceived as criteria of success enable all persons involved to verify whether the project activities have come to a successful end. The Council of Europe (2000) has recently published a powerful tool for the systematic description of learning objectives in the domain of language teaching and learning, the *Common European Framework of Reference* (http://www.coe.int).

As many teachers will confirm, learners are frequently unable to develop a precise, concrete and realistic idea about their learning objectives. It is hence an important facet of learning management to help a learner become aware of the whole bundle of learning objectives. In this context, the language learner's subjective theories about language learning may be questioned and individual preconditions for learning discussed. For these purposes instruments such as consultations or checklists can be of great help.

Once learning goals and objectives are set, they should not be changed for the sake of reliable planning during the course of the project. It is certainly reasonable to document learning objectives in the form of a contract between the (most important) protagonists of a learning project. Learner contracts have proved useful insofar as they respond to the teachers' and learners' needs for structure, security and responsibility (Huff & Johnson, 1998; Williams & Williams, 1999; Hiller & Hietapelto, 2001). Moreover, they are a substantial aid for a learner to better identify with their learning endeavour (Knowles, 1980), thereby increasing motivation and commitment. Finally, learner contracts urge all persons involved to state objectives clearly and explicitly so that a solid basis for the project communication can be laid.

A further part of the initial phase consists in establishing the organization of the learning project in which multiple persons with specific skills take part. Technically, project organization can be understood as a structure to serve the project and its protagonists. It particularly refers to the roles and responsibilities of the persons involved in the project. In order to avoid confusion, it is essential that responsibilities, duties and competencies be clearly assigned and that a robust organizational structure is created. Since learning can only take place in a learner's head, the learner must be considered one of the main protagonists of a learning project. The learner's role above all is to fulfil the tasks corresponding to the requirements defined during the planning phase, i.e. to acquire knowledge or skills and to practice. In contrast, the project manager is directly responsible for the success of the project (Wideman, 1995). The project manager collects all project-relevant information; he or she coordinates the planning and implementation of the project and supervises the project's progress. It can be easily understood that the project manager has to reconcile various roles in one person, such as the role of a leader, motivator, coach, psychologist or conflict manager (Litke, 2004). Interestingly, this description is quite similar to that of a teacher in self-directed learning. In the case of the hybrid learning arrangement described above, the teacher has the function of a project manager who defines learning objectives (thereby taking into consideration the learner's curricular and personal needs), assesses resources, deduces and sequences work packages, chooses or suggests appropriate teaching and learning methods, finds suitable learning materials, evaluates the learning progress, motivates all persons involved etc. Where learning is entirely autonomous, the learner would play the role of the project manager. An efficient way to list the protagonists of a learning project as well as their functions is the creation of the "yellow pages of the learning project" that summarise which persons have what kind of responsibilities and how and when they can be contacted. The exhaustive list of protagonists is an essential part of the project documentation.

More specifically, the project file created in the initial phase contains all documents about objectives, plans and activities necessary to understand the course of the project. An equivalent in foreign language pedagogy are portfolios that comprise different samples of work, often texts written by a learner (Belanoff & Dickson, 1991; Graves & Sunstein, 1992; Yancey, 1992; Council of Europe, 1997). In the framework of learning management, portfolios have a slightly different function in that they further strive to promote a learning culture favourable to self-directed learning. Through portfolios, learners can document their learning in a structured way, ponder their

learning processes, and optimise learning outcomes by regulating learning processes more effi-ciently. Reflection on learning itself can be stimulated by checklists covering learning objectives, plans, already acquired language competencies, individual characteristics, prior learning experi-ences (e.g. prior knowledge, learning styles, learning strategies), risks for the learning process etc.

