

Chapter 35

Flipped Instructional Technology: Developing MIS Competencies Applying Enterprise Resource Planning

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ABSTRACT

Most recently, the Flipped Classroom concept has drawn attention by educators as a means of organizational and individual competencies. The goal in the university setting is to improve cognitive practice and increase learning in the value creation process and the zone of proximal development (ZPD) environment. Seeing one experiences this newest pedagogy in “flipped classroom” design, it has changed various educational disciplines in business education due to the increase in the success in learner motivation and comprehension - based on the objectives required for course work. Educational technology has played a key role providing a catalyst in this achievement. For example: The ZPD and experiential learning are applied in the growth of specialist in the field of management information systems (MIS).

INTRODUCTION

This paper is organized in four parts to thoroughly address the complexity of the ZPD and experiential learning theory. The first part introduces the topic, and selected definitions of the terms used in the discourse. In order to guide the discourse, two questions will be proposed in the second part. 1) How does the ZPD create value to the learner and the organization? 2) How does the shared experience enable learning? In the last part, a conclusion is drawn, mentioning the limitations of the arguments provided in the debate and a suggestion is also made for future research in “flipped” instructional pedagogy.

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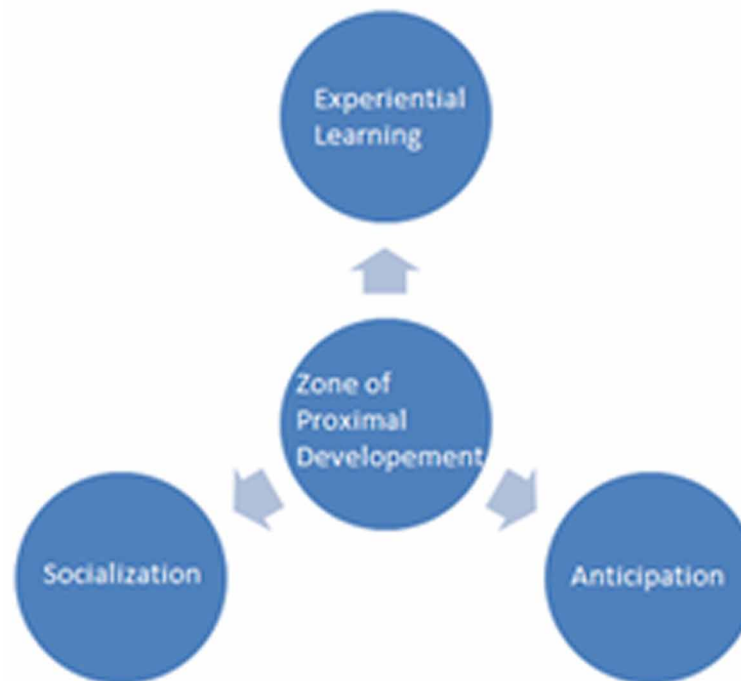
AN OVERVIEW OF SELECTED LEARNING IN THE FLIPPED CLASSROOM

The Zone of Proximal Development (ZPD) inside the classroom setting or cyberspace continuous learning environments has borrowed practices and techniques from Vygotsky (1978), Bandura (1977), Senge (1990), Lave & Wenger (1991), Brown & Duguid (1991), Jenkins (2009), Mupepi (2014) & SAP. Com(2015), among many others.

Vygotsky (1978) suggests that the Zone of Proximal Development (ZPD) can be adopted to develop the skillfulness of learners in different learning environments such as MIS. In the ZPD, Vygotsky propounds that competencies can be enhanced by the expert(s) demonstrating the “how to” in developing competencies. In the ZPD, Vygotsky demonstrates three stages of skills development by the novice. The lower limit of ZPD is the level of skill reached by the learner working independently. The upper limit is the level of potential skill that the learner is able to reach with the assistance of a subject matter expert.

In Figure 1, the centrality of the ZPD is illustrated to be surrounded by three equal circles. If the circles are misaligned, the ZPD will not be real and the potential will learning not be achieved. Vygotsky also makes reference to a community of practice. The ZPD develops concepts that can be applied to understand job specifications and the competencies required to do certain jobs. Mupepi (2014) suggests that the division of labor enables the managers to understand the skills dexterity in the job and the explicit knowledge to be successful. The division of labor is expanded and analyzed to understand the knowledge, skills, technology and disposition required by a worker to become proficient.

Figure 1. Zone of proximal development (Mupepi 2014)



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