Communication and Collaborative Learning at Work: Views Expressed on a Cross-Cultural E-Learning Course

VIRPI SLOTTE
University of Helsinki, Finland
virpi.slotte@iki.fi

PÄIVI TYNJÄLÄ

University of Jyväskylä, Finland
paivi.tynjala@ktl.jyu.fi

This study focuses on the prerequisites for successful communication and collaborative learning in a large multinational company as perceived by human resource development (HRD) practitioners who took part in a cross-cultural e-learning course. The participants were Finnish and Chinese employees (*n*=17) who used an asynchronous web-based tool to study adult education on a virtual university course. The study is based on the Web discussions conducted during the one-year university course. On the basis of a phenomenographic analysis, three main themes around communication and collaboration at work could be identified: 1) prerequisites for collaborative activities, 2) cultural differences, and 3) the role of the management. We discuss the implications of these factors for the development of e-learning solutions designed to promote professional and organisational development.

Introduction

Technological progress and changes in organizational infrastructures have made collaborative learning more important as an aspect of professional development. How knowledge is constructed, shared and communicated in organizations and how teams and organizations learn have become pivotal questions in organizational development (e.g., Argyris & Schön, 1996; Nonaka, 1994; Nonaka & Takeuchi, 1995). The ability to learn col-

laboratively with other people, both within and outside of one's organization, often means the difference between success and failure. Employees who cannot network with others to share and build knowledge, fall clearly behind peers with such abilities.

This study is a part of a larger project whose aim is to foster cross-cultural collaborative learning through a university course delivered in the workplace (Slotte & Tynjälä, 2003). As previous studies have showed, effective use of computer- supported collaborative learning methods in the workplace depends on much more than simply purchasing a state-of-the-art package (e.g., Corrie, 2001). Organizational structures and practices, pedagogical arrangements and solutions form a framework which to a great degree determines the success of any learning program. In the present study, the focus is on how experts in human resource development (HRD) see the preconditions for successful communications and collaborative learning in a large multinational company. Because HRD practitioners work as key professionals in the field of organizational development (Hytönen, 2002; Slotte, Tynjälä & Hytönen, 2004; Valkeavaara, 1997, 1998), their views can provide important starting points for developing e-learning programs intended to foster professional and organisational development.

Collaborative Learning at Work

Collaborative learning is the process of generating new knowledge that emerges when two or more individuals explore a body of information together and produce shared outcomes (e.g. Dillenbourg, 1999; Koschman, Kelson, Feltofich & Barrows 1996; Roschelle & Teasley, 1995; Urdan & Weggen, 2000; Webb & Palincsar, 1996). One benefit of working collaboratively and sharing ideas is the fact that the participants thus also share the cognitive burden (Pea, 1993). Successful collaborative learning requires that the participants are open-minded, tolerant and make their thinking processes transparent. Common goals, open communication and organizational support are also required (see, Jäntti, 2003). Sharing workplace experiences in a non-competitive spirit may benefit both the individual and the organization. At its best, building knowledge together with other people may lead to the accomplishment of something more than what could be achieved by the individual alone. According to Bryans, Gormley, Stalker & Williamson (1998), people who adopt a collaborative mindset maintain an active awareness of the collaborative learning potential of every work-based transaction. These people probably learn continuously in any case, informally, as a side effect of their work (cf. Marsick & Watkins, 1990; Collin, 2002; Eraut, 2000). However, making formal collaborative university learning and career development available to people in worklife may offer employees additional benefits, turning intentional learning into an integral aspect of an enterprise's operations. This is an essential element of a learning organization

(Appelbaum & Reichart, 1998; Senge, 1990).

Co-operation between universities and the organizations of working life has expanded rapidly in the last few years (e.g., Bryans et al., 1998; Otala, 1998; Slotte & Tynjälä, 2003; Tynjälä, Välimaa & Sarja, 2003). While work organizations provide university students with contexts for work-based learning, universities provide academic courses that serve the purpose of organizational development programs. However, whilst university courses offer new tools of continuous professional development, full-time employees may find the simple completion of a long course a daunting task. In addition to the familiar problem of finding time to study, the courses themselves may require employees to engage in collaborative learning activities unfamiliar to them.