A kick-off meeting is certainly a good way to promote successful learning: the persons in-volved meet all the other protagonists in person and learn about each other's specific functions and competencies. The social character of the kick-off meeting will thus lower anxiety on the part of the learners and increase their motivation. A kick-off meeting is also a perfect opportunity to communicate about learning goals and appropriate ways to acquire knowledge and skill. Taking potentially detrimental subjective theories about learning explicit and deconstructing them should lead to better study outcomes. When multiple persons take part in a learning project, it is particu-larly important that rules of cooperation are set, e.g. rights, duties and sanctions. For instance, learners may be required to accomplish tasks within a given time, participate actively in classroom activities, be punctual, prepare and review for classes etc. While it will often not be practicable to organise kick-off meetings for each individual learner, this is easily feasible for a larger number of learning projects, e.g. at the beginning of a language course or a semester. On such occasions, teachers, learners, tutors, fellow learners, librarians, testers etc. meet to lay the foundations of successful learning.

5.2 Planning

The success of a project is directly related to how thoroughly and realistically it has been planned. The planning phase therefore strives to find viable solutions in order to realise the objec-tives defined in the initial phase (Wideman, 1995). Steps in the planning process are: 1) breaking down complex problems into smaller ones that are easier to handle; 2) finding multiple solutions for each problem, for instance through techniques such as brainstorming or brainwriting; 3) evalu-ating solutions and selecting the most proper one; and, finally 4) elaborating the chosen solution in detail.

From a more practical standpoint, the planning phase focuses on specifying a multitude of con-crete work packages with reference to the detailed list of learning objectives. All work packages are then systematised into a hierarchical learning plan (the equivalent of the work breakdown structure; for this concept see Baker & Baker, 1992; Wideman, 1995), whereby the main task is at the top, partial tasks are in the middle, and work packages are at the bottom. Further elements of the learning plan are milestones, clearly identifiable points in a project that denote the completion of a key component (Baker & Baker, 1992). *In toto*, the learning plan can be defined as an exhaus-tive and precise graphical representation of all activities that are required to accomplish the main learning objective, indicating as well which persons are responsible for which work package at which time. The kinds of work packages, partial tasks and main tasks that actually form part of a learning plan solely depend on the solution chosen in order to achieve the major goal. Learning management, as well as project management, are hence entirely neutral with respect to implemen-tation methods.

Figure 2 gives an example of a learning plan for the field of vocabulary acquisition in the form of a tree graph. Larger work breakdown structures are better displayed as a table of content, whereby the decimal system can be used to label tasks and work packages (e.g. 1 for the major task, 1.1 for a partial task, 1.1.1. for a work package). In Figure 2, the achievement of a partial task is identical with the achievement of a milestone.
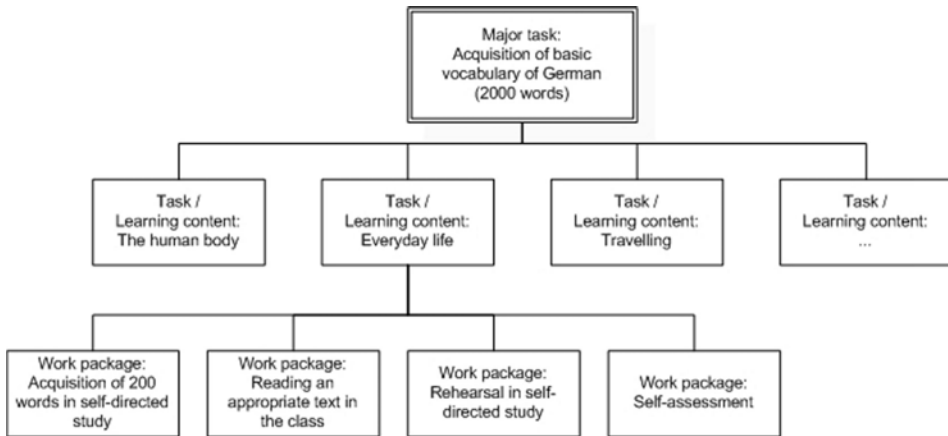
**Fig. 2: Example of a Learning Plan for the Learning Project
"Acquisition of Basic Vocabulary of German"**

As illustrated in Figure 2, the learning plan provides a transparent overview of the whole learning project. It can, furthermore, be used as a device for project monitoring, i.e. to assess whether planned activities were actually executed at the time they were scheduled. The learning plan may also be helpful in checking whether all relevant activities were taken into consideration. Finally, the learning plan is a good basis for the planning of costs and the scheduling of project activities.

