

Blended Learning Trends in Workplace Learning Settings: A Multi-national Study

Running head: Corporate Blended Learning Trends

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### Abstract

This paper reports survey findings related to the current status and future trends of blended learning in workplace learning settings from diverse cultures. This particular survey was conducted of 674 training and human resource development professionals from five different countries (i.e., China, South Korea, Taiwan, United States, and the United Kingdom). The results show that blended learning will become a popular delivery method in the future of workplace learning not only in Western countries but also in Asian countries. Still, the respondents indicated that there were several barriers to blended learning; one of the most noticeable issues was being their lack of understanding of the term blended learning. There is a pressing need, therefore, to provide practitioners with guidance on how to implement blended learning in their organizations. Respondents' predictions related to emerging instructional strategies, technologies, and evaluation techniques for blended learning are also reported. Additionally, the results of the present study showed that organizations from Western cultures were more likely to be early adopters of blended learning compared to those in the three Eastern countries we surveyed; however, those from the Eastern cultures were likely to embrace this innovative approach for workplace learning more rapidly in the near future.

## Blended Learning Trends in Workplace Learning Settings: A Multi-national Study

With the emergence of Internet technologies, there has been an explosion of nontraditional learning opportunities during the past few years. This explosion is apparent in K-12 environments, higher education, and government and military training settings (Bonk & Graham, 2006; MacDonald & McAteer, 2003; Young, 2002). Such informal and nontraditional training approaches have also proliferated in corporate training (Cross, 2006; Noe, 2003). However, various limitations of e-learning as a training method in corporate settings have led many to try mixing various delivery methods. Accordingly, interests in blended learning, which typically combine face-to-face (FTF) training and online learning, is rapidly increasing (Boyle, Bradley, Chalk, Jones, & Pickard, 2003; Duhaney, 2004; Thomson NETg, 2003; Thorne, 2003). Millions of learners around the planet, in fact, are actually learning in this fashion each day (Bonk & Graham, 2006). Ironically, however, there is minimal known about the resulting learning differences among various blended learning models and the transfer of learning gains from one delivery mechanism (e.g., self-paced online learning to acquire content) to (e.g., FTF classroom training to practice one's new skills in front of others).

Despite the many unknowns, blended learning estimates continue to climb. By the end of the decade, it is conceivable that 80-90 percent of college and corporate training classes will be blended (Kim, Bonk, & Zeng, 2005) and that more than one billion learners around the globe will advance their skills in this fashion. Therefore, many practitioners in Human Resource Development (HRD) and corporate training are asked to strategically plan for blended learning even though many questions remain unanswered. In response, this research project explores the current status and future directions of blended learning in workplace settings, including business,

government, and not-for-profit organizations, in five different countries. Among our key interests was whether blended learning practices were similar in Eastern and Western countries.

The present study intends to provide a compass that can mark the direction and intensity of the blended learning approach in corporate training settings. Blended learning is becoming a dominant delivery method for workplace learning across organizations within various sectors and of varying sizes. A 2004 survey in *T & D Magazine* estimated that the use of blended learning in all of training in the United States in 2005 would double from the previous year and would reach thirty percent (Balance Learning, 2004). Some corporations are embracing blended learning as a training method that links learning and performance (Rossett, 2006). There are also expectations that blended learning can create more engaging learning environments (van Dam & Andrade, 2005) and help improve business performances (Harris, 2005).

Although many organizations are recognizing the potential of blended learning to bring learning closer to employees, there are numerous issues to be addressed in delivering blended learning. First, there are a plethora of technologies and delivery methods that can be used for blended learning in training settings. Indeed, there are many different models and blended learning approaches for delivering training (Rossett, Douglass, & Frazee, 2003). Such a fact can lead to confusion for practitioners in deciding the optimal blended learning approaches for their organizations. Thus, practitioners need guidance on the effective and efficient methods for delivering blended learning. Second, although blended learning has been discussed in global perspectives in higher education settings (Bonk & Graham, 2006), such discussions have been lacking in training settings despite the fact that many researchers and practitioners have emphasized the importance and benefits of global collaboration in education and training. The present study addresses these two issues while exploring instructional strategies and emerging

technologies related to the current status and future trends of blended learning in corporate training in five different countries.

