

The Hybrid Learning Model and Alternative Evaluation System

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Abstract. Education reform for the 21st century has generated various models of learning that have emerged over time. In this paper the Hybrid Learning Model is introduced, which has grown out of a ten-year research and development efforts within the university context. In this article, the author attempts to explore the contributions of hybrid learning to the innovation of a learning culture for the 21st century.

Keywords: Hybrid Learning, Learning Culture

1 Introduction

Hybrid learning is not only a new way of learning but also a historic reform that learning culture is undergoing. As an inevitable trend of online living environments and online education, hybrid learning not only combines traditional classroom teaching and online learning but also integrates the learning experience of "three worlds": the experience world, the language world, and the online virtual world. The goal and value of a research on hybrid learning is that it helps teachers and students surpass the traditional 20th century teaching model, which alienated so many students, and embrace the rapidly developing, rich and complex real-life living environment. Too often today the learning environment is ill-structured for the realities of life that are both actual and virtual, and it fails to promote the learning outcomes for adapting to a global society. Learning and working within and across time zones, with the explosion of knowledge and information available to everyone everywhere, is a new opportunity and capacity. Many students and faculty have developed personal global networks, which add strength to the resources available, and invigorates the interaction capability for students. These features, however, remain elusive to most. Hybrid learning all the resources that are now available by embracing the local experience, the students own knowledge and interests, and integrates them with possibilities that exit within virtual environment. Assessing student performance within a Hybrid Learning model remains a challenge, which is important for shifting the teaching and learning experiences to the Hybrid Learning Model.

2 The Meaning and Value of Hybrid Learning

Hybrid learning originates not from theory but from practice; it is an inevitable outcome of the rapidly developing cyberspace environment and online learning activity. When online learning emerged fifteen years ago, many people predicted that the traditional classroom and schooling would be replaced by a more virtual type of education. Online learning has developed even more rapidly than expected, but these predicted changes within classrooms did not happen. In fact, many negative reactions to the “intrusion” of the virtual environment have emerged over time. Educators have learned from the last several decades that online learning should not be isolated from educational traditions and cultural backgrounds. Facing the challenges from practice, we began to consider the differences and relationships between rapidly developing online learning options and traditional teaching models, which has led to the birth of Hybrid Learning Model.

A practical project was launched ten years ago to explore an alternative model of online learning. This project relied on a core course of instructional technology program, called: Theory and Practice of Learning in a Digital Age (now named Learning Sciences and Learning Technologies: Developing the Learning Capability for the Collegiate Learner in the Digital Age). We expected there to follow a learning revolution in higher education in this digital age from this from teachers and students who experienced an alternative learning model within an information culture.

As expected, we were confronted with conflict between online teaching and traditional classroom teaching at the beginning of this project. We began to understand that by copying the model of traditional classroom teaching into online environments, and simplifying the complex online learning back to head talk and screen reading, will not produce the desired effects we were seeking in student learning outcomes. A new model was created with a new theoretical framework [1] to integrate the learning experiences from three different worlds into an organic unit. To begin, in the traditional schooling learners live in two types of learning environments all the time: 1) the intuitive world of experience, and 2) the abstract verbal world. The current educational model in schooling separates these two worlds. The contemporary information technology broke the constraints of space and time and created unprecedented virtual worlds for bridging the interaction of the two previously mentioned worlds.

Many experiments in our project revealed that online learning could replace learning in neither the real world nor the verbal world. For example, there is evidence that some learners fail to adapt to e-books displayed through computer screens and cannot master the information provided by online instruments. Some learners are doomed to failure if online learning is limited to multimedia and the Internet. Online learning must be unified with experiences in real world of experience and abstract ideas to facilitate learners’ independency, collaboration and creativity.

Now, having ten-years of practice of experience in managing, we have come to realize that Hybrid Learning needs to become a prominent concept for teachers and professors everywhere. If we expect to promote the learners’ capacity building in the digital age, hybrid learning emphasizes the necessary integration of learning activities and experiences in diverse settings, from traditional classroom teaching to online learning, from the real world of experience to the abstract world of language and to

the virtual world online. The key of success with Hybrid Learning is to make full use of diverse forms of learning sources and experiences, and unify them into an integrated unit. Most of the successful cases for online learning projects all over the world are triggered by the practical needs proposed by learners, and then designed and developed to guide their inquiry in real and abstract worlds with the help from teachers. These projects enable learners and teachers to develop their ability to learn and research in the digital age through communication with each other across space and time and to comprehend massive amounts of information from various channels.