The use of a learning plan as described above may appear uncommon in the domain of foreign language teaching and learning. Yet, the transparency of the graphical representation of a learning endeavour, and the option to look back at accomplished tasks and forward to tasks still to be realised, as well as to estimate the expenditure of resources, constitutes a helpful tool for many foreign language learners.

A second aspect of the planning phase consists of scheduling project activities. Based on the learning plan, the duration of every single work package may be estimated. Moreover, a decision can be taken about which work packages may be processed at the same time (for instance, in a language lesson) and which work packages have to be processed later (for instance, in a phase of self-directed learning). As a result of the temporal alignment of work packages, a schedule of the learning project can be created. From the standpoint of foreign language acquisition research, it is particularly important to take into account that some learning content presupposes the acquisition of some other learning content (cf. the assumptions of processability theory, e.g. Pienemann, 1998). A very useful tool to communicate about project schedules is the Gantt diagram. In this matrix, every single work package is listed in a table, and its duration is graphically displayed in the form of a bar. The main benefits of Gantt diagrams are that every person involved in a learning project can see at a glance which activities are scheduled at what point in time, how long they will last and which activities are to be performed at the same time. Figure 3 gives a simplified example of a Gantt diagram.

An essential aspect of organizing learning processes is the planning of costs, such as for teaching staff, administration, libraries, travel abroad, literature, media, tests, classrooms, computers, and Internet connections. The learning plan is used as a starting point for the reliable estimation of costs. For this purpose, based on experiential data, individual costs for each work package are estimated. Overall costs then ensue from the costs of all single work packages.

In practice, many learning endeavours fail or at least proceed less than optimally. One prominent feature of learning management is therefore its systematic focus on factors threatening the success of learning projects, such as a lack of motivation on the part of the learner, the cancellation of lessons, low acceptance of learning materials, emotional blocks, anxiety, a lack of communication between the persons involved, and social exclusion. The basic idea of risk management is to

analyse in depth possible causes for flawed learning processes, as well as to determine their impact on the course of the project and to develop appropriate countermeasures. In order to perform the risk analysis in a systematic way, every single work package contained in the learning structure plan is analysed for potential risks. In this respect, it is also crucial to take interrelations between work packages into consideration. Sometimes the failing of a single work package is detrimental for other work packages as well.

ID	Work package	Beginning	End	Duration [days]	Mrz 2005
1	Acquisition of 200 words in self-directed study	28.02.2005	04.03.2005	5	
2	Reading an appropriate text in the class	04.03.2005	04.03.2005	1	
3	Rehearsal in self-directed study	28.02.2005	04.03.2005	5	
4	Self-assessment	05.03.2005	05.03.2005	1	
5					
6					
7					

Figure 3: Gantt Diagram Scheduling a Partial Task
"Acquisition of Basic Vocabulary 'Everyday Life'"

5.3 Monitoring and control

It would appear clear from the above that project management is an approach that requires extensive planning. This only seems justified when interim results are systematically compared with regard to their conformity with the original planning during implementation. Divergences may result from unrealistic planning (e.g. in terms of the complexity of the project, insufficient prior planning experiences or incomplete data), unforeseeable changes during the course of the project (e.g. new methods, new theoretical insights, changed priorities concerning time, costs or products), non-optimal work efficiency or insufficient quality of work products (Litke, 2004). In the case of divergences from the original planning, the project manager is required both to take counteractions and to modify the original planning.

