Chapter 5

Teaching and Learning Fused through Digital Technologies:
Activating the Power of the Crowd in a University Classroom Setting

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ABSTRACT

The invisibility of the many in university classroom instruction sounds anachronistic in the age of the Internet, where learning is made meaningful by personal drives, personal choices, and personal possessions of learners. Reported here is a reconstructive effort at integration of teaching and learning by exploring the open nature and availability of the read/write Web in a pedagogic, hybrid course in China. This chapter is based on three key ideas: (1) learning community, (2) iterative learning process, and (3) reconstruction of personal conceptualizations through the dynamics of social discourse. By embodying target knowledge in the learning process, intuitive and reasoning powers of individual learners were shaped into primary driving forces through selective reading, classification tasks, and essay writing. In the intensive multi-level dialogues that followed, students reconstructed their personal conceptualizations of target knowledge, learning, and self-concepts, which were consolidated and developed further through monthly reflections and a term paper.

INTRODUCTION

The affordance of the read/write web, or Web 2.0, has a great impact on learner engagement within higher education by blurring the boundaries between personal, social spaces, and formal learning contexts (Hall, 2009). Yet the open nature and availability of the read/write web has not been well recognized and fully explored for participative models in classroom instruction to re-work both content and presentation, and to enable dynamic, hybridized, and derivative knowledge development.

Contemporary models for classroom instruction in universities still uphold the dominance of a privileged few in the class, be they a lecturing teacher or a presenting group. At the best, the sitting crowd might come up with some questions

and/or a few answers, yet the general direction is predetermined and the key notes are not to be doubted. The digital part of the classroom is often a presentation using PowerPoint (or some other digital format) or video to be shown, and the read/write web might come in for preview before class and assignment after class. The former divides the class into transmitters and receivers of knowledge and the latter separates the digital technologies into a representation tool in class and a resourcing and interactive tool after class.

The privilege of a few and the invisibility of the many in classroom instruction sound anachronistic in the age of the participative crowd on the internet, where knowledge expands in exponential and exploding ways, and learning is something made meaningful by personal drives, personal choices, and personal possessions of the learners. In a time when learning stands at the center, teaching should be affiliated with learning ready to serve at the beck of learners instead of being a master turning up an arrogant nose to learning.

What causes such an arrogant separation of teaching and learning resulting in a parallel divide between the representing function and the resourcing/interactive function of digital technologies? How is it possible for us to integrate teaching and learning in classroom instruction by exploring the open nature and availability of the read/write web? And what should be done to bring such a reintegration of teaching and learning through

innovative exploitation of the open and flexible read/write web in classroom setting? These are the motivations behind the present chapter.

BACKGROUND

Invisibility of Learners in the Tyler Rational and Collective Intelligence as Instantiated in Wikipedia

The invisibility of learners is a heritage from the modernist pedagogical practice as represented by the Tyler's rationale, whose four principles are (1) goals chosen, (2) experiences expressing the goals, (3) organization of the experiences, and (4) assessment (Doll, 2012). These four working together delimit the learning space for the students as shown in Figure 1.

The learning space as illustrated in Figure 1 is dominated by the teaching process, where the educator is given discretionary power to select from a wide range of goals and an even wider range of experiences and organize the experiences in ways that seem best in his/her judgment whereas the learners and their learning process remain invisible and could only be inferred from the dimension of assessment (Yang, 2012).

The Tyler's rationale is a product rising out of a need for efficiency of the rising, merchant middle class (Doll, 2012). The industrialization

Figure 1. Learning space as defined by the Tyler's Rationale
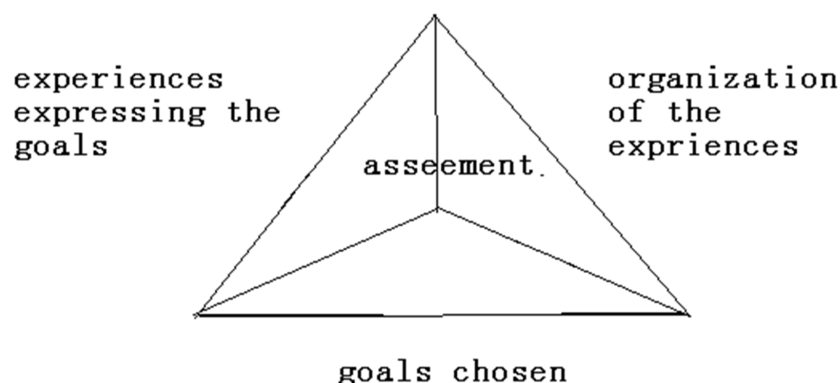
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