Given recent trends toward the adoption of blended learning in workplace settings combined with the plethora of misunderstandings related to blended learning, a study of the future of blended learning and its implications for researchers and practitioners on workplace learning is warranted. Research on the direction of blended learning can lead to more effective strategic planning for it; however, an organization needs a vision of these future trends and the leadership to take advantage of them (Torraco & Swanson, 1995). Given the somewhat sudden emergence of blended learning and the attention it has gained in training settings, it is critical that training and HRD practitioners become aware of future trends in blended learning to effectively prepare for the future of training and development in their organizations. In response to this need, a survey was conducted of training and HRD professionals (e.g., chief learning officers, training managers, trainers/instructors, and e-learning developers) from diverse cultures on the current status and future trends of blended learning in workplace learning settings. To that end, the research questions addressed in the present study included:

- How is blended learning perceived and practiced in workplace learning settings today?
- What are the benefits of and barriers to implementing blended learning?
- Are there cross-cultural differences in the current trends and issues in blended learning?
- What are common as well as emerging instructional strategies, learning technologies, and evaluation techniques for blended learning?

### Review of the Literature

Blended learning has garnered a great deal of attention from both education and training settings around the world for several reasons. In educational settings, particularly in higher education, blended learning has been recognized as an opportunity to improve the teaching and learning process by complementing the strengths and weakness of FTF and online learning settings. Blending traditional teaching approaches with learning technologies allow for more interaction between instructor and students or among students than in FTF classroom instruction such as in large classroom lectures (Chamberlain, Davis, & Kumar, 2005; Dziuban, Hartman, & Moskal, 2004). Additionally, blended learning can also support increased accessibility and flexibility of classroom teaching, and also increase the cost-effectiveness by reducing seat time in classrooms (Chamberlain, et al., 2005; Dziuban, et al., 2004; Osguthorpe & Graham, 2003). Moreover, some blended learning approaches are adopted as a means to address pervasive dissatisfaction of online students with the lack of a sense of community in their online classes due, in large part, to the lack of FTF interactions (Lee & Im, 2006; Osguthorpe & Graham, 2003).

Several studies have been conducted to compare the effectiveness of blended courses with FTF or online courses. Results of several higher education research studies suggest that learner satisfaction and learning outcomes can be superior in blended learning settings compared to those in online settings (Boyle, Bradley, Chalk, Jones, & Pickard, 2003; Lee & Im, 2006; Lim, Morris, & Kupritz, 2006). In addition, Dziuban and his colleagues (Dziuban, Hartman, Juge, Moskal, & Sorg, 2006) report that the learning outcomes of students in blended courses (i.e., academic achievements and withdrawal rates) are equal or superior to that of students in FTF or online courses. Also, a meta-analysis of prior studies on the effectiveness of Web-based instruction compared to classroom instruction conducted by Sitzmann and her colleagues

(Sitzmann, Kraiger, Stewart, & Wisher, 2006) provides preliminary evidence related to the effectiveness of blended learning programs by harnessing the effectiveness of the two different modes of instruction; i.e., online and FTF instruction. Furthermore, some studies suggest that higher education instructors have a high level of satisfaction with blended courses, due largely to increased flexibility and enhanced interactions in Web-enhanced environments (Dziuban et al., 2004; Wingard, 2004).

In addition to the benefits of blended learning reported in higher education settings, HRD and training professionals have touted the potential of blended learning for transferring learning in workplace settings (Rosenberg, 2006; Rossett & Frazee, 2006; Shaw & Ignneri, 2006). A study by Thomson NETg (2003) of learners in both education and training settings indicates that learner satisfaction and learning outcomes – Level 1 and Level 2 evaluations in Kirkpatrick's (1994) model for evaluating training programs – were higher in blended courses than in e-learning courses. Another key benefit of blended learning in corporate training settings is an increase in the cost-effectiveness of course delivery by reducing the time and costs for employees to travel to participate in classroom training (Bonk & Graham, 2006). Accordingly, a recent survey of learning professionals in the UK and the US found that a majority of learning professionals think that blended learning is the most efficient training method (Balance Learning, 2004). It should be noted, however, that empirical studies on blended learning in workplace learning settings are still sparse. In fact, Shaw and Ignneri (2006) contend that more research studies are needed to enhance the understanding of how blended learning can truly improve learning, performance, and retention.

In terms of the current blended learning practices, several blended learning models are being used in workplace learning settings (Bersin, 2004; Bonk & Graham, 2006; Rossett &

Frazer, 2006). Additionally, a survey report from the MASIE Center (2006) related to learning delivery methods in workplace learning settings shows that classroom delivery is used for leadership/supervision, sales/customer service, and orientation, whereas e-learning delivery is used for HR compliance, safety, and IT systems or software. Another survey by the eLearning Guild (2003) found that management skills and business skills were taught most often in a blended mode. This survey also reports that sixty percent of the respondent organizations were measuring the increase in knowledge or skills from blended learning and another thirty percent were measuring an impact of blended learning on job performance to evaluate blended learning programs. While these reports document current practices in blended learning largely in North America, there is a paucity of research on global trends related to blended learning both in terms of current practices and future projections.