As mentioned above, the hybrid learning scenario described above particularly faces the problem that the responsibility for knowledge and skill acquisition is in the hands of so many protagonists. In order to guarantee that all protagonists pursue the same goals and objectives, appropriate monitoring devices are hence needed. It is equally important to verify whether accomplished work packages have satisfied the defined quality requirements, for instance, whether the partial objectives formulated at the beginning of the learning project have actually been reached. In other words, successful learning projects are comprised of a sophisticated evaluation concept that takes both the timely completion of work packages and the quality of results into account. In the field of learning projects, evaluation tools such as learner diaries, portfolios, self-assessment checklists, online tests, peer tests and different kinds of exams may be combined.

5.4 Completion

A learning project is completed when the requirements defined at the beginning are completely satisfied. This is only possible when the major learning goal is formulated as a success criterion, thus enabling one to decide objectively whether the learning project has succeeded or (partly) failed. A second aspect is the conclusion of the project file: the learner retrospectively reflects on

his or her entire learning process, particularly on successful elements as well as factors of failure. These experiences are documented and form the basis of future learning projects. The idea of documenting, structuring and reflecting on experiences related to learning processes clearly has implications for the learner's need for life-long learning. A final meeting as the optional counterpart of the kick-off meeting provides an opportunity for all protagonists involved in a project to discuss the results of their work.

6 Conclusion: A pedagogic profile of learning management

The preceding section has suggested learning management as a model of how hybrid learning processes can be effectively structured by applying project management to the domain of language teaching and learning. Now the following question arises: what are the limitations of learning management? After the discussion of its limitations, the article will conclude by providing a sharper pedagogic profile of learning management by comparing it to a related approach, project work.

A first limitation of learning management ensues from to the fact that it typically addresses learners who are able to reflect on, organise and document their own learning processes. It is only possible to demand analytical and organizational skills like these from adolescent or adult learners.

The resources spent on actively organizing the learning process represent a second limitation to learning management. It has probably become clear that activities such as identifying individual needs, goals and backgrounds, understanding the nature of learning objectives, controlling the learning process, monitoring outcomes, documenting experiences are relatively time consuming. In consequence, fewer resources can be deployed for learning activities as such, and thus some learners may even resist learning management.

A third limitation concerns the learning culture outlined above, e.g. the student taking more responsibility for his or her learning processes and the instructor(s) playing an altered role as facilitator, helper, coach, consultant, guide etc. Acquiring knowledge and skills with learning management will only work when both the learner and instructor(s) have adopted the corresponding learning culture. As yet, some teachers are reluctant to delegate responsibility to the learners, as this also constitutes a loss of authority. Similarly, educational systems may be unwilling to promote a learning culture favourable to hybrid learning, because changes in language learning and teacher education would be required as well as other institutional transformations. For learners, the learning culture at issue may be at odds with an already existing learning culture (e.g. a very authoritarian one). Be it as it were, learning management will not work optimally without a learning culture as described above.

Another point could be that participants in learning management environments may object to an approach originating in organization and work sciences, e.g. they may suspect that an essentially personal domain such as language learning is standardised and submitted to bureaucratic rules. It may also occur that participants in learning management environments only trust one specific method of knowledge and skill acquisition (e.g. only teacher-centred instruction or one form of e-learning). In both cases, learning will probably proceed less than optimally unless learners' subjective theories can be overcome.

Finally, an important factor determining the success of learning management environments is the teaching materials used. Although learning management does not necessarily require the use of e-learning materials, learning arrangements incorporating components of e-learning are most appealing. As many professionals complain, only few suitable materials exist so far. This observation can be generalised, though: learning will, to a large extent, be only as successful as the quality of the learning infrastructure, e.g. textbooks, exercises, libraries, computer programs, learning platforms etc.

The remainder of this section aims to outline the pedagogic character of learning management. For this purpose, it might be useful to compare learning management with a related concept, pro-

ject-based learning. Adherents of project work praise it as an "approach to learning which complements mainstream methods and which can be used with almost all levels, ages and abilities of students" (Haines, 1989, p. 1). While project work obviously represents *one* kind of teaching method, learning management is more a method of organising multiple teaching or learning methods and related resources. Actually, learning management is entirely neutral with regard to teaching methods as it is primarily intended as a heuristic for defining objectives, identifying and arranging work packages as well as monitoring outcomes. How tasks are actually processed is solely in the hands of the person responsible for the learning project.

