

# Relationships Between Teaching and Practice

## How Can Teachers be Effective Without the Knowledge and Application of Teaching Models?

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### ABSTRACT

You have heard your colleagues say many times, “my students have no idea what I presented in class today” or “they did not understand the concepts that I demonstrated”, and/or “they just can’t read”. These comments are heard over and over nation-wide, causing concern for educators at all levels and in many disciplines. Additionally, you have heard your students comment, “I can’t understand what Dr. X is saying”, or “she may know what she is presenting, but I don’t understand a thing she is saying”, and/or “she just doesn’t know how to get the material across to us so that we somewhat understand”. Is education in many schools failing? Is there cause for alarm in the statements, “If the child hasn’t learned, the teacher hasn’t taught?” All of the aforementioned comments have some legitimacy. However, with effective teaching models, methods, strategies, and tactics through collaboration with disciplines across the curriculum, the statements can be “stamped” out.

**Keywords:** Teaching Models, Teacher-Centered, Student-Centered and Lesson Plans.

### 1. INTRODUCTION

What factors affect the way teachers teach? How can models of teaching be utilized to effect positive changes in the classroom? These are just a few of the questions that are concerns from outside entities, about student performances in the classroom. Studies have shown that attitudes and beliefs about teaching have been a long driving force behind the success and/or failure of student learning. Therefore, the focus of teaching should entail one or a combination of the six models of teaching, which include (1) Presenting and Explaining, (2) Direct Instruction, (3) Concept and Inquiry-Based Teaching, (4) Cooperative Learning, (5) Problem-Based Learning, and (6) Classroom Discussion. Additionally, application of teaching models is essential and what better way to demonstrate these teaching models, than through best

practice lesson plans that illustrate students’ understanding of the models of teaching with public school students in K-6 grades and with their peers in a university class setting.

The object of this paper is to present models of teaching that are used to impact a positive change in the learning experience for students. The paper begins providing a theoretical framework on which the work is based. The next section introduces the teaching methods used in the course. The paper concludes with summary points.

### 2. THEORETICAL FRAMEWORK

In an effort to prepare future teachers, during the fall 2010 and 2011 semesters, 13 and 6 students respectively, enrolled in a curriculum and teaching *Methods of Teaching* course. Generally, the course content focuses on (1) developing a repertoire of teaching models and strategies, (2) understanding the theoretical foundations behind teaching and learning, (3) understanding the dynamics, both inside and outside of the classroom, (4) developing an awareness of current teaching practices, (5) appreciating the challenges of teaching in diverse classroom settings, (6) developing the skills for assessing and evaluating student learning, and (7) becoming knowledgeable on how to adapt instruction to meet the needs of all learners.

Regardless of the discipline or profession, everyone needs a “good” teacher, that is both “good and effective” and everyone should aspire to be a “good” and “effective” teacher to help all students’ survive in this competitive world. Therefore, it is essential to be knowledgeable about models of teaching as depicted in figure 1. Research shows that there are six models of teaching, characterized as either *teacher-centered* or *student-centered*: (1) Presenting and Explaining, (2) Direct Instruction, (3) Concept and Inquiry-Based Teaching, (4) Cooperative Learning, (5) Problem-Based Learning, and (6) Classroom Discussion.

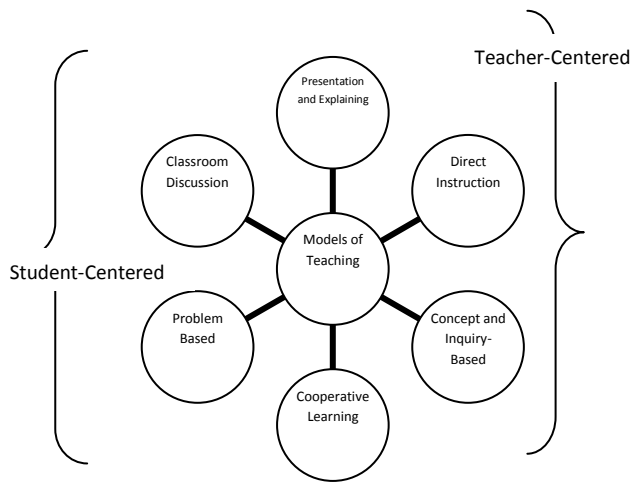


Figure 1. Models of Teaching

A teaching model is a broad, overall approach to instruction with a coherent theoretical perspective about what students should learn and how they learn; albeit through behaviorism (Skinner), Social Cognitive (Bandura), Cognitive and Information Processing (Bruner, Gagne, Anderson), and Social cultural and constructivist (Dewey, Piaget, Vygotsky). [1].