The value of research on Hybrid Learning is to help teachers and students surpass the ivory-towered and alienating traditional classroom teaching model, and face the rapidly developing real-life environment and the ill-structured learning environment of classrooms, and adapt to current human learning realities.

3 Hybrid Learning and the Innovation of Learning Culture

Hybrid learning is not only an alternative form of learning, but is also a revolution for the learning culture of change. Learning is an individual behavior as well as a social phenomenon. For a long time, people limited learning to the transfer of culture and knowledge; research on learning was confined to the fields of educational research within the existing traditions of classroom learning. To understand the new living environments in which people naturally learn, we need the perspective and knowledge from many fields of inquiry, such as philosophy and anthropology. With the accelerating development of society and the well-known knowledge explosion in modern times, learning is taking on a more important role in the development of our civilization. To understand learning within the new context of the 21st century, we need professionals from psychology, sociology, brain science, computer science, economics, to name a few. We must extend our understanding about human learning from macro levels to micro levels, and from history to current conditions. At present, the most urgent need is to synthesize all the findings on human learning and integrate them into a united framework to guide the practice of learners. Research on learning from the perspectives of philosophy and culture has emerged as a major challenge to educators, and to invent a new and integrated learning culture.

In recent years, the question "Does learning really happen to you?" has been raised by the researchers on the forefront of learning sciences all over the world, and by teachers and students as well. To some extent, this question is surprising. Aren't students learning every day? But, what do we mean by learning today? What is a healthy learning environment today? These questions are not only in the forefront of the learning sciences and but also great challenges for renovating the culture of school learning. Scholars hold different answers to these questions. Based on our research over the past decade the following key ideas have surfaced for our consideration:

1) Knowledge is different from information. Unlike information, knowledge cannot be infused imparted into students by teachers in a mechanical way. In essence, learning is triggered by motivation; personal interests and willingness are important preconditions. 2) Learning can be guided by questions and supported by effective learning environments with rich learning resources provided through instructional

technology. In learning activities, dialogues and communication are necessary for the success and positive effects, and for good experiences. These conditions are important for the subsequent learning.

If these two key ideas are not in operation, learners might spend all of their time on reading and rote memory of unimportant information, and true learning may never happen to them! A lot of energy and time is wasted day by day with students engaged in irrelevant and mindless activity. What is more worrisome is that the learners can develop many bad habits, experience failure and generate negative experiences about their learning! The bad habits and experiences of failure can be disastrous for learners. This is a wake-up to those teachers and students who are still immersed in boring, ineffective teaching careers who are unaware of the huge approaching danger!

It is an arduous task to deeply investigate and successfully develop models for hybrid learning with the combination of theory and practice. This challenge lies at the edge of interdisciplinary work on human learning that is accompanied with the realities of information technology. The goal of a revolution and innovation in school and university learning can be reached when the shackles are broken from outdated education philosophies, conservative schooling institutions, outdated performance evaluation and promotion policies, and learners' long-established bad habits.

By innovating the culture of learning, the teacher-centered classroom must be transformed so that students are able to become the masters of their own learning. The new Learning Culture is one in which students are liberated from passively receiving information from teachers, and are empowered with the ever-changing information technology in an alternative classroom environment where independent learning and collaborative learning is the norm. In this setting they learn to cope with various challenges and fully display their creative talents, to become the owner of their own learning. Students need to understand that their role is irreplaceable in their own learning activities and to recognize the need to take full responsibility for their own learning activities and the consequences. When student have entered this realm of learning they will become masters of their own learning!

4 Reinventing Assessment and Management in Hybrid Learning

The healthy, orderly and efficient development of web-based hybrid learning requires that the practices of student assessment and management be redesigned. Current online learning management remains today as it was established for 20th century learning, which is a closed system with no capacity for continuous adaptation to the ever-changing open online learning. The task of Management is to promote the innovation of curriculum and teaching models and to guarantee the improvement of learning efficiency. If students are to engage successfully in online learning at home and abroad, their performance is too often assessed by traditional teaching model of teachers infusing students with information and measuring their exact acquisition of the information. Tests of memory need to be abandoned, along with multiple choice tests that measure predetermined knowledge. This new age of living is generating multiple possibilities and new knowledge continuously. At best, students can learn about the trends in ideas. There now longer are many absolutes. If we are to prepare

learners for life long and continuous learning, we need to develop their capacity to learn independently and collaboratively. The different practices are directly and closely related to the different choices of education management modes.

At present, the priority is to develop new ideas for the next generation of education management. The characteristics of education management in the information age include: openness, diversity, independence, synergism, service-based projects, nonlinear, online, individualized, life-long, database-based, intelligent, remote-controlled realities.