In particular, modern virtual learning programs require the participants to be aware of and ready to reflect on their own ways of learning and working. A virtual learning environment provides a freedom that, at the same time, entails also taking responsibility for one's own learning process. This is difficult if the individual participants rely on mere *co-operation* where the task in question is broken down into subtasks on the basis of a fixed division of labor and on transmitting existing knowledge from peer to peer. Although such information-sharing in groups and teams is also helpful, it tends to maintain the status quo and signals acquiescence with the power hierarchy because of an unwillingness to "rock the boat" (Corrie, 2000).

Collaboration, instead, involves the production of a joint outcome and thus demands sharing and generating new knowledge together with one's peers. In this way it provides individuals with better opportunities to use higher-order thinking skills and problem-solving skills in the construction of their ideas about practice (Jonassen, 2000; Järvelä & Häkkinen, 2000). Collaborative learning is based on a simple but powerful idea: creating groups or learning communities that ground their professional development on mutual learning processes. This presupposes that the participants are positively interdependent in terms of their knowledge need. That is, that the members of a group are selected so that they cannot accomplish their joint task without each others' help (e.g., Jäntti, 2003). In many cases, this calls for the acquisition of new learning skills. The need to develop learning skills has special relevance to employees whose memories of formal education date back several years or even decades. The key notions here are being active and developing initiative.

The Cultural Context of Collaborative Learning

Learning and communicative acts are always embedded in a specific context. Work organizations are comprised of different communities of practice (Wenger, 1998) in which people engage in their everyday activities and participate in social practices. Furthermore, communities of practice operate in

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wider organizational cultures which, in turn, are parts of national and/or multinational cultures with their own specific ethnic, linguistic and cultural characteristics. The way in which an employee communicates stems from his or her culture. This poses challenges to those who design learning environments for cross-cultural settings. Studies of student learning with international students have identified three kinds of cultural problems (Biggs, 1999): 1) problems related to social-cultural adjustment, 2) problems with language, and 3) learning and teaching problems due to culture. The last category of problems covers cultural influences on how learners approach problems and how they participate in groups and in communities. For example, in some countries teaching and learning cultures are based on a strict teacher-directed style, while in other countries students encouraged or even required to be active, display initiative and be self-directed. Some learning cultures demand rote learning and memorization, whereas others encourage deep understanding and critical thinking. In the same way, the organizational context in the workplace encourages certain ways of acting and discourages others, such as particular approaches to completing tasks, making decisions and handling conflicts. Employees working in a multinational company can, of course, be familiar with more than one learning or organizational culture and may be competent in a combination of such cultures. Nonetheless, this does not eliminate the possibility that communication will sometimes lead to misunderstanding, misinterpretation and even unintentional insults. No matter how well colleagues working in the same organization think they understand each other, communication is hard. Understanding the expressions and arguments of one's fellow workers may be complicated not only by cultural and linguistic factors, but also by different educational backgrounds.

However, although cultural differences make collaboration more difficult, they also have positive aspects. For example, in Confucian heritage societies success is attributed to effort and failure is attributed to lack of effort, which may, in collaborative situations, help Westerners, who tend to attribute failure to lack of ability, to adopt more optimistic attitudes. (Biggs, 1999). As Biggs (1999) has stated, in Confucian societies the bottom line is that failure is not predetermined: "If I fail I can do something about it." Furthermore, groups guided by Confucian assumptions tend to be more strongly motivated than Western people, and the pressures to successfully operate in them are both collectivist and personal (Biggs, 1999). Thus, learning about the different ways in which people act and communicate can enrich everybody's lives, as DuPraw and Axner (1997) have pointed out. Understanding other people's different world views and learning and work experiences gives us a broader picture of what the world of work has to offer.

Altogether, the trend towards multinational communities is a challenge for those who organize collaborative learning courses and environments.