Additionally, we attempted to search research instruments used in earlier studies to survey the current and future state of blended learning. As a result, we found a survey instrument used in a survey study by eLearning Guild (2003), but there was no research instrument developed to predict the future trends of blended learning. Therefore, the present review of the literature revealed the need for the development of a research instrument to answer such a research question, which was the main focus of the present study.

## Methods

### *Participants*

A Web-based survey was conducted of 674 employees from five different countries (i.e., China, South Korea, Taiwan, United Kingdom, and the United States). These surveys were administered through professional organizations and listservs related to workplace learning.

Those five countries were selected for the study using a convenience sampling method. They were also purposefully selected to represent countries from the East and the West. Figure 1 below represents the breakdown of the total respondents by their location of employment. We chose to study practitioners with varying roles and experiences in blended learning to attempt to grasp its' current practices and future trends.

The participants in this survey study belonged to various types of organizations, including government, business, and not-for-profit organizations. About forty percent of the respondents were female and sixty percent were male. Additionally, our survey respondents were also employed in organizations of various sizes. About thirty percent of respondents were employed in small businesses with the number of employees less than 100. Another 30 percent were employed in large organizations with employees more than 5,000. Also, ninety percent of those surveyed answered that they assumed a role related to blended learning in their organizations, including designing (23.2%), planning (15.6%), delivering (15.2%), visioning (10.9%), and evaluation (3.7%).

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#### *Instrument and Procedure*

The survey instrument for this study consisted of 31 items related to respondent demographics, current status of blended learning in respondent organizations, and predictions of the future state of blended learning. This questionnaire comprised of 29 closed-ended questions (e.g., multiple-choice and Liker-scale types) and two open-ended questions to elicit general comments about blended learning.

Based on the review of literature described in the earlier section, a preliminary questionnaire was developed first by seven investigators, including three from Korea, two from mainland China, one from Taiwan, and one American. To tailor this instrument for the international participants, the survey was created in four different languages (i.e., traditional and simplified Chinese, English, and Korean). The questionnaire was developed in English first, and then was translated into other languages by the investigators who were speakers of the native language. The translation was then cross-checked by other investigators on our research team or by external colleagues to verify the accuracy of the translation and also to check the overall validity of the instrument. A reliability analysis, such as Chronbach's  $\alpha$ , was not sought on this instrument because the type of data gathered from this instrument, which was mostly categorical, was not suited for such a statistical analysis.

This survey took place between November 2005 and July 2006 using SurveyShare; a Web-based survey tool. This survey was part of a third set of studies on e-learning in corporate training and higher education settings which began in 2001 (Kim & Bonk, 2006; Kim, Bonk, & Zeng, 2005). As indicated, the survey was distributed to several online forums and listservs for training and HRD professionals in the aforementioned countries. Some descriptive analyses (e.g., frequencies, means, and standard deviations) were conducted of the data using a statistical analysis tool provided in the survey system used for this survey. Additionally, assorted inferential statistics (i.e., chi-square test, t-test, and correlation analysis) were performed using SPSS to investigate potential cross-cultural differences in the trends and issues related to blended learning.

## Results

### *The Current State of Blended Learning across Cultures*

#### *Current Popularity of Blended Learning*

The results of the present study indicate that blended learning has become a popular delivery mode in workplace learning settings in general. Sixty-one percent of those surveyed responded that their organizations were already using blended learning approaches for training their employees. Furthermore, another twenty-one percent of them indicated that their organizations were considering using blended learning at the time that this survey was being conducted. Yet, the results of a chi-square analysis show that there was a significant differences in the level of use of blended learning across cultures [ $\chi^2 (16, 653) = 128.05, p = < .01$ ]. More specifically, blended learning approaches were being used the most in the US and the UK, where 75 percent and 73 percent of respondents from these countries, respectively, answered that their organizations were using or had used blended learning. The Chinese were using blended learning approaches the least among the five participating countries; in fact, only 37 percent of Chinese respondents reported that their organizations were using or had used blended learning approaches.

