

ADE/B.Ed. (Hons) Elementary

Syllabus

Methods of Teaching

Semester 1

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Technical Support: Education Development Centre (EDC); Teachers College, Columbia University

SYLLABUS: METHODS OF TEACHING

Year /Semester: Year 1/Semester 1

Credit Value: 03 credits

Prerequisites: None

COURSE DESCRIPTION

This course is an introduction to teaching methods used in elementary schools. Since you have been an elementary school student, you will recognize some of the methods but you know them from a student's perspective rather than a teacher's perspective.

Teaching methods are often divided into two broad categories: teacher-centred methods (also called Direct Instruction) and learner-centred methods (also called Indirect Instruction or Inquiry Learning). An effective teacher knows several methods, some teacher-directed and others learner-directed. He or she would choose, from among these, the one method or combination of methods most likely to achieve a particular lesson's objectives with a particular group of students.

Because teaching and learning interact, a course about teaching must also be about learning. The content and structure of the course is based on two strong claims about learning. First, learning results from what the student already knows, thinks, and does and *only* from these actions of the student's mind. A teacher enables students to learn by influencing what the student *does to learn* but the student has to *do* it. Second, as students progress through school they should learn to become their own teachers. That is, students should learn *how to learn* using their teachers as models.

COURSE OUTCOMES

- A personal theory of teaching and learning based on a critical analysis of implicit theories formed as a student and modified/elaborated through reflections prompted by the work done in this course.
- An argument paper that presents the pros and cons of teacher-centred and learner-centred teaching methods and states your position as a teacher
- Records of structured, reliable classroom observations and conclusions drawn from reflection on these.
- Participation in a Cooperative Learning group that planned, taught, and critiqued a lesson to college/university classmates
- An elementary school lesson plan
- A reflective journal

LEARNING AND TEACHING APPROACHES

This is your first opportunity to study teaching and, to a lesser extent, learning in school. You will soon learn that there are several sources of knowledge about teaching and learning and you will be introduced to these sources. Because you have years of experience as a student but are a beginner to the study of teaching, this course provides you with the opportunity to experience school with a focus on the teacher. You will observe teachers at work in classrooms and interview two students in each classroom. You will start your student interviews with two elementary school students whom you interview about their teachers away from the classroom. You will have a conversation with at least two experienced teachers. You will participate in planning and teaching a lesson to your college/university classmates and you will write a plan for a lesson appropriate for students in an elementary school.

Experiences of all types have more meaning when you *reflect* on the experience. In this context, *reflection* means turning your attention inward to your mind and searching for connections between the experience you have just had and past experiences. You turn to your own thoughts, experienced as mental images and words, to discover what you learned through the new experience. Reflection is aided by writing about your thoughts and by talking about them with other people. The course is organized so that you complete many of your assignments in collaboration with two or more of your classmates and you write 3 to 5 times a week in your journal.

You are expected to be a self-directed student in this course. This means that you will act to arrange school visits and to find teachers and students to talk with away from school. You also will take an active interest in your journal and use it for the purposes for which it is intended. Finally, you will be a responsible member of any group of classmates with whom you work. It is probable that the value of this course to your study of teaching will be proportional to the energy and time you invest in the course assignments.

SEMESTER OUTLINE

Unit 1 Teaching and Learning in School (2 weeks/6 hours)

You have been in school for at least 12 years. If you are like other prospective teachers, you probably have a personal theory about teaching and learning that was formed by your experience in school as a student. You may not be aware of all of these thoughts and beliefs but some of them may interfere with learning to teach. In this unit you will examine and write in your journal about your existing theory about teaching and learning so you become fully aware of it. Then you will compare your personal theory about teaching with other perspectives on effective teaching. You may want to modify your theories. You will also learn how to observe teachers and students at work in classrooms.

Week	Topics	Sub Topics
1	Sources of Information about Effective Teachers	• Your experience as a student • Students currently in school • Published research • Observations in classrooms • Reflections on classroom observation by yourself and with others • Conversations with experienced teachers • Theories about education and instruction • The relationship between teaching and learning
2	Sources of Information about Learning in School	• Your experience as a student • Current students' self descriptions • Published research, especially in cognitive and educational psychology • Observations in classrooms • Reflections on student interviews by yourself and with others • Conversations with experienced teachers • Theories about learning • Cultural influences on teaching and learning

Unit 2 Classrooms are Busy Places (2 weeks/6 hours)

Teaching is a universal human experience: parents teach their children; brothers and sisters teach each other; friends teach friends; employers teach employees; and colleagues teach each other. These examples of teaching usually involve a few students at the most and occur in the setting where the learning is used. (For example, young children learn about collecting water with their mother at a stream or well, or a child learns a new game from a group of friends in a playground.)