The participants should be able to trust one another and remember that diversity in most cases is an asset, not a threat. The learners need to possess a sense of humor and an open mind, and be keenly interested in the perspectives of the other participants. Even when armed with these skills, learners may not necessarily succeed in constructing common ground, in developing mutual understanding, and identifying the shared beliefs and presuppositions that are needed for collaborative learning. Thus, effective professional development depends, to a great degree, on setting the stage (Hemmington, 1999). Today's work cultures face the task of seeing to it that everyone is comfortable enough to collaborate and learn. In the case of elearning, an additional challenge comes from the virtual context of collaboration. Studies on collaborative knowledge construction have indicated that despite the tools developed to enhance communication, geographically dispersed groups still have more problems than groups that are able to work face to face. These problems may be due to hardware or software limitations, user resistance, and an inability to choose and apply the right tool for a given task. Furthermore, collaborative work itself has characteristics or phases which are difficult to handle without face-to-face meetings. Problem formulation, decision-making and drawing conclusions seem to be particularly hard to accomplish by computer conferencing (Hansen, Dircklinck-Holmfeld, Lewis & Rugelj, 1999). Thus, a multinational collaborative elearning course is a challenging context for employee learning.

Aim of the Study

In the present study, the employees participating in a multinational virtual university course studied adult education in order to develop their professional knowledge of their field, HRD. The context for their learning was their own multinational work organization and a multinational e-learning course. The course was designed to represent contextualised learning so that the HRD practitioners could draw and reflect on their own experiences as human resource developers in their organization. The study addressed the following research question: How do HRD practitioners describe communication and collaborative learning at work? Thus, attention was paid not to how participants learn collaboratively, but to how they describe the corporate communication and collaboration *processes*. That is, what, in their opinion, are prerequisites for and challenges facing successful communication and collaborative learning in a large multinational company.

Participants

Altogether, 17 participants (14 female and 3 male) volunteered for a one-year adult education course. Most of them were Finnish (n=12: one working in Denmark, one in Hong Kong and the rest in Finland), with the remaining 5 participants coming from China (including one German who works in

China). They can all be regarded as full-time in-house HRD practitioners since the company studied here employed them as human resources and competence developers. Some of them had previously met but none of them had worked together before.

Study Design

The HRD practitioners' views about communication and collaboration at work were examined in the context of an e-learning course in adult education. The course was given by the Open University of Jyväskylä, Finland. It consisted of all the content areas generally included in the degree program in adult education (15 credits), but was modified to support HRD work in a global company.

The adult education course consisted of four modules: (1) Introduction, (2) Developing and Learning as an Adult, (3) Planning and Supporting Adult Learning, and (4) Learning in Working Life. Each module lasted 1-3 months, making up a one-year program of study. The students used an asynchronous web-based tool to communicate with the other students. They were asked to read certain materials, discuss and refine their ideas and understanding with others, and complete a set of assignments. One university tutor facilitated the discussion throughout the course while two other tutors joined the discussion at specific periods of time. The company supplied three tutors. Apart from an introductory lecture there were no other face-to-face meetings (Slotte & Tynjälä, 2003).

The course placed a special emphasis on understanding the complex relations between learning, communication and development in workplace. For this reason, many of the web-based discussions which took place as part of the course were focused on the questions of communication and collaboration at work. These web discussions were used as material for our study. At the end of the course this formed a database of 159 pages (a single-spaced Word document). In addition, three group interviews were carried out in China to complement the results.

Analytic Methods

All of the participants' comments were analysed qualitatively to obtain the major themes that characterise communication and collaborative activities as seen by the HRD practitioners. This was done by applying the principles of methodology called phenomenography (Marton, 1988, 1994).

A phenomenographic analysis is not based on texts produced by individuals as analytic units. Instead, the participants' texts were handled as a whole to find out what Marton (1994) calls "the pool of meanings," the whole variation in the conceptions articulated by the participants. Accordingly, the texts were read several times in order to determine the distinct ways in which the HRD practitioners described communication and collaboration at work. In addition to differences in forms of expression, attention was also

paid to similarities. Thus, when two expressions differed at the word level but carried the same meaning, they were placed in the same category. The outcome of a phenomenographic analysis is a system of categories of description which covers the total variation in the conceptions expressed in the research population (Marton, 1994).