Although fewer organizations in Asian countries adopted blended learning than those in Western countries (i.e., the UK and the US), they showed a high level of interest in using blended learning approaches; in fact, over a quarter of the Taiwanese and Chinese respondents answered that their organizations were considering using blended learning. In particular, blended learning seems to be booming in Korea. About two-thirds of Korean respondents indicated that their organizations were using or had used blended learning and another 28 percent were considering using it.

*Benefits of and Barriers to Blended Learning*

What is driving this increasing popularity of blended learning? A majority of respondents reported that improving the quality of learning experience, an increase in the availability and accessibility of learning, and cost reductions were the major key drivers for adopting blended learning in their organizations. Additionally, nearly one-third of those surveyed responded that an increase in the focus related to on-demand learning would promote blended learning the most in the new few years, followed by the blurring lines between work and learning (19%), an increase in the use of real world cases, stories, and examples in training (15%), and increasingly individualized or personalized learning (15%).

Despite the increasing importance of blended learning in workplaces, the results of the present study also show that there are obstacles in adopting blended learning. Our survey respondents indicated that their lack of understanding of blended learning was the most important issue that needed to be addressed to implement blended learning successfully. This finding is important because 68 percent of the respondents also indicated that blended learning was either important or very important for the strategic planning for training and development in their organizations for the coming years. Ironically, however, less than a half of those surveyed answered that their strategic plans were presently addressing blended learning. This trend of the lack of strategic planning for blended learning was almost identical throughout the countries studied [ $\chi^2(8, 599) = 12.286, p = .139$ ]. Interestingly, while lack of management support is often a major challenge in delivering new forms of corporate training, only eleven percent of the respondents indicated that “lack of management support” was a problem of developing blended learning.

*Practitioners' Overall Perceptions of Blended Learning*

Given such confusions and lack of understanding that existed about blended learning, the present study investigated the respondents' attitudes toward blended learning. Measured in a five-point Likert scale, where 1 was the most pessimistic and 5 was the most positive, our survey respondents had a moderately positive view about blended learning ( $M = 3.54$ ,  $SD = .970$ ). The results of a chi-square test indicated that there was a significant difference in respondents' attitudes toward blended learning across the five countries under investigation [ $\chi^2(16, 653) = 61.37$ ,  $p < .01$ ]. When comparing the Eastern countries included in this study (i.e., China, Korea, and Taiwan) and the Western ones (i.e., the UK and the U.S.), the results of an independent t-test indicate that respondents from Western cultures had significantly more positive perceptions about blended learning than their Eastern counterparts ( $F = 23.446$ ,  $p < .01$ ).

Additionally, respondents exhibited a moderately positive attitude toward the level of support that they receive from their government on blended learning ( $M = 3.76$ ,  $SD = .854$ , where 1 = "not supportive at all" and 5 = "very supportive"). Furthermore, the results of a chi-square test showed that the level of government support that respondent organizations received was different across cultures [ $\chi^2(16, 591) = 37.47$ ,  $p < .01$ ]. In more detail, respondents from Western cultures reported a higher level of government support than their Eastern counterparts ( $F = 2021.446$ ,  $p < .05$ ). The results of a correlation analysis showed that respondents' perceptions of blended learning were significantly associated with the level of support from their government ( $r = .088$ ,  $p < .05$ ).

*Skills Currently being Taught in the Blended Mode*

Then content areas taught in blended approaches the most were job-related skills (40%),

computer application and software skills (33%), and communication and teamwork skills (33%). (Note that respondents could choose more than one response in this item). In contrast, computer systems or programming skills and product specific information were the areas that were least taught in a blended mode, with less than thirteen percent of respondent organizations using blended approaches to deliver courses in such areas. Further analyses indicate that there were cross-cultural differences in the content areas often taught in a blended mode. Computer applications were taught most often in blended approaches in the UK and US organizations, whereas job-related skills and basic skills were being taught the most using blended approaches in China, Taiwan, and Korean organizations. Additionally, the basic skills area was one of the least taught topic areas in a blended mode in the Western countries, whereas product specific information was the least taught in a blended mode in the Eastern countries.

#### *The Current State of Organizations' Strategic Planning on Blended Learning*

In response to a question on the importance of blended learning, 68 percent of respondents also indicated that blended learning was either important or very important for the strategic planning for training and development in their organizations for the coming years. The results of a chi-square test showed that there was a significant differences in the respondents' perceptions of the importance of blended learning across cultures ( $\chi^2 = 29.503, p < .05$ ). More specifically, just over a half of Chinese and Taiwanese respondents indicated that blended learning was important for their organizations' training and development in the coming years, whereas more than two-thirds of those from Korea, the UK, and the US felt that it was important.