Classroom teaching is a special instance of teaching. First, the group is large and diverse creating management challenges for the teacher. Second, learning takes place in an unnatural environment creating motivation and attention problems for the students. People who have not been responsible for teaching in a classroom have difficulty appreciating the complexity of the work. The purpose of this unit is to introduce you, a prospective classroom teacher, to the complex environment in school classrooms

Week	Topics	Sub Topics
3	Sources of Complexity in the Classroom	• Classroom space is crowded • Work takes place in public: students don't have offices • Teachers must simultaneously pay attention to a group and each individual in the group • Children are not carbon copies of each other • Resources are scarce: students have to share and often wait • Teachers plan but unexpected events upset plans often • Classroom activities do not occur one at a time: several different activities are in progress at the same time
4	Managing Complexity	• Learn names, interests, & learning strengths fast • Establish rules and routines • Group students • Organize books and other materials for easy access • Create pairs of students to help each other

Unit Three: Teacher-centred and Student-centred methods (2 weeks/6 hours)

These two methods are a good place to start your study of teaching methods because they are usually seen in opposition to each other when they may be seen as complementary. Teacher-centred, Direct Instruction is used to help students acquire knowledge and skills. Student-centred, Indirect Instruction (Inquiry/Problem Solving) is used to help students understand the physical, social, and psychological world in which they live. In addition to different goals, the methods derive from different theories about learning and employ different practices. The Unit is organized around the view that both methods belong in schools. *Knowing* and *understanding* are different but related mental processes; each is a legitimate goal of schooling for all students.

Week	Topics	Sub Topics
5	Key Concepts	• Distinction between lower and higher order learning • Outcomes from lower order learning • Outcomes from higher order learning

		• Instructional activities that enable lower order learning • Instructional activities that enable higher order learning • Direct Instruction: a method to enable lower order learning • Inquiry Learning: a method to enable higher order learning • Different roles for teachers and students
6	Model Lessons	• Template for Direct Instruction lessons • Sample lessons • Template for Inquiry/Problem Solving lessons • Sample lesson • Inquiry, Problem Solving, Project: same or different? • Choice: Teacher –centred or Learner- centred? Or both?

Unit Four: Lecture, Demonstration, Discussion, Questions, and Cooperative Learning (3 weeks 9 hours)

As the previous unit illustrates, the method or practice that a teacher chooses depends on the goal s/he intends to achieve with a particular group of students. Teachers have choices not only about teaching methods but also about how they group students for instruction: whole class; small groups; pairs; or as individuals. A teacher's decision about grouping is usually determined by a lesson's goal or objective. For example, if a lesson requires that every student in the class have information that is not easily accessible and requires interpretation, the teacher will probably decide to construct a lecture followed by discussion, including questions, for the whole class.

This Unit has ambitious goals and complicated logistics. Each of you will be assigned to one of six cooperative learning groups. Each group's task is to create a 15 minute lesson using one of the methods in the Unit title (lecture, demonstration, or discussion) for a total of six lessons (two for each method). All six lessons will include questions. One person from each of the six groups will teach the lesson to the rest of the class during the third week of the Unit (week nine of the course). Three class sessions will be devoted to the lessons the (2 lessons per day) leaving 15 minutes day for discussion of the lessons and 15 minutes for continued study of questioning strategies. There are handouts for this unit that facilitate the work of the Cooperative Learning groups. Persons who will teach the lesson from each group will be selected by drawing one name from an envelope that contains names of everyone in the group at the beginning of class on the day of the lesson.

Week	Topics	Sub Topics
7	Cooperative Learning	• Peer teaching practice • Rationale for Cooperative Learning • Different models of Cooperative Learning • Cooperative Learning procedures • Incentive structure of Cooperative Learning • Limitations of Cooperative Learning • Checklists as assessment devices

8	Lecture, Demonstration, and Discussion	• Reasons to lecture • Structure of a lecture • Active lectures • Structure of a demonstration • Characteristics of good discussion • Purposes of questions • Questions in lecture, demonstration and discussion • Wait time
9	Asking questions	• Open and closed questions • Lessons taught in class

Unit Five: Teacher-Student and Student-Student Interactions that Support Learning in the Classroom (2 weeks; 6 hours)

While studying Unit 2 in this course, you had the chance to watch a teacher and students at work in 2 different classrooms and discuss the observations with your colleagues. Hopefully, you could see that classrooms are unusual social environments. One adult is expected to allocate limited resources (space, time, learning tools, and attention) equitably among 40 (more or less) students.

Students are expected to sit for long periods of time and pay continuous attention to their lessons. Each student's competence is on public display all the time. The teacher is supposed to have eyes that rotate 360 degrees so that s/he knows what each student in the class is doing most of the time. In this unit you will learn that a teacher and students can turn an unusual social environment into an environment that supports learning

You and your partners will observe in two more classrooms during the next two weeks. In each classroom you will observe a teacher interacting with two students and those students interacting with each other. In each classroom the teacher will choose the students whom you will observe.