The texts were read and categorised until exactly the same outcomes were gained twice in succession. All of the analytic processes were carried out by the first author. The categories resulting from the analysis describe the whole variation of different ways in which the HRD practitioners discussed corporate communication and collaboration.

RESULTS

The analyses of the web-based conversations showed that HRD practitioners dealt with a great variety of different themes concerning communication and collaborative learning in the workplace. In general, all participants emphasised the importance of collaboration at work and the tremendous potential that lies within people. This was also explicitly stated in some comments such as the following: "If we just study by ourselves and never test our thoughts with others, many good things will never come up."

As a result of the phenomenographic analysis, the themes discussed by HRD practitioners could be classified into three basic categories: (1) prerequisites for corporate collaboration, (2) cultural differences, and (3) the role of management. The contents of these categories are described in more detail in the following sections. We will start with the first theme, further analyzed into five different categories of description.

Prerequisites for Corporate Collaborative Activities

The five categories of description covering the prerequisites for corporate collaborative activities are:

- (1) Individual responsibility
- (2) Social skills
- (3) Technical tools to support human interaction
- (4) An atmosphere of open and constructive communication
- (5) Adaptation to continuous change

The first category includes comments related to the core of collaboration – shared knowledge building, with emphasis on *individuals' responsibility* to add value to the communication process:

We stress that employees should take primary responsibility for their own development and for following through on their own development plan. Technology is there only to facilitate and make communication activities easier and faster, but the responsibility for the content and nature of communication – the actual skill to use language – still lies with people.

Besides, we are not only part of the network as such – we are also responsible to form, build and continuously re-build this network as to meet changing needs. Usually, elements are connected in a certain way. But in our environment, we need to make sure that the communication channels, the 'who-provides-what-to-whom,' are always up-to-date.

In addition to stressing the importance of individual responsibility in the collaboration process, the course participants ranged widely over the role of social skills and related individual preferences concerning the interaction taking place in connection with everyday work activities.

In our organisation that is very strong technically, the soft side of skills are often neglected or underestimated. It is not yet fully understood how important good relationships are for good organisational functioning and performance, and in the long run for the overall success of the company.

I strongly agree that in our organisation we should use collaboration more and encourage people to share their ideas and experiences. However, most often people claim that there is no time to talk with each other, or they don't know the best way to do it.

When using collaboration as a method, we should also remember that not everyone likes to discuss and share his or her ideas with each other. Extroverted persons may be the most outspoken ones and willing to share their thoughts as soon as possible. Introverts, meanwhile, need time to reflect and then maybe speak up.

The topic of individual preferences is closely related to the next theme – the question of *the technology* and *methods appropriate* to support human interaction. Face-to-face communication was generally considered the most rewarding communication and learning method. Approximately half of the participants preferred face-to-face contacts rather than online communication, although they generally acknowledged the benefits of the technology around them. Such tools were seen as useful in "facilitating and making communication easier and faster," but their limitations were also emphasized. The following examples illustrate the opinions about the suitability of various communication tools:

We often forget interaction between people and just send emails and at the same time we lose something very human - joy of learning together. You Nina mentioned that we should create the environment where people are participating more and they should build something new together. Do you think that it is possible only via emails? I do not think so. As for interaction, it shouldn't go through paper, nor through computer, but via face-to-face communication. I think we still have space for improvement in this area. Quite often email or the Internet are very good ways for communication, but it is not very good if we depend on them too much. Sometimes we are just sending an email, shooting the ball in the air and waiting for someone to take it.

In a way, this kind of online communication here in writing requires one to interpret others in the way they have intended the meaning to be interpreted. In this kind of discussion, and in fact in all kinds of communication, feedback is crucial. Otherwise, one wouldn't know how one's messages and thoughts have been understood and interpreted.