To gauge respondent organizations' readiness for blended learning, we investigated the current state of strategic plans that organizations had for blended learning. Our survey results showed that over three-quarters of respondent organizations had a strategic plan for training and

development in place, among which just over a half addressed blended learning and 67 percent were addressing e-learning. Additionally, less than thirty percent had a blended learning model or framework in their strategic plans. Interestingly, the results of a chi-square test showed that there were significant differences in the state of organizations in terms of their strategic planning for blended learning among the five countries ( $\chi^2 = 149.756, p < .01$ ). More specifically, fewer UK and US organizations (20% and 18%, respectively) had a strategic plan in place than the Chinese or Korean organizations (ranging from 32% to 42%, respectively). Additional findings related to the cross-cultural differences in organizations' strategic planning on blended learning are reported elsewhere (Teng, Bonk, Kim, Oh, Son, Zeng, & Cheng, 2007).

#### *Predicting the Future State of Blended Learning*

##### *Organizations' Future Spending on Blended Learning*

In terms of the future state of blended learning, 68 percent of those surveyed predicted that their organizations' spending on blended learning would increase during the next few years. Respondents' predictions related to the future spending of blended learning differed significantly across cultures ( $\chi^2 = 1139.70, p = < .01$ ). Korean respondents were the most optimistic about their future training budgets on blended learning, with 84 percent of them reporting that their budget spending on blended learning was expected to increase during the new few years, whereas 44 percent of the Chinese respondents predicted such an increase. Predictions made by the respondents from the UK, US, and Taiwan were somewhat similar, of which those reported that their organizations' spending would increase in the coming years ranged from 61 to 66 percents.

##### *Emerging Instructional Strategies and Technologies for Blended Learning*

One of the most often asked questions that arises when designing blended courses or

programs is what the optimal blends are (Rossett & Frazee, 2006). Figure 2 illustrates the results of the present study regarding instructional strategies that would be widely used in blended learning in the future. Our respondents predicted that instructional strategies that link learning and performance by providing learners with collaborative learning environments and authentic tasks would be used more often during the coming decade. In contrast, didactic, lecture-based learning approaches and Socratic questioning were among the least favored. Clearly, Figure 2 reveals an emphasis on learner-centered, problem-based, and team-based approaches over instructor-centered ones.

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In another question, we listed 13 technologies and asked the respondents to select a technology that was expected to be used most widely for blended learning in the future (see Figure 3). Our survey respondents predicted that technologies that enable learners to engage in just-in-time training or performance support, such as knowledge management tools and digital libraries or content repositories, would be widely used during the next few years. The respondents also predicted that wireless and mobile technologies would be extensively used for delivering blended learning. However, only a small number of respondents predicted that some collaborative learning tools, such as massive multiplayer online gaming, blogs, and wikis, would be used often. This is a highly interesting finding given the exploding interest in such technologies in the media and in training-related conferences and publications. These results are conceivably associated with corporate security restrictions, which are extremely critical in workplaces (Ardichvili, 2002). Such findings also might be related to the fact that corporate e-

learning programs have been slow to incorporate social and collaborative methods (Macpherson, Elliot, Harris, & Homan, 2004). Collaborative and socially interactive e-learning environments allow learners to generate content on their own or through social interactions and collaborations using Web 2.0 tools such as blogs and wikis.

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### *Evaluating the Outcomes of Blended Learning*

Another important question for delivering quality blended learning is how it is evaluated. When looked at from the Kirkpatrick's (1994) evaluation model, 43 percent of respondent organizations were evaluating their blended learning programs at Level 1 (learner satisfaction) and 39 percent were evaluating at Level 2 (Learning gains); only 22 percent were evaluating at Level 3 (change in learner behavior). This finding indicates that there is a global trend in workplace learning to evaluate the outcomes of blended learning by measuring the increase in a learner's knowledge or skills. Such results are parallel to findings from a survey of learning professionals in the UK and the US (eLearning Guild, 2003).

We decided to ask whether this trend in evaluating blended learning programs at Level 1 or 2 of Kirkpatrick was going to persist in the coming years. Despite decades of evaluation centered at Level 1 or 2, nearly one in three (i.e., 30 percent) of our survey respondents predicted that the quality of blended learning would soon be measured most effectively by assessing employment performance. Another 24 percent of them projected that the quality of blended learning was going to be evaluated effectively in relation to its benefits to their organizations such as return on investment or cost-benefit analysis (see Figure 4). Therefore, it is notable that

there is a trend toward evaluating blended learning at a higher level.