Week	Topics	Sub Topics
10	Constructive Interactions Between Teacher and Students	• Respect • Credibility • Fairness (justice) • Trust • Interest • Enthusiasm • Adaptive teaching
11	Constructive Interactions Between Students	• Cooperative working relationships are central • Examples of cooperative working relationships • Feelings are the foundation of thought • Importance of trust and confidence

Unit Six: Designing Instruction: Goals and Objectives; Assessment; Plans; and Materials (4 weeks; 12 hours)

Teachers started using learning objectives (also called learning outcomes) to design lessons about 50 years ago. Previously, lessons were named by the topic rather than a learning outcome. For example, ‘Addition of two-digit numbers’ rather than ‘All students will correctly solve at least 8 out of 10 problems involving the addition of two-digit numbers’. Teachers have more than one way to write learning objectives.

You have seen different formats for lesson plans: some plans have more parts than others. Though there are differences in the number of parts a plan may have, all lesson plans have objectives, a sequence of activities for obtaining the objectives including materials that will be used; and means for collecting evidence that students achieved the learning outcomes. In this unit, you will learn how to write learning outcomes and choose or create assessments. You will use knowledge you have acquired about methods to create and write a teaching plan. You will learn to find or create the materials that you need to use your plan. You will do some work on the lesson plan in class with the two people with whom you have visited schools. During the last week of the Unit (week 15 of the course) you will review what you have learned about teaching methods and learning and instructional principles in the course and compare that knowledge with your current personal theories of teaching and learning.

Week	Topics	Sub Topics
12	Sources of Knowledge for Designing Lessons	• Learning principles • Pakistan’s elementary school curriculum • Definitions of standards, goals, and objectives • Examples of standards, goals, and objectives • Bloom’s Taxonomy of Educational Goals and Objectives
13	Assessment	• Definition of assessment in schools • Personal experience with assessment • Assessment practices in schools in Pakistan • Purposes of assessment • Distinction between formative and summative assessment • Examples of formative assessment
14	Instructional Materials	• Sources of instructional materials, including textbooks, in Pakistan • School budgets for instructional materials • Lo/no cost materials as a supplement to or substitute for materials provided by the government • Examples of materials created from local resources by teachers for mathematics, science, and literacy
15	Review and Synthesis	• Review of teaching methods and instructional and learning principles • Review of students’ current personal theories of teaching and learning • Search for synthesis • Complete instructional design project (lesson plan) • Presentation of lesson plans designed by students

Unit Seven: Self-Regulated Learning (1 week 3 hours)

You know that learning is not confined to school. Children learn to walk and talk before they go to school. People continue to learn after they go to work. When you think about it for a little while, you will probably conclude that people learn throughout their lives. When you think about your own experience in school, you will probably also conclude that as you progressed from grade 1 through grade 12 the work in school got harder and you had more responsibility for learning. (Learning in school can also be called studying.) The fact that learning is continuous in people's lives is partly responsible for the claim that children should 'learn how to learn' while they are in school.

The purpose of this Unit is to introduce you to the process of learning how to learn. You will probably become aware of mental actions that you do without thinking about it (For example, checking with yourself to be sure you understand when you are reading in preparation for a test.) As you study the unit, try to think of yourself both as a student (which you are) and as a teacher (which you are becoming) because you are learning about mental actions that you will teach your students.

Week	Topics	Sub Topics
16	Self-Regulated Learning	• Becoming your own teacher • Parents and teachers attitudes toward self-regulated learning • Interdependence between learning and motivation • Intrinsic and extrinsic motivation • Mastery learning goals and performance learning goals

SUGGESTED REFERENCES

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Brophy, J. (1999). Teaching. (Educational Practice Series No. 1). Geneva: International Bureau of Education. Retrieved from <http://www.ibe.unesco.org/en/services/online-materials/publications/educational-practices.html>

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UNESCO(1973). NewUNESCO sourcebook for science teaching. Retrieved on January 20, 2012. <http://unesdoc.unrsco.org/images/oooo/ooooo56/00564le.pdf>

Rosenshine, B. (2010). Principles of instruction (Educational Practice Series No. 21). Geneva: International Bureau of Education. Retrieve from <http://www.ibe.unesco.org/en/services/online-materials/publications/educational-practices.html>

Vosniadou, S. (2001). How children learn. (Educational Practice Series No. 7). Geneva: International Bureau of Education. Retrieve from <http://www.ibe.unesco.org/en/services/online-materials/publications/educational-practices.html>

What Makes a Good Teacher? Opinions from Around the World. Retrieve from <http://www.unicef.org/teachers/teacher/teacher.htm>