Teaching models prescribe tested steps and procedures to effectively generate desired outcomes [8]. The *presentation* model is a teacher-directed and systematically way of delivering information, Figure 2.

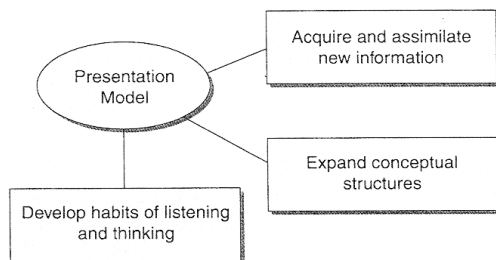


Figure 2. Presentation Model

The students are to acquire, assimilate, and retain information, expand their conceptual structures, and develop habits of thinking and learning [1]. The term *direct* instruction, which is teacher-centered [3] refers to a highly structured and fast-paced teaching method with constant interaction between the teacher and the student, accomplishing knowledge and skill mastery. Figure 3 provides an example of direct instruction.

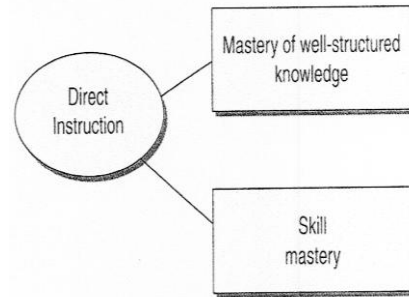


Figure 3. Direct Instruction

A *concept* model of teaching can be described as teacher-centered and moderately structured to effect students' higher-level thinking. Figure 4 provides a graphical representation of the concept model of teaching.

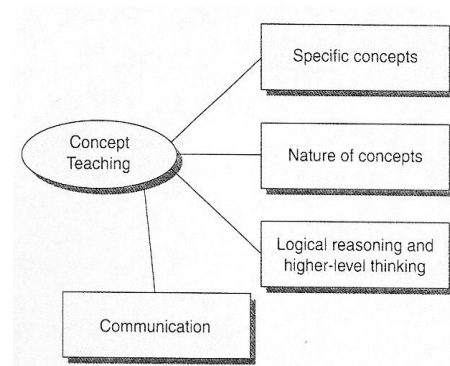


Figure 4. Concept Model

The aforementioned modalities of teaching stemmed from the areas of behavioral, cognitive and information processing theories of learning; and were all teacher-centered. The teaching models of cooperative, problem-based, and classroom discussion are all student-centered. "*Helping each other*" describes the cooperative teaching model. Figure 5 shows the cooperative teaching model.

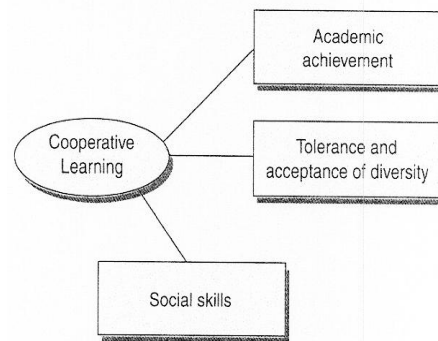


Figure 5. Cooperative Teaching Model

Students by nature are inquisitive-minded. Hence, the *problem-based* teaching model gives the students an opportunity to investigate a “*real*” problem and present solutions. Figure 6 shows the problem-based teaching model.

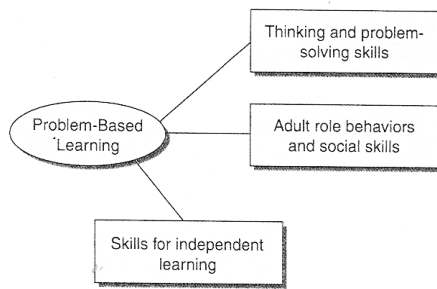


Figure 6. Problem-based Teaching Model

Perhaps, *classroom discussions* as depicted in figure 7 are utilized across most of the other five models described and is one of the most important distinctions of constructivist teaching. It is through discussions which is a student-centered model that verbal-illicit ideas are exchanged to posit student learning.