Perhaps more importantly, only about a half of those surveyed answered that their organizations were evaluating the quality of blended learning. In other words, fewer than seven in ten (i.e., 68 percent) of those using blended learning were actually evaluating such approaches. Furthermore, the results of a chi-square test revealed that small and medium-sized enterprises (SMEs) were less likely to evaluate blended learning than large businesses ( $\chi^2 = 13.277, p < .001$ ). In our study, nearly one in three (i.e., 32 percent) of respondents in SMEs (i.e., organizations with less than 500 employees) indicated that they were not evaluating blended learning, whereas just one in five (i.e., 21 percent) of those in large organizations failed to do so.

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## Discussion and Conclusions

### *Discussion of Findings*

In parallel with other survey studies (Balance Learning, 2004; eLearning Guild, 2003), the findings of the present study indicated that blended learning will become a popular delivery method in the future of workplace learning not only in Western countries such as the United States and the UK but also in Asian countries such as China, Korea, and Taiwan. Despite the strong agreement among our survey respondents regarding the increasing importance of blended learning for the future of workplace learning, they also noted that they were facing several barriers to implementing blended learning within their respective organizations. One of the most noticeable barriers or issues that our survey respondents reported was the lack of understanding

of the term blended learning. This finding indicates that HRD practitioners, including training professionals, as well as other key stakeholders in workplace learning settings are in need of professional development in this new and emerging instructional method called blended learning. They need to be familiar with the models and frameworks on blended learning. They also need to be competent in adopting existing blended learning models and customize them to their needs. Additionally, they need to be adept at the emerging instructional approaches and technologies that will be used for blended learning. Also importantly, researchers may need to reflect upon the finding from the present study that many organizations did not use any models or frameworks on blended learning to lay out their strategic plans for it. This finding may indicate that more efforts need to be put into making such models or frameworks readily available and adaptable for practitioners.

In terms of evaluation, the results of the present study revealed there has been a paucity of research on how learners in workplace settings perceive blended learning and how it is impacting their job performance. Blended learning in workplace settings can improve further by better understanding such factors. Additionally, the results of the present study indicate that a variety of evaluation methods will be available in the coming years. Accordingly, practitioners need to acquire the knowledge and skills to effectively utilize those evaluation methods.

The results of the present study indicate that there are some interesting differences across countries in terms of the levels with which they have adopted blended learning approaches. On the one hand, organizations from Western cultures, such as the UK and US, were more likely to be early adopters than those from Eastern cultures (i.e., China, Korea, and Taiwan). On the other hand, most Eastern countries, with their increasing interest in blended learning, are seemingly in what Rogers (1962) calls the innovator stage of the diffusion process in blended learning where

the population has multiple information sources and greater propensity to taking risk. Our findings, however, may simply reflect general international trends that many innovations in education and training often arise in Western cultures, both in academic writings as well as corporate practices and experimentations. Such may also be the case with blended learning. Still, the results of the present study indicate that, in the near future, organizations from Eastern cultures are likely to embrace new blended learning approaches and derivations for workplace learning faster than those from Western cultures. Whatever happens in the evolution of blended learning, it will be interesting to watch. East may never meet West, but, instead, may surpass it in many unique ways with blended learning innovations and implementations specific to its myriad cultures and contexts.

It could be speculated that some of the Eastern countries such as Japan and Korea, which have been recognized as early adaptors of emerging technology and online learning in recent years (Jung, 2007), already have a sufficient level of infrastructure and government support to take advantage of technological innovations for education and training such as those surrounding blended learning. With sufficient leadership, models, and infrastructure, it is possible that there will be fewer differences across cultures in the pace with which organizations adopt blended learning in the coming decades. As emerging technologies become more accessible and new generations of learners who grew up with technology (i.e., the net generation) enter the workforce, blended learning options might not simply be a nice thing to consider, but a mandate for workplaces to compete as well as attract talented and creative workers who want viable options in their working and learning lives.

#### *Limitations of the Study*

It should be acknowledged that the generalizability of the present study could be enhanced

if a random sampling method had been employed. Instead, convenience and purposive sampling methods were used for this study because it was infeasible to identify the target population of every adult learner in workplace settings. However, the representativeness of sample drawn from a non-random sampling method can improve with a larger sample size (Fraenkel & Wallen, 2000). To this end, we made an effort to obtain a large sample size. In addition, a non-random sampling method was used to select the countries to be surveyed; thus, an important next step would be to investigate whether the trends found from the five countries surveyed in the present study are global trends or they apply only to these five countries.

