

# Supporting Professional Development among K-12 Teachers

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## **Abstract**

*UDL is a common theme in education across the United States but is just emerging as a conversation in other countries. This paper describes the initial perceptions of K-12 teachers in Saudi Arabia and discusses implications for integration of UDL in day-to-day practice as well as in the countries education policy.*

## **Keywords**

Professional Development, UDL, and K-12 teachers.

## **INTRODUCTION**

The growth of the education sector in Saudi Arabia has led to a shift away from traditional education to evidence-based research that is experimental and simulates the best practices in educational systems. During the last ten years, education for K-12 has changed in Saudi Arabia. As a result, the Ministry of Education is trying to activate the role of research to build curriculum so that the entire educational system will align with recent theoretical frameworks and best practices in education (Ministry of Education, 2014). The instructional designs that have been used by teachers should be aligned with this change in order to reach target goals. Changing or improving instructional designs is a fundamental means of shaping the educational system in order to meet the various needs of learners. Thus, improvements to instructional design need to be part of the professional learning framework in order to ensure it attains the highest quality possible.

Universal Design for Learning (UDL) is a powerful model and framework of instructional design that enables students in general and those with disabilities in particular, to access the general education curriculum (Rose & Meyer, 2002, 2006). UDL considers how information is represented, how students are engaged, how they express their knowledge to others, and the tools (e.g., technology, materials) that promote their interaction with content and their communication of knowledge. This paper deals with teacher perceptions of UDL in Saudi Arabia through the Concerns-Based Adoption Model (CBAM) (Hall & Hord, 1987) to reflect on UDL and how it works in different situations and environments. CBAM has been used in different studies that measure the concerns among teachers when they implement interventions or are part of a study to promote change through their practices.

Currently, Saudi Arabia's education policy has a focused initiative on implementing practices and theories from developed countries such as the United States. With a focus on implementing UDL in Saudi Arabia, the aim of this paper is to describe a study that will identify the current status of UDL and the barriers of its implementation in Saudi Arabian schools. This study will focus on K-12 teachers. As a first step toward implementation, it will assess the level of teacher understanding, perceptions of and potential for UDL in Saudi Arabian schools.

## **CONCEPTUAL FRAMEWORK**

The conceptual framework of this study will be built by relying on different theories and models that enhance the quality of the work and make the design more coherent (see Fig. 1). This study will support professional development for teachers by adopting theories that help to explain how learning occurs. In addition, it will support the successful implementation of UDL at every stage by addressing the concerns of teachers tasked with adopting the new model. Building a conceptual framework to connect these theories and models will lead to effective and successful practices (Ravitch & Riggan, 2012). It will be the first ever research study examining UDL and its relationship to change, teachers, and instructional design in Saudi Arabia. Consequently, it will provide the basis for future research on the framework of UDL that can be used as a benchmark when expanding the initiative to a larger segment of teachers in Saudi Arabia.

Changes in the Saudi Arabian educational system are leading to improvements in the instructional methods for all learners (Ministry of Education, 2014). The current instructional methods and design should enhance all students' learning process. This means that instructional design should allow students to be more creative and motivated to learn in different and attractive new ways. Thus, UDL can serve as a framework that helps both students and teachers build a better learning environment and shape instructional design in order to enhance outcomes for all students (Rose, Meyer, & Hitchcock, 2005).

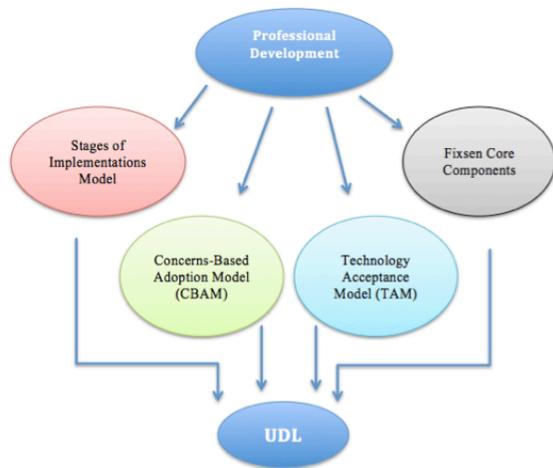


Figure 1. The conceptual framework of this study

A UDL framework will provide all learners with enriched learning by creating a modern environment that helps students to engage with the content. Applying UDL principles through the use of technology will empower the learning process and provide opportunities for teachers and students to learn and interact with content in many ways. It personalizes instruction by motivating learners to gather and learn information in multiple ways using the tool of technology (Basham & Marino, 2013; Rose & Gravel, 2010; Smith, 2012). Technology is pervasive in the culture. It can engage the attention of learners and provide significant data that allows teachers to track student learning. Technology becomes a fundamental and vital element that enhances the learning outcomes for students regardless of their weaknesses and strengths. Therefore, technology, when integrated under a UDL framework, will likely be effective and improve learners' outcomes (Edyburn, 2010; Hall, Strangman, & Meyer, 2003).

## RESEARCH DESIGN

This study will measure research questions and test hypotheses across domains using a variety of different approaches. More insight will be gained by including different data analysis rather than using a single method (Creswell, 2009). Methods that use different concepts and approaches will provide enriched databases throughout the stages of this study ensuring the quality of the content delivered to teachers. (Johnson & Onwuegbuzie, 2004).

### First Stage

The first stage of this research effort will consist of a pilot study. A small group of K-12 teachers will be randomly selected to participate and to take the first version of the survey to check its face validity. Also, the content validity of the survey will be peer reviewed to make sure that items will measure what they are expected to measure. The purpose of the pilot study is to examine the feasibility of the survey which is intended to be used in a larger-scale study (Leon, Davis, & Kraemer, 2011).

### Second Stage

After face and content validity are affirmed, the survey will be distributed to teachers. The survey will explain the current level of implementation of UDL used by K-12 teachers in schools. Also, the survey will measure barriers to implementing UDL in Saudi schools.

### Third Stage

Teachers will fill out a survey before the training session starts to measure their understanding of UDL and to serve as a baseline measurement of their attitudes towards UDL implementation. This survey will be different than the previous one that was developed for Stage Two. It will function as pre/post survey to measure teacher attitudes (CBAM) and understanding of UDL. Teachers will then participate in a set of extensive training sessions to learn how to provide new instructional designs and the application of UDL to those instruction designs. In addition, teachers will learn how to design and create digital materials through UDL After completing their training, they will complete the original survey as a post test.

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