Current school management practice need to change, from the management of teaching to the management of learning, from teaching administration to learning service and performance management, and from uniform management to a diverse and individualized system of learning. For example, traditional teaching management in colleges and universities is a kind of simple two-level management, including university-department level (programs and evaluation) and teacher-student level (attendance and examination). But for online learning management, it should be on the one hand promoted from teaching administration to online course development and learning resource building management and on the other hand extended from teaching-centered management to individual and online learning management and service system construction, and these two sides should be combined in a unified way.

The curriculum development in online courses is far more complex than classroom based curriculum development. Compared with traditional curriculum, online curriculum contains more factors, including the scientific and normative requirements as in traditional classes, and also feasible flexibility for online inquiry, enough resources for independent exploration, and reliable model for interaction in virtual environments. Online learning management is more difficult than classroom based learning, and yet contains learning objective management, motivation stimulation, learning capability development, learning obstacle settlement, and learning efficiency and outcome evaluation.

We must accelerate our efforts to update the modes of learning in the digital age and explore alternative learning models that feature online learning elements: collaborative learning combined with long distance and short distance interaction, self-evolving learning characterized by independency and individualization, and task-driven and nonlinear online learning in both comprehensive curriculum and subject curriculum. In the process of creating Hybrid Learning environments, attention needs to be given to new models for evaluation, which is the test of innovation at its core. For nearly ten years, our team has been developing a roadmap for the innovation of a testing culture, which is guided by multiple intelligences and based on information technology, and aims to build a process for evaluation in Hybrid Learning. Our work has been guided by this principle: examination should be regarded as a special kind of learning and be conducted through production, according to individual differences, in the form of team work, with intelligent instruments and based on resources.

The model for evaluation in Hybrid Learning is displayed in figure 1: An Alternative Model for Evaluating Hybrid Learning. The examination of learning is the centerpiece, which emphasizes examination as a special phase of the learning process, and is not separate from what was learned or the process of learning. It is part of the learning process and its outcome. There are five elements that are included in the examination phase, which includes: 1) examination through production, 2)

examination in the form of team work, 3) examination based on resources, 4) examination with intelligent instruments, and 5) examination according to individual differences. These five features are each equal features of Hybrid Learning, and they are at the same time interdependent features as well. For example, assessment of teamwork is linked with the actual production of work. And the production of work is based on resources, individual differences.

Among the five essentials in this evaluation model, the most important one is examination as a special kind of learning, which holds the core position in the model and is the soul of examination of hybrid learning. Examination is an element adhering to the basic principles of learning, and is facilitated throughout the process of learning to develop students' ability to exam their own learning. In the implementation of this new evaluation model, student reflection and evaluation of all aspects of their own learning is important. This self –assessment includes what they have learned and how they have learned in various terms, e.g. knowledge, emotion, process, experiences, skills, and so forth. Only in this way can a comprehensive, objective and fair learning assessment be achieved.

In the process of learning assessment, student can master and use information technology to develop their own web-based portfolios, personally and for the team or whole class. The contents of the portfolio include various learning achievement in forms of research reports, papers and learning resources. Through the development of e-portfolios, a multimedia online evaluation model, with rich resources for the process and achievements of learning is created. For this alternative model, more theoretical details and relevant practical cases will be introduced and discussed at the conference.

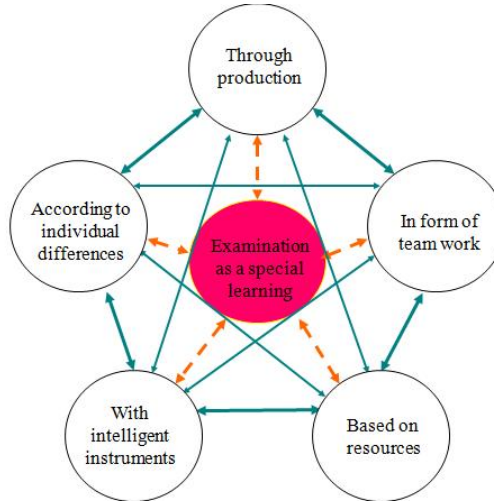


Fig. 1. An alternative model for evaluation of hybrid learning

This Evaluation Model for Hybrid Learning environments is an image of what makes sense today. As time goes on, new features will be added and others dropped. For now, there remains a significant challenge to educators, which is to embrace the

realities within the Hybrid Learning Model, and the opportunities for learning in the Alternative Model for Evaluation. With these two models in practice, student learning can become more energetic, more interesting, more challenging, and more suited to the times.

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