ANKARA UNIVERSITY DISTANCE EDUCATION CENTER

e-Tutor Certificate Program

Online Instructional Methods

An experienced instructor can use instructional methods and techniques accurately to promote effective online learning. This lesson will briefly elaborate on the qualification of e-instructors, followed by the instructional methods preferred for online learning.

1. Qualification of an e-Instructor

The main purpose of instruction is to assist students in becoming independent and self-disciplined learners. Delivering basic knowledge and skills, preparing learners for the next cognitive level and for their professional lives, and introducing cultural values are among other factors that need to be considered for instruction. From this perspective, it is possible to say that an e-instructor should in the first place, primarily have subject-matter expertise and a deep interest about the target learners' situation and problems. These characteristics should also be supported by four specific high-order features, and therefore an e-instructor should:

1. Have good communication skills, empathy and the ability to create democratic learning environments.
2. Have expertise in the area of content, human development, learning and pedagogy, and the ability to use this expertise to organise effective learning environments.
3. Have sufficient experience to train students to become self-disciplined learners, to increase their high order thinking skills, to improve their success on basic skills, and to boost their motivation.
4. Should perceive teaching and learning as a lifelong process and should adapt their own professional knowledge in order to improve students' learning and the quality of schooling.

From a different perspective, an e-instructor is expected to accomplish three main functions in a learning environment:

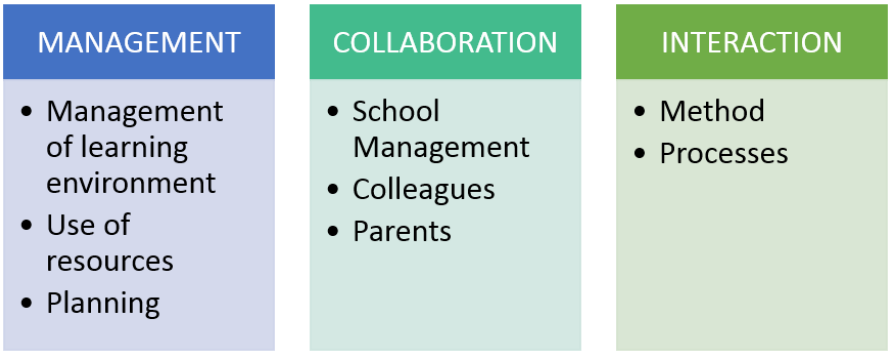

Figure 6.1. Three Main Functions of an e-Instructor

2. Online Instructional Methods

There are six (6) main instructional methods that are used for teaching and learning processes: Presentation, direct instruction, concept teaching, collaborative learning, problem-based and project-based learning, and discussion. These methods can be adapted both for face-to-face and for online learning settings. The important thing in selecting the instructional method is which strategy or what type of content is to be used by the instructor.

Presentation

Presentations, explanations and lectures given by instructors constitute a large portion of classroom time, since curricula require learners a vast body of information to be learnt. The instructional goals of the presentation model are mainly to help students acquire, assimilate and retain information. Successful presentations require a fairly compact-structured learning environment that allows instructors to present and explain new information effectively, and allows students to see and hear (Arends, 2012; pp. 290-291). Online presentations are as effective as classroom presentations since they have a larger coverage for technology, and they allow more simultaneous interaction than classroom environment.

The general flow or syntax for a presentation lesson consists of four main phases: presenting the objectives and setting the scene, presenting an advance organiser, presenting the learning materials, and using processes to monitor learners' understanding as well as to help learners extend and strengthen their thinking (Table 6.1).

Table 6.1 - Flow of Presentation Method

Phase	**Instructor Behaviour**
Phase 1: Gain attention, explain goals and set the scene.	Instructor goes over the aims of the lesson and gets learners ready to learn.
Phase 2: Present advance organiser.	Instructor presents advance organiser, making sure that it provides a framework for later learning materials and is connected to learners' prior knowledge.
Phase 3: Present learning materials.	Instructor presents learning materials, paying special attention to their logical ordering and meaningfulness to learners.
Phase 4: Monitor and check learners' understanding and strengthen learner thinking.	Instructor asks questions and elicits learners' responses to the presentation to extend learner thinking and encourage precise and critical thinking.

Direct Instruction

Acquiring basic knowledge, skills and attitudes is an important goal for learners since they are supposed to possess the basics before they can move on to a more advanced learning process. Instructional effects of this model are to promote mastery of simple and complex skills as well as declarative knowledge that can be carefully defined and taught in a step-by-step fashion. The general flow or syntax of a direct instruction lesson consists usually of five phases (Table 6.2).

A Direct Instruction model requires a highly structured learning environment and a careful orchestration by the instructor. This tight structure does not mean that it has to be an authoritarian or uncaring process (Arends, 2012, p. 318). Hence, this method may be used alone or integrated with other methods for teaching procedural knowledge in online environments.