West Virginia State Department of Education Resources for Formative Assessment
Retrieve from <http://wvde.state.wv.us/teach21/ExamplesofFormativeAssessment.html>

GRADING POLICY

A variety of assessments should be used to assess student learning. It is recommended that course work count towards at least 50% of the final grade. Instructors will advise at the start of the course about which pieces of course work (assignments) will be graded. The remainder of the grade will be determined by mid and end of semester exams. s

COURSE ASSIGNMENTS

Reflective Journal

Each student will purchase a spiral bound notebook to be used as a Reflective Journal. This journal will be used for specific assignments (e.g.) the development and continuous revision of a personal theory of teaching and of learning) and also for classroom observations. In sum, the journal will function simultaneously as a repository for certain assignments and as a diary for recording experiences connected with the course (e. g. classroom observations). When you talk with students about journal, tell them either to leave a wide margin when they write or to leave one side of each page blank so that you can record your reactions to their work and they can go back and record their own reactions to text they have written earlier (e.g. personal theory of teaching and of learning).

Classroom Observations

The course includes nine observations in classrooms. The course syllabus indicates that students may have to locate the schools in which they will observe. If the teachers approve, form triads among the students so three people observe in the same class at the same time. Each triad should remain together throughout the semester. Observing in triads has two purposes.

First, it allows a richer conversation about the observation and, second, it allows the students to practice talking and thinking together about teaching and learning with colleagues. Hopefully, they will bring this habit with them when they begin their teaching careers. Explain that observing and recording what they see is necessary but not sufficient. The value of the observations comes from talking and thinking Together about what you have seen and then individually describing what you saw and your interpretations as a one page paper.

Observations are planned for Units 1, 2 & 5. Each set of observations has a different purpose. The first two observations are of teachers' actions during a lesson using a checklist created from the teacher effectiveness research. Two teachers are to be observed varying the age of the students (within grades 1 through 8) and the subject of the lesson (e.g. math, Urdu, etc.). The

third observation is of a teacher's movement in the classroom during a lesson. The fourth and fifth observations are in the same classroom and are of a teacher interacting with two students in the class whom the teacher has identified as in the top quarter of the class and the bottom quarter of the class academically. The remaining four observations take place in two classes again varying students' age and subject matter. These observations are of two students in each class who have been identified by their teachers as popular and less popular. Here the observation is of the interaction of the two target students in each class with other students in the class. Each type of observation (teacher alone; teacher-student interactions and student-student interactions) has data collection forms that are among the handouts accompanying this guide.

Student Interviews

The course includes ten interviews with students. The first interviews are with two elementary school students who are to be asked their views about good teachers. Then each triad will interview four students (two high achievers and two low achievers) during lessons in classes the first observation is conducted. The student interviewers will create their own interview questions. The purpose of the interviews is to learn the students' opinions about school, the teacher and themselves as students. The other four interviews are with two popular students and two less popular students each pair in a different class. The student interviewers will determine the questions which can be the same as those used for the first set of interviews. For each set of interviews, the interviewers might consider asking each student, 'If you could change one thing about school and one thing about the teacher in the class we just visited, what would it be?' Summaries of these interviews, including the questions asked and interpretations, become journal entries.

Teaching a Lesson

This assignment is described in the course syllabus. It is a group project the purpose of which is twofold: to plan and critique a lesson using a lecture, discussion, or demonstration and to work in a group using cooperative learning.

Divide the class into six groups. Prepare six slips of paper – two will say lecture, two will say discussion and two will say demonstration. Put them in a bag or envelope. Have one member from each group draw a slip from the envelope. The name on the paper is the method the group will build into a lesson appropriate in content for their college/university classmates.

Each member of the group will participate in planning the lesson as a cooperative learning experience. At the beginning of the class session in which the lesson is to be taught, names of the people in the group that planned the lesson will be put in an envelope and one name will be drawn. That person is the one who will teach the lesson to the class. In other words in each of the six groups every person has to be prepared to teach, though only one of them will actually give the lesson. Class members will be given rubrics to be used to judge the lesson. A critique will follow each lesson and will include the members of the group who planned the lesson. Each group will be responsible for providing evidence that every member of the group participated equally in preparing the lesson.

Designing a Lesson

It may seem strange to plan and teach a lesson before learning how to design a lesson. This is a more detailed plan than the one used to teach using a lecture, demonstration or discussion. Hopefully, using a simpler plan just utilizing one method will make the more comprehensive plan easier to create.

This is also a group experience with three persons in a group. There may be some advantage in keeping the people who observed in classrooms together for this project. (There are also advantages to working with a new group.) The topic for the lesson is nutrition. The lesson is for students in Class IV. It will be helpful if you can find 4th grade textbooks containing chapters on nutrition and put them on reserve for this course in the library. Students should be encouraged to collect teaching materials for this assignment on their own also.