Flexible Learning: The Digital Engine of the Knowledge Economy

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Abstract

A recent World Bank (World Bank 2003) report stated that "Lifelong learning is education for the knowledge economy." If lifelong learning is education's fuel, then the knowledge economy's engine is flexible learning. This article examines a digital learning model developed to enable Thailand's Revenue Department to promote active engagement of its upper management in order to promote organizational change. These "e" case studies allow managers to generate their own solutions to current situations identified in their work environment. Through the use of high quality digital video and DVD technology, learners transform the passive training environment into one of active engagement, and when learners are engaged, motivation is not a concern. Although the initial project was created for use on DVD systems its design flexibility allows it to be implemented on intranet and Internet systems. Portions of this paper were included in a previous talk (Johnson, C. 2005b).

Introduction

The current training model used in the majority of companies in Thailand is a learn-by-telling one (Johnson 2005a). Everyday employees gather in training rooms or at resorts and spend hours viewing PowerPoint slide after slide. Many times they fall asleep, talk on their mobile phone or take page after page of notes about what is being "told" to them. These same employees then go back to the office and giving little thought to the "telling" they received and "do" their jobs. People "do" everyday, so why do we not "do" when we train them? As natural lifelong learners people will learn to do new tasks when they need to not before, when was the last time you learned a new set of skills that you currently don't require just in case you may need them at work. How about at home? No? Well maybe because we don't work that way. Just-in-case learning, the creation of schools and universities has long been the standard way facts or information is presented to the learner. This unnatural learning style is in direct conflict with the way business function in today's rapidly changing global environment. So how do we put learning-by-doing and just-in-time learning into a platform that the business world can use? Easy, Digital Goal-based Simulations (GBS). A GBS allows employees to practice the skills they use at work while being evaluated on their performance of the skills involved, not how good they are at memorizing a group of facts. Using an interactive DVD teams are presented a series of scenario cases that they need to find solutions for, not just right or wrong answers. This paradigm change in the way we approach a problem-solving situation is critical to the new lifelong learning model, which states that all situation are fluid, and subject to continuous change. The practice aspect of a GBS allows learners to become proficient at a skill just like a musician or athlete who train over and over

until the skill is second nature. Engagement is found in the simulation's gaming aspect, short-term goals leading to the final winning solution or failure depending on previous choices. The learner is presented opportunities to correct mistakes, however, they must be able to effectively react in a timely manner or lose yet another chance for success. This learning-to-learn strategy ensures that as the volume of information continues to grow employees will be able to recognize critical opportunities and act appropriately as the situation demands.

DVD Simulation Learning

The challenge is to provide the end user with a service, which is both "desired" such as entertaining video, but also useful in a broader sense. By taking advantage of DVD technologies built-in scripting language, branching based video simulations can be constructed to challenge learners to over come obstacles to leadership, management or any other soft skill we wish to present them. Additionally, MTV style information-commercials or "informercials" will provide key tips, which the user will need in order to solve the simulation's challenge. This visual format takes advantage of current game-based learning theory and provides students access to realistic challenges in the form of simulations that have both short and long term consequences. An additional benefit of using movie scenarios over written cases in Thailand can be found in the writings of Chareonwongsak (Chareonwongsak 2002), who points out that the Thai's learning culture is one of a listening, watching and talking with a tendency to avoid reading especially "deep" materials. In addition to the DVD based simulation games and "informerials" the DVD format allows for the storage and retrieval of standard computer files such as Adobe PDF files for print documents, Macromedia's Flash MX files for interactive tutorials and platform specific applications. This added feature allows preexisting educational/informational materials to be placed on the DVD without the cost of an additional CD-ROM. This material can be accessed via any DVD player on a Windows, Macintosh or Linux computer.

DVD Training Model

Often management teams are overtaxed due to the lack of strategic planning experience in dealing with unique events such as organizational core value change. While the use of live role-play exercises are often used to train such teams their cost and extensive planning restricts their regular as well as widespread use. Fortunately, there is an effective low-cost alternative. Using strategic game style simulations teams can gain experience in managing the variety of services required to effectively resolve this type of large-scale situation. This training model uses a 4D approach to promote active engagement in the learning process. Christopher Johnson and Juthamas Kaewpijit of Thailand's National Institute of Development Administration coined it "4D Learning" for its Discussion, Dialogue, Debate and Debriefing. The 4D model ensures all members of the training contribute to the learning environment and remain in an active rather than passive mode. Using a technique from Robert Slavin's (Slavin 1995) cooperative learning model, learners elaborate their understanding of how their team's action plan compares to the simulation's "best practice" solution. The following detailed description is how each of the four phases is carried out during a typical training session involving upper management.

Model Outline

The following model represents a four-phase system that can be used to create

highly interactive learning environments for any topic dealing with strategic or tactical planning needs. See below for further details of the models operation.

Phase I

Watch Video Scenario: This sets up the problem or situation that needs to be resolved. Four (4) person teams will watch video simulations based on information gathered through interviews, questionnaires and focus groups during training needs analysis. Teams then determine to "act" or "not act" at the simulations decision point. If they do not act then they move to the feedback movie showing the outcome of their inaction. Each team will be required to discuss the simulation situation prior to making a choice to take no action. This can be a simple "yes/no" vote or they may choose to dialogue for group consensus. If the team decides to take action they are presented an opportunity to discuss a plan of action, record the steps and then once they have formulated their own action plan view the DVD to see the choice the expert suggests or "best practice". This component is similar to Richard Duke's (Duke and Greenblat 1979) frame game.

Phase II

Once they view the best practice provided the teams break into dyads (2 person learning teams) and perform a review of the simulation case, the group action plan and experts' best practice recommendation. Each dyad will then select which outcome choice they support and note their choice on an Action Card. If new mangers are being trained a series of video stories from experts can be created to act as virtual coaches, this does add extra cost and time to the project but would allow the program to be used by a wider target group.

Phase III

The teams then reform and each of the two dyads present their Action Cards to the opposite team. The choices are recorded on the tracking sheet. Teams may wish to discuss or debate the merits of each dyads choice as it relates to the experts best practice recommendation. Teams then watch the outcome of the expert's best practice choice they select. Feedback is provided on the basis of the choice. This video sets up the next decision choice for the team to make. Teams track their choices versus the expert's solutions for use during the debriefing session when teams will be called upon to explain their rationale for their action plans. *Go to Phase I until all scenarios are completed, if all scenarios are finished then do to Phase IV*

Phase IV

Once the teams have completed the entire simulation a facilitator will direct all the teams through an open debriefing session. During the debriefing the facilitator moves through the decision points then asks groups their outcome choice. At this point teams that belived their action plans were a more appropriate choice then the best practice choice are asked to explain their rationale behind their decision. All members who selected alternative solutions are given the opportunity to expose the rest of the teams to different was of problem solutions. Finally, teams are asked to draft final recommendations on the simulation outcome as a whole. This summary will include justifications of alternative selections and an elaboration of the problem-solving method used during the training.

We expect our health professionals to use the most effective means in our care. Why should we ask any less of our training professionals? There is no longer any reason why HR departments are not offering the most effective means for their employees to

acquire the skills and knowledge to perform their jobs in a way that benefits all. Failing to provide the next generation of employees the adequate tools to learn will ensure that companies will in effect become dinosaurs and like the dinosaur pass from the Earth into history and be replaced by the more adaptable mammal of the business world, those who learning-by-doing and therefore learn-to-learn.

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