Beliefs and presuppositions concerning how people co-operate with each other and create common ground as a basis for shared understanding are further tested by *continuous change*. In such cases, the participants often said that change is not really change unless it has been embraced by all the employees in the organization. Further, the participants mentioned a positive atmosphere and openness as being the most important issue regarding adaptation to the changing needs of global business. The following comments illustrate both categories of description:

This process of collaborative learning is in fact a joint effort to share and refine information, knowledge, opinions and ideas for mutual and organisational benefit. It is almost obvious that the prerequisite for this kind of collaborative knowledge creation among colleagues and superiors will be based on trust, mutual respect, and open and supportive communication, which is a two-way dialogue.

The concept of perceptual change has been mentioned several times. But what may be difficult, is how to live with it, and adapt to all those novel situations and ways of working so rapidly and constantly. I think in the process of change, constructive, open and honest communication and sharing of thoughts and concerns may facilitate the adapting process and make it easier.

The everlasting change of things and organisations is a valid comment. It is not enough to learn to communicate to certain group of people. You have to learn to be able to communicate to target group that is always changing and might have different kinds of background, opinions, etc.

The nature of information we process and distribute is subject to continuous change. Only if the structure of the network and the speed fully support the business, will we be able to become a learning organisation.

Cultural Differences in Corporate Collaboration

The cross-cultural university course generated a large number of comments concerning the cultural differences associated with corporate communication and collaborative learning. The participants generally agreed that all collaborative actions are context-specific and that they can be understood properly only by understanding the situation where they have been uttered. Therefore, if a piece of communication is extracted from its original context, and expressed in another social context, it is most likely to be misunderstood and misinterpreted. Such misunderstandings in the course of human interaction were described as rather common, especially between people from different cultural backgrounds. This was partly because more often than not we tend to take comprehension for granted, without taking the other person's background, level of knowledge and experience into account.

Communication is often claimed to be very ambiguous, maybe because meanings are not in words, but in people. People have different social and cultural backgrounds, education, worldviews, beliefs, norms, and attitudes against which they try and interpret another person's meanings, which again have been formulated against his/her own sociocultural background. It is a universal fact that these backgrounds seldom match. This is one of the facts that makes communication complex. It puts extra demands on the act of communication, and on how things should be said, and how meanings are negotiated.

We should remember to take into account cultural differences. For example, in China it is unheard of people to speak openly in front of their senior managers.

When the participants discussed cultural differences, they described them for the most part from the point of view of corporate communication. In most cases, their descriptions revolved around the influence of previously learned things on interaction between people. These notions reflect obstacles to collaborations that stem primarily from people's previous experiences of whom it is appropriate to talk with and how much it is appropriate to talk in certain situations:

In the Chinese hierarchy environment, communication used to be and sometimes still is perceived as a top down, one-way approach. Even in the freer company context, not everyone is aware that they are supposed to respond; they are expected to explain their ideas assertively and are entitled to say no. We call it a "dead box," which means after information goes into it, nothing is produced and it vanishes. With the discouragement, the information provider can become silent very easily, and eventually nobody takes the initiative to share.

I see cultural differences here, because Finnish people are not used to boasting with something they know. And unfortunately it might sometimes be taken like that if you start telling about your experiences with an issue or telling another person how to do things. You just keep it to yourself and that's it.

One point that Ann made is very important: the Chinese education and social systems do not encourage young people to criticise people of authority, (i.e., parents, teachers, bosses, etc.).

Marianne, I also see the cultural differences here in China. Chinese are taught to play low on oneself on the one hand, which is recognised as modesty and on the other hand, knowledge and information are seen as power/advantage over others. There is a fear that if you "give" it to others, you don't have it any more. It sounds sad, doesn't it? However, if we consider the huge population and notice the resources per capita, it is no surprise. The scarcity of resources defines the Scarcity Mentality.

The last comment is especially noteworthy because it highlights one fundamental prerequisite for successful collaboration, sharing ideas with other people, and shows concretely that in a multicultural setting, careful consideration and effort are needed in order to make collaborative learning possible.

The Role of the Management

Open and straightforward interaction between managers and subordinates was described as the key to a culture of constructive communication. The following examples illustrate this:

I think that managers are in a crucial position in creating and inspiring an encouraging communication culture through their teams.