Table 6.2 - Flow of Direct Instruction Method

Phase	Instructor Behaviour
Phase 1: Clarify goals and set the scene.	Instructor gains learners' attention and ensures they are ready to learn by going over goals for the lesson, giving background information, and explaining why the lesson is important.
Phase 2: Demonstrate knowledge or skill.	Instructor demonstrates the skill correctly or presents step-by-step information.
Phase 3: Provide guided practice.	Instructor structures initial practice.
Phase 4: Check for understanding and provide feedback.	Instructor checks to see if learners are performing correctly and provides feedback.
Phase 5: Provide extended practice and transfer.	Instructor sets conditions for extended practice with attention to transfer of the skill to more complex situations.

Concept Teaching

Concepts are basic building blocks, around which people organise their thinking and communication. Concept learning and logical thinking are critical goals since these become important scaffolding for building learner understanding of school subjects. Concept learning is essentially a process of building cognitive schemes by putting things into classes or categories. Hence, the instructional goals are mainly to help learners acquire conceptual understandings of the subjects they are studying and to provide a foundation for higher-level thinking (Arends, 2012, p. 352). Since this method requires visuals to be effective and online environments are full of options for different kind of visuals, this method can be applied effectively to e-learning.

The general flow or syntax of a concept lesson consists of four major phases: present goals and establish set, provide examples and non-examples, test for concept attainment, and analyse student thinking processes (Table 6.3).

Table 6.3 - Flow of Concept Teaching Method

Phase	Instructor Behaviour
Phase 1: Clarify aims and set the scene.	Instructor explains the aims and procedures for the lesson and gets learners ready to learn.
Phase 2: Input examples and non-examples.	In the direct presentation approach, the instructor names the concepts, identifies the critical attributes, and illustrates with examples and non-examples. In concept attainment, examples and non-examples are given, and learners inductively arrive at the concept and its attributes.
Phase 3: Test for attainment.	Instructor presents additional examples and non-examples to test learners' understanding of the concept. Learners are asked to provide their own examples and non-examples of the concept.
Phase 4: Analyse student thinking processes and the integration of learning.	Instructor gets learners to think about their own thinking processes. Learners are asked to examine their decisions and the consequences of their choices. Instructor helps students integrate new learning by relating the concept to other concepts in a unit of study.

Collaborative Learning

Collaborative learning is one of the best approaches for online learning which uses different goal, task and reward structures to promote student learning. The collaborative learning task structure requires learners to work on academic tasks in groups. This model seeks further aims, besides academic learning, like intergroup acceptance, social and group skills, and collaborative behaviour. Hence, learners work in groups but they take responsibility for their own learning (Arends, 2012, p. 390). Collaborative learning is important for online learning environments since it increases interactivity between learners and instructor.

The syntax for collaborative learning model relies on small group work rather than whole-class teaching and includes six major phases: present goals and set the scene; present information; organise students into learning teams; assist teamwork and study; test on the materials; and provide recognition (Table 6.4).

Table 6.4 - Flow of Collaborative Learning Method

Phase	Instructor Behaviour
Phase 1: Clarify goals and set the scene.	Instructor goes over goals for the lesson and establishes the learning set.
Phase 2: Present information.	Instructor presents information to learners either verbally or print or online text.
Phase 3: Organise students into learning teams.	Instructor explains how to form learning teams and helps groups make efficient transition to learners.

Phase 4: Assist teamwork and study.	Instructor assists learning teams as they do their work.
Phase 5: Test on the materials.	Instructor assesses learners' knowledge of learning materials or groups present results of their work.
Phase 6: Provide recognition.	Instructor finds ways to recognise both individual and group effort and achievement.

Problem-Based & Project-Based Learning

In problem-based learning, instructors present problem situations to learners and get them to investigate and find solutions on their own. Hence, learners are expected to develop problem solving skills, to exchange experiences with adult roles, and to gain confidence in their own ability and to become self-regulated learners. This method is also useful for e-learning since learners should be active which also increases interaction and communication in online environments (Arends, 2012, pp. 424-425).

The general flow or syntax of a problem-based lessons consists of five major phases: orient learners to the problem; organise learners for study; assist with independent and group investigations; develop and present artefacts and exhibits; and analyse and evaluate work (Table 6.5).

Table 6.5 - Flow of Problem-Based & Project-Based Method

Phase	**Instructor Behaviour**
Phase 1: Orient learners to the problem.	Instructor goes over the objectives of the lesson, describes important logistical requirements, and motivates learners to engage in problem-solving activity.
Phase 2: Organise learners for study.	Instructor helps learners define and organise study tasks related to the problem.
Phase 3: Assist independent and group investigation.	Instructor encourages learners to gather appropriate information, conduct experiments, and search for explanations and solutions.
Phase 4: Develop and present artefacts and exhibits