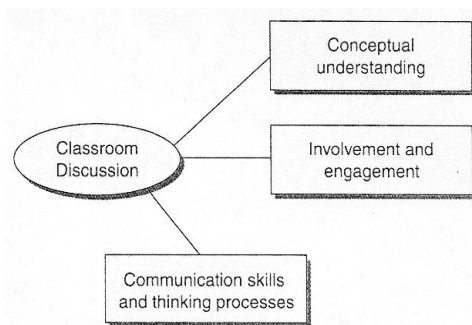


Figure 7. Classroom Discussions

### 3. COURSE DESIGN

#### 3.1. Course Description

A brief description of *EDCU 309 – Curriculum Principles for Elementary Education* is to introduce basic considerations in curriculum development for Early Childhood and Elementary Education, including Factors Affecting Curriculum, Curriculum Goals and Objectives, Organizing for Teaching and Learning and Classroom Management. The prerequisites for the course include acceptance in the teacher education program and a seminar in teaching.

The curriculum and teaching class is a junior level undergraduate course for students with a major in elementary education. The teaching methods in this course include: lectures, readings, observation of practicing teachers in their classrooms; lessons and

activities with elementary children; videography (including microteaching); cooperative learning activities; and games and simulation. Although all models are taught, the Curriculum and Instruction Department has adopted a constructivist perspective approach which under-grid all methods used in teaching this course. The **Constructivist teacher**:

1. Encourages and accept student autonomy and initiative.
2. Uses raw data and primary sources, along with manipulative, interactive, and physical materials.
3. When framing tasks, use cognitive terminology such as “classify,” “analyze,” “predict,” and “create.”
4. Allows student responses to drive lessons, shift instructional strategies, and alter content.
5. Inquires about students’ understandings of concepts before sharing their own understandings of those concepts.
6. Encourages students to engage in dialogue, both with the teacher and with one another.
7. Encourages student inquiry by asking thoughtful, open-ended questions and encouraging students to ask questions of each other.
8. Seeks elaboration of students’ initial responses.
9. Engages students in experiences that might engender contradictions to their initial hypotheses and then encourage discussion.
10. Allows wait time after posing questions.
11. Provides time for students to construct relationships and create metaphors.
12. Nurtures students’ natural curiosity through frequent use of the learning cycle (“discovery”) model.

Students are also encouraged to use reflection to monitor their growth as a teacher, and to understand themselves and the children and teachers with whom they work. In this instance, reflection means to think deeply about a teaching or related experience and their relationship to it.

After being introduced to the models of teaching, the students were expected to show their competency and understanding of the models by teaching at least three of the six models to public school children in k-6 grades. The students were expected to use various techniques and to maximize their understanding of the six structures of the models to facilitate student learning in the classroom.

#### 3.2. Learning Outcomes

Learning outcomes are extremely important when developing a course. The learning outcomes describe the specific knowledge and skills that students are expected to acquire. Learning outcomes were accomplished by way of written examinations, lesson plans, and clinical laboratory requirements. The learning outcomes for the

EDCU 309 course include the following: at the end of the course, a student should be able to apply:

1. Knowledge of the importance of developing learning objectives based on the Alabama course of study and the needs, interests, and abilities of students.
2. Knowledge of a wide range of research-based instructional strategies and the advantages and disadvantages associated with each.
3. Knowledge of the relationship between assessment and learning and of how to integrate appropriate assessments into all stages of the learning process.
4. Knowledge of current Alabama assessment requirements and procedures.
5. Knowledge of current trends, issues, and problems related to elementary education; knowledge of typical and alternative patterns of elementary school organization.
6. Knowledge of how to plan instruction based on curriculum goals/objectives and students' experiences, and how and when to adjust plans based on student responses and other contingencies.
7. Knowledge of various techniques, strategies, curriculum and literacy models, and programs for promoting maximum development of children, including interdisciplinary instruction, flexible grouping patterns, and strategies for facilitating cooperative and independent learning and decision-making skills. Advantages and limitations association with various instructional strategies
8. Knowledge of the state course(s) of study applicable to elementary education and how elementary education relates to other teaching fields.
9. Knowledge of approaches to knowledge construction and application in all disciplines.
10. Knowledge of techniques for using manipulative materials and play as instruments for enhancing development and learning.
11. Knowledge of criteria to be used in selecting, organizing, and evaluating available space resources, experiences, and equipment appropriate to the divergent components of the elementary education curriculum.
12. Knowledge of effective classroom and behavior management techniques and how to discipline students.
13. Knowledge of a variety of strategies for evaluating and reflecting on one's own performance as a teacher.
14. Knowledge of techniques for adapting the school program for children from diverse cultural backgrounds and exceptionalities.
15. Knowledge of appropriate strategies for working with parents and other guardians.

16. Knowledge of community agency materials and/or personnel which impact on the elementary school program.
17. Knowledge of collaborating with other professionals.

Hence, learning outcomes create a positive attitude towards learning and an increased commitment and responsibility for teaching and learning utilizing a plan of action and lesson plans.

For many in the classroom, teaching poses a challenge for lack of methodology and well-thought-out lesson plans. This was not the case for the students enrolled in a Curriculum and Teaching methods class in 2010 and 2011 fall semesters! They were required to develop, demonstrate their skills and understanding, and teach at least three of the six models of teaching in a public elementary school and a four-year university. Specific guidelines regarding the lesson plans and the teaching models were utilized and hence, are the focus of the student presentation through the actual lesson plans developed and taught. Table 1 is an example of the lesson plan presented in class.

**Table 1. Lesson Plan**

Lesson Plan Format – Internship
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Name _____
Date of Observation _____
Primary Teaching/ Learning Strategies _____
A. Title/Content of Lesson
1. You may give your lesson any title you choose. Be Creative!
2. Provide an overview of the content and concepts included in this lesson.
B. Purpose/Learning Outcomes
1. Write objectives with active verbs describing what you expect students to do or accomplish during the lesson.
2. Write objectives concerning the type of thinking you hope to promote the concepts students are developing.....
3. Write any other important objectives you have that may not be directly each other in positive ways during their small group discussions”.
C. Before the Lesson Assessment of Students’ Learning Needs
1. Describe students’ prior experiences with the skill(s), knowledge and concepts involved in this lesson.
2. Describe how your lesson addresses students’ learning needs.

3. Describe how you will provide for students' individual differences.
<b>D. Procedures</b>
1. Describe what the students will be doing during the lesson.
2. Include directions you will give the students.
3. Include questions you want to ask during the lesson.
4. Include questions that go beyond factual recall of information.
5. Describe resources/materials you plan to use.
6. Include the use of technology for planning, implementation and assessment.
<b>E. Plan for Assessment</b>
1. Explain the method(s) you will use for determining if all students have made progress towards the learning outcomes.

As a result of the learning experiences of creating lesson plans and utilizing methods of teaching, the students are better equipped to manage the classroom setting.

#### 4. CONCLUSION/STATEMENT OF THE PROBLEM

Learning to teach is a complex journey. It cannot be learned over night. It continues for a lifetime, if teachers are serious about being effective in the classroom. Consequently, if we as teachers are to chart the way for a new direction and to assure more meaningful learning in the classroom, it is imperative for us to teach our students through models of teaching that are problem-based. We must instill in them the ability to think and read:

- Critically
- Creatively
- Environmentally
- Historically
- Psychologically
- Multi-culturally
- Technologically
- Sociologically
- Philosophically
- Economically
- Geographically
- Mathematically
- Morally
- Scientifically
- Aesthetically
- Politically
- Legally
- And to use other modalities that affect this global society

There are several goals of the paper. One specific goal was to study and learn how to use models of teaching to effect positive change in the classroom. Another goal was to have university students demonstrate their understanding of the teaching models by teaching a lesson utilizing several of the models with k-6 grade students and their peers as well. Through these efforts, it was our aim to further the understanding of models of teaching and application of skills through lesson plans to answer the initial questions, what factors affect the way teachers teach? How can models of teaching be utilized to effect positive changes in the classroom?

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