

# Chapter 2

## Challenge:

### 4000 Years of Behavioral Conditioning Define the Designs of Face-to- Face Classrooms – Next Generation Learning Environments

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#### ABSTRACT

*Too many stakeholders are ignoring too much scientific research and the net resulting outcome is too many students are left behind academically. Significant and strategic changes must occur quickly to correct this fundamental outcome. This chapter explores issues relative to the current state of classroom design and why they haven't changed systemically in over 4000 years. Definitions of active learning and behavioral research basics, the nature of the physical learning place, Evidence-Based Designs (EBD) solutions and examples of solution features and capabilities impacting pedagogy (i.e., teaching and learning strategies), technology and spaces are shared. Metrics of 'proof' of engagement impact are cited, and this author argues that space provides behavioral cues. To simplify the complexity of moving from a teacher-centric paradigm and design solutions to a learner-centric one, two important items for consideration are presented: 1) a formula guiding deep learning parameters for all stakeholders and 2) a decision-makers' checklist.*

#### INTRODUCTION

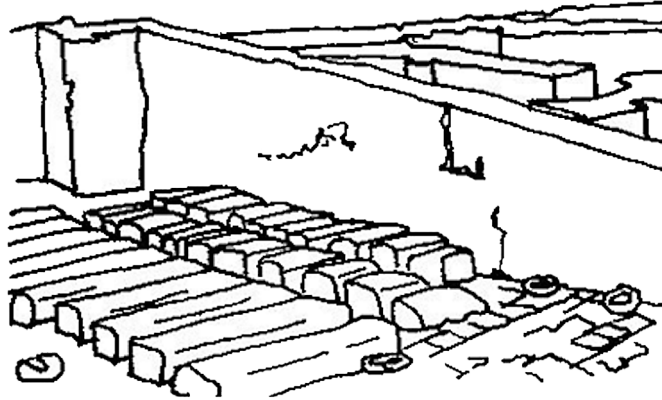
An archeological dig of a 2000 BCE Sumerian site was labeled 'The Classroom' by the archeologist Cole (2005, p. 200 in Teitelebaum 2015, p. 28). Why was this site referenced with this name? The layout, or design, is row-and-column marble slabs as seats with a 'teacher' desk at one end (see Figure 1) mimicking the row-and-column design layouts we see today in a 'traditional classroom' (see Figure 2). Designs for face-to-face learning environments continue to repeat this row-and-column layout (Scott-Webber, 2004) and for centuries have been coupled with a teacher-centered practice of dyadic delivery. Research

DOI: 10.4018/978-1-5225-1689-7.ch002

## Challenge

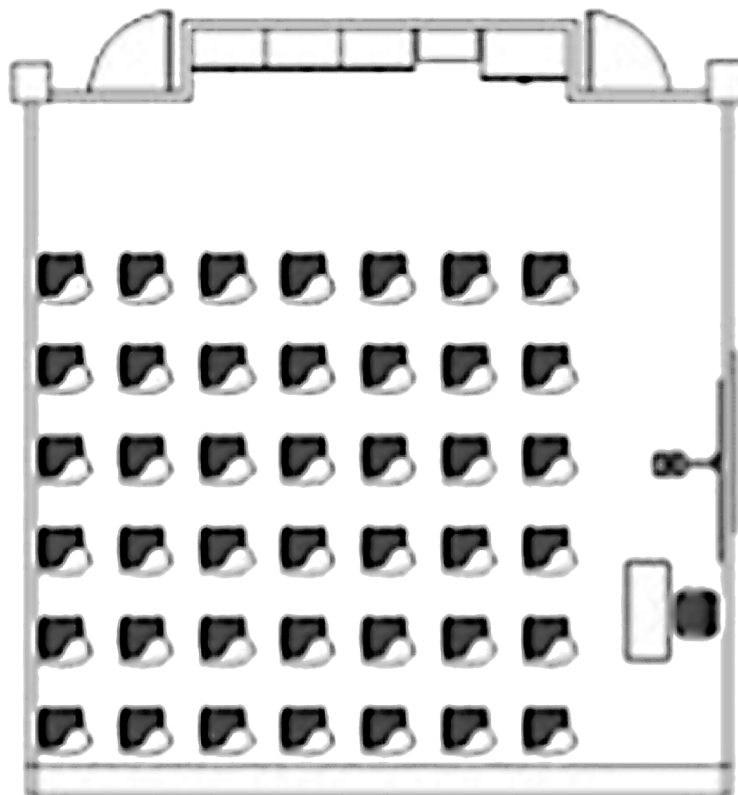
*Figure 1. Adaptive sketch of Sumerian dig's 'The Classroom'*

Source: Cole, 2005, p. 200; In Teitelebaum, M. (PhD diss., University of Toronto, 2015, p. 38).



*Figure 2. 'Traditional' row-and-column classroom design*

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