Still, we found that our respondents were appropriate to represent those who we attempted to reach for the purpose of the study. We aimed at practitioners who were aware of blended learning to obtain reliable data to survey the current practices related to blended learning and to predict its future trends. The results of our data analysis showed that our survey participants had various roles and experiences with blended learning. Furthermore, the perceptions of blended learning revealed in the survey indicated that our respondents were not heavily biased towards blended learning.

#### *Implications for Research and Practice*

The results of the present study show that there is a pressing need to provide HRD professionals with guidance on how to implement blended learning in their organizations. Consequently, the results of this study should help practitioners become better informed on how blended learning will be designed, delivered, and evaluated for workplace learning in the future. Moreover, the findings of the present study on the current state of blended learning will provide some direction for researchers to address issues that HRD professionals and managers are facing around the planet. Lastly, since there is scant research on blended learning that compares

countries or regions of the world, the results of this survey study will provide meaningful data and ideas for serious decision making by both HRD practitioners and researchers related to blended learning around the globe. Once again, East may not meet West in such research endeavors nor does it in practice, but each can inform the other of what is currently happening and proving effective through benchmarking, research dissemination, white papers, and other reports. Then again, some new training approach or delivery method will likely emerge beyond blended which causes us to conduct a follow-up study in even more countries and regions of the world. Stay tuned.

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Figure 1. Respondents' location of employment (N = 674)

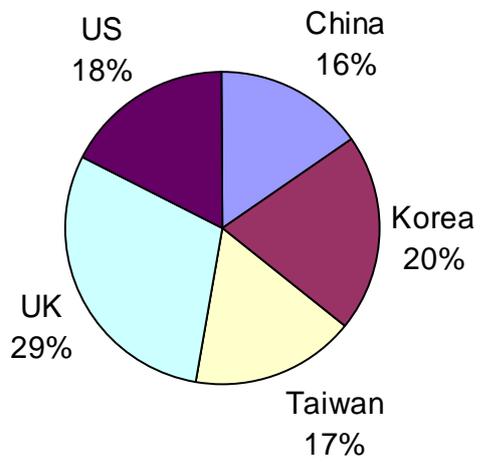


Figure 2. Instructional strategies expected to be widely used for blended learning in the next few years.