According to Stoller (1997), project work focuses on content learning rather than on specific language targets, aiming at the "authentic integration of skills and processing of information from varied sources, mirroring real life tasks". In contrast, learning management is completely neutral with regard to learning objectives. As probably any teacher will confirm, learning objectives can differ significantly even within a homogenous group of learners. Learning management does not qualify these objectives as good or bad; it only tries to help each learner reach his or her goals by choosing and combining learning methods. Due to the fact that objectives are negotiated at the beginning of each learning project, unrealistic learner expectations can be revised early.

Another difference between project work and learning management is that the latter explicitly strives for transparency. In teaching and learning, it is often not clear what objectives are pursued, what exactly is expected from the learner, why a specific teaching or learning method is selected, or how the outcome of a learning process is evaluated. Learning management therefore creates clarity for all persons involved by defining objectives/success criteria, relating them to concrete tasks to be performed during the project, displaying all work packages in an integrated overview, displaying the sequence of work packages in a schedule, organizing the persons involved and assigning responsibilities, enhancing communication about potential risks and the need to implement monitoring components.

Finally, learning management goes beyond project work in its specific focus on risks threatening the positive outcome of a learning project. In contrast to pedagogy, which does not usually adopt the perspective of failing, risk management components incite learners to reflect on learning processes in depth, i.e. to identify risk factors and their mutual interdependencies, estimate their significance and develop effective countermeasures. The question of the typical traits of a "good", i.e. successful, language learner inspired a very fruitful strand of research – theories about learning strategies and learner autonomy. Perhaps the contrasting perspective will now do the same and yield a comparable body of insights into the conditions of language learning.

Although some differences between project work and learning management are striking, both approaches have important things in common. For instance, project work (Haines, 1989; Stoller, 1997) and learning management are strictly learner-centred, i.e. all efforts are intended to enable every individual learner to achieve optimal learning outcomes. Since learning is categorically restricted to the learner, learning management consequently tries to identify individual needs, objectives and preconditions. Moreover, a high degree of individualization can be realised by implementing an intelligent blend of self-directed learning components in accordance with the learner needs and characteristics.

A second property that project work and learning management share is that they both culminate in an end product. In the case of project work, the result can be an oral presentation, a poster session, a bulletin board display, a report, a stage performance etc. (Stoller, 1997). In the case of learning management, all the end products mentioned above could constitute possible results of learning processes. It is only important that the end product aimed at be clearly defined at the beginning of a learning project and that all activities relevant to the project be performed to reach this goal. Apart from these objectives, a considerable number of learning projects will focus on exams or certificates as an end product. Again, learning management goes a bit farther than project work, because it necessarily requires that relevant interim results be spelled out.

Furthermore, both project work (Stoller, 1997) and learning management are potentially motivating, stimulating and empowering. As for learning management, because of their involvement in many aspects of the learning process – e.g. defining objectives, planning, implementing, monitoring and controlling – learners are supposed to identify strongly with their learning endeavour. Taking responsibility leads to a strong commitment to the learning process and, by extension, to a high level of motivation. Motivation is likely to increase further when learners see that they have achieved important interim objectives. Because more than two people are generally involved in learning projects, the social nature of this kind of learning yields positive motivational incentives as well.

To summarise, project work and learning management share many important features. This is mostly due to the fact that both approaches refer to the same central idea, the project concept. While project work represents one appealing kind of teaching method among others, learning management is more a means to organise learning processes in a universal and efficient way. Learning management hence has to be considered the more generic concept, being a very flexible and open instrument to impose a structure on learning processes and to design pedagogic environments that are highly favourable for learning. Because of its generic character, learning management can be used as an overall educational framework for the development of curricula, consultations, the creation of teaching and learning materials, or the architecture of language centres.

Author's note

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