Where we have to become much stronger though is in changing the corporate culture. No training course can replace the motivation by the boss or other peers. We talk about intrinsic motivation as being crucial for the learning. But this also comes from the possibility to exchange and pair up with others. If the boss really cared for the changes planned, then a training course would be a big thing – a step into developing a learning organisation.

In the future I'd like to see the concept of collaborative learning in the form of conversation to spread also to the management level. Top management has a lot of valuable information to share, which would benefit the lower levels of management, and speed up the circulation of information and special know-how. They could act as guest speakers or facilitators in multiple occasions of learning, whether face-to-face or online. In fact, I think that this concept could be easily applied to our everyday lives if we only feel receptive to it, because in our immediate environment there is so much to discover.

When the participants talked about their experiences with superiors, they usually criticized managers' unwillingness to improve their communication and other soft skills. This was seen as significant because there is so much knowledge of effective collaborative learning that has not yet been applied into practice.

People still tend to look at their superiors as role models. But as you said, not very many managers seem to understand the benefit this would have on the performance and success of their teams, and on the whole company.

I agree with you that practice isn't up to theory yet, and a lot needs to be done, especially in the area of management skills. Even if the management styles have changed for better direction, and 'regular' people get more and more responsibility, I still think that it is managers who, with their own behaviour and communication styles, set the pattern for the whole team.

It is strange that we talk about the improvement of communication and an open, trusting atmosphere, but it still seems to stay on the level of words only. Often I think when participating in a course that deals with interpersonal, team building and communication skills, that more managers should participate, but they never do.

DISCUSSION

Three main themes emerged from the analysis of the HRD practitioners' e-learning discussions about collaboration and communication at work. First, the practitioners dealt with the general prerequisites for true collaboration and functioning communication. Second, they raised the question of cultural differences that are present in the multinational workplace, and third, they emphasized the role of management in creating the context and atmosphere for collaborative activities.

Given that the participants of the e-learning course were experienced practitioners of corporate human resources development, these three themes can be seen as a reflection of the actual communication cultures operating in their company, and of the needs for developing opportunities for collaborative learning. Consequently, they can also be seen as data which provides important hints for developing e-learning solutions to enhance communication and collaborative learning in multinational companies. In the following paragraphs we briefly suggest some things to be considered while applying e-learning in corporate training.

Among the prerequisites for corporate collaborative activities mentioned by the participants are not only technologies, but also individual and social factors such as individual responsibility, social skills, adaptation to continuous change, and an atmosphere of open communication. These elements are very similar to those identified by Johnson and Johnson (1990) as components of collaborative learning in school contexts (Dillenbourg, 1999; Littleton & Häkkinen, 1999). They are factors that cannot be taken for granted on collaborative e-learning courses. Instead, they have to be constructed by co-workers and co-participants acting in unison to establish them. Despite the similarities between work-based and school-based learning, the findings

indicate that a context for a formal collaborative e-learning, a workplace also has some characteristics that have not been brought up in discussions about collaborative learning in school contexts. In particular, the continuous change peculiar to working life both challenges attempts to establish and maintain functioning collaboration and collaborative learning in the workplace and increases the need for them there. What is clear from experience and the participants' comments is that creating a cross-cultural e-learning environment at the workplace requires new kinds of approach to learning at work, based on a repertoire of study skills and readiness to negotiate meanings. Such factors are not inborn gifts, but skills that can be learned and which should therefore be taken into account in course design.

The results showed that the participants paid special attention to communication as an aspect of the operations of a global business. In the words of one participant, "an organisation that has created a fruitful communication network can be more intelligent than the cumulative sum of intelligence of its members." Effective communication is important for the success both of the organization and of the employee, and failure to achieve it is costly. Therefore, we suggest that every e-learning course – whether multinational or not – should begin with a preliminary phase designed to establish open communication and trust among the participants. In an ideal case, a face-toface meeting before starting electronic communication can provide a context where such an atmosphere can be built. As was pointed out above, formulating the problems to be addressed is very difficult if computer conferencing is the only channel of communication (Hansen et al., 1999). When problem formulation is included as a phase in a course, face-to-face meeting at the initial stage will make it easier to frame the relevant issues. If a face-toface meeting is not possible, it is important to introduce the participants informally to each other and negotiate the rules of the game. Individuals accept more personal responsibility in an environment that, in a positive spirit, encourages mutual dependence.