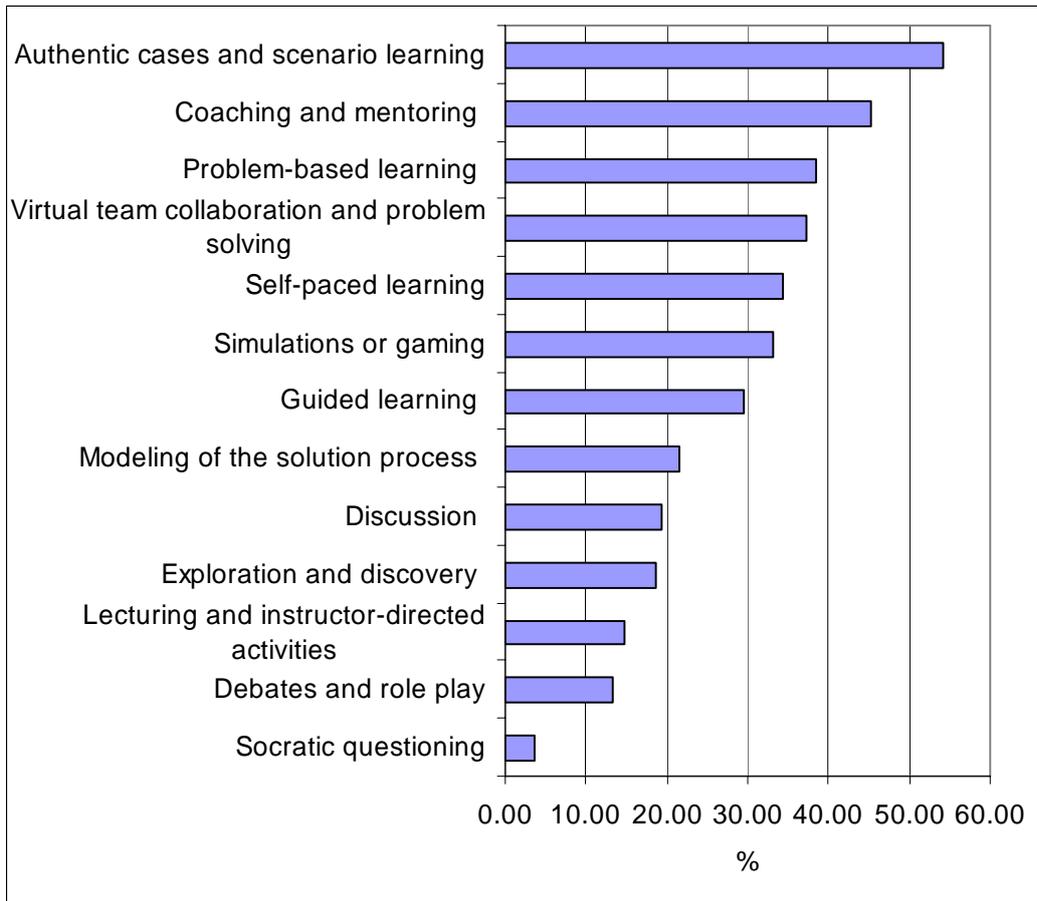


Figure 3. Emerging technologies expected to be widely used for blended learning in the next few years.

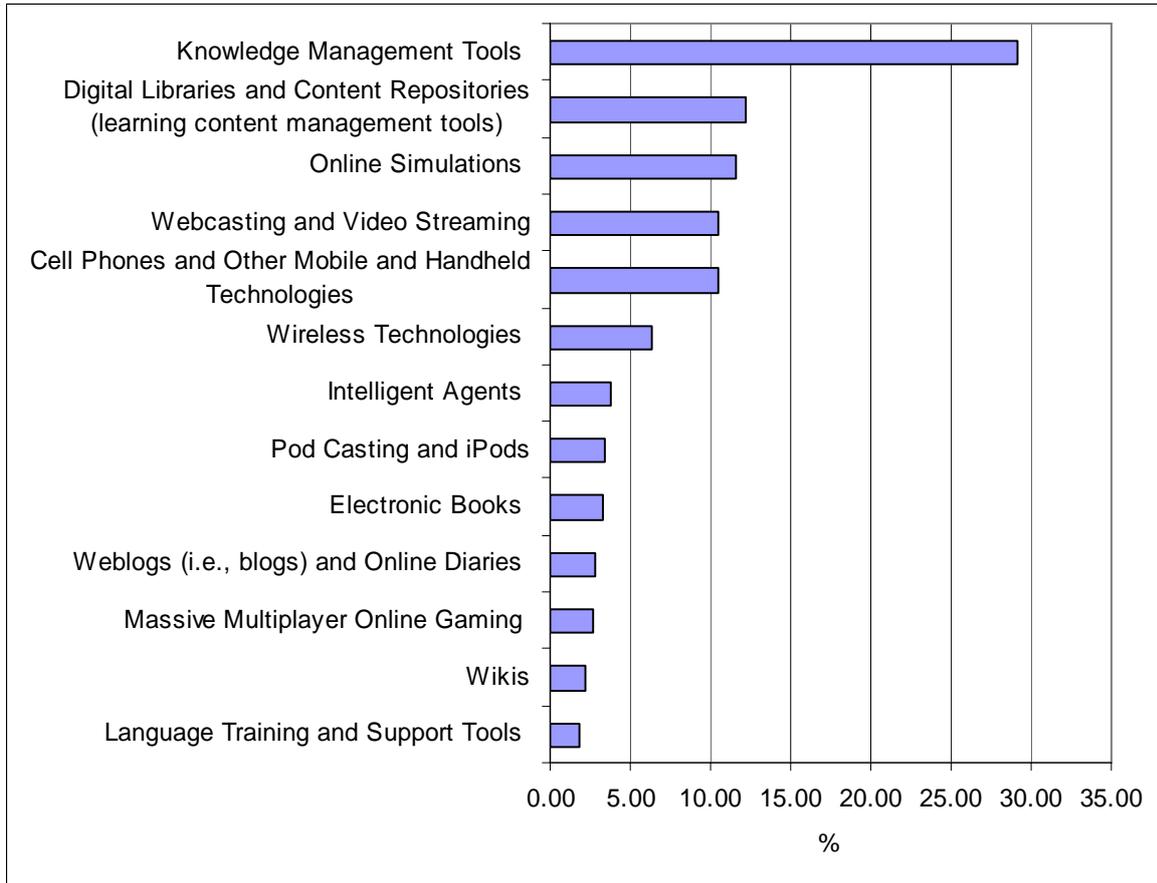


Figure 4. Respondents' predictions of the evaluation methods for blended learning in the coming decade.