In the present study, the HRD practitioners were generally found to enjoy the opportunity to discuss their experiences with their colleagues from other countries. This reflects the benefits of asynchronous communication, which gives the participants time to reflect on topics under discussion, formulate their responses and check them. This reduces the problems associated with "losing face" and preoccupation with self-esteem and reluctance to share ideas with others (DuPraw & Axner, 1997). Nevertheless, sometimes online communication can prove a rather frustrating medium, with many questions flowing back and forth before the real message is clear. In such cases, the main difficulty is getting enough information from the participants to pinpoint areas of concern.

Elaborating on other people's statements as well as explaining concepts and procedures to oneself and others has a strong positive effect on learning.

According to Järvelä and Häkkinen (2000), this is due to sharing critical thinking methods that can help the participants understand the divergent ways in which people think about problems and solve them. The development of critical thinking can be supported fully only if employees are able to read between the lines, which is particularly difficult because of the culturally charged nature of communication and learning. Further, the reduced shared context available during an online course in comparison can make people misunderstand each other. They may also react in ways that can hinder what are otherwise promising partnerships, as the HRD practitioners pointed out. People are not always even aware that culture is affecting them. Therefore, it could be useful to unpack the culture-bound aspects of an e-learning course and thus increase the participants' awareness that presentation methods, content, jargon and styles may vary between different cultures.

In addition to creating an appropriate context for e-learning, it is important to pay attention to the different communication styles among the participants. This is a question that concerns not only multinational corporations, but also other large companies. Ways of communication differ between countries and ethnic and social groups. For example, even in countries and companies that share the English language, the meaning of "yes" varies from "maybe, I'll consider it" to "definitely," with many shades in between. It is a different question how this can be taken into account in a way that makes reciprocal understanding easier. It is possible that learning to know different cultural practices can be an important content of and aim for multinational e-learning courses. We believe that current e-learning solutions provide excellent tools for increasing intercultural awareness and respect – provided that the courses are run by teachers and tutors who are themselves familiar with different cultures and cultural practices.

The management's role in collaborative corporate learning and communication was the third main theme that was discussed by the subjects. The discussions reflected a concern about the distance between the ideal of organisational development and actual managerial practices. Under the stress of what work today requires of employees, having a supporter and facilitator is becoming more and more important. While workers are required to master a wide range of skills in order to be able to do their jobs, they are also being given greater opportunities to acquire new skills. Several studies show that people involved in major change processes cope better if they have a chance to analyze the core elements of change so as to see whether they can influence them in any way (e.g., Filander, 1999). Some of these elements can be influenced easier than others. The ability to exert influence is one of the qualities employees look for in their superiors; another is the ability and willingness to place one's insight and powers of persuasion in the service of the entire organization. We suggest that it is essential in corporate training programmes – delivered either in traditional ways or as

e-learning solutions – that the management-level personnel also attend. If e-learning courses are designed for promoting professional and organizational development, the whole organization must take part.

Creating a learning environment that truly promotes communication and collaboration at work is not easy. It requires profound pedagogical insight, an eye for social situations, and skills in guiding other people. In multicultural contexts, it demands also what is called cultural competence (Matinheikki-Kokko, 1997). In this respect, tutors have a pivotal role in an e-learning course. Without skillful and experienced tutors, e-learning situations may never reach the level on which significant learning experiences can take place. It would be worthwhile to examine how shared expertise that embraces company support, university tutors, and learners with expertise of various kinds could be brought together to address the cultural implications of e-learning solutions.

In sum, we emphasize that designing successful e-leaning courses that foster professional and organizational development depends on the following four crucial principles: 1) creating an atmosphere of open communication, 2) using skillful and experienced tutors, 3) providing cross-cultural training, and 4) involving the whole organization, including the management, in professional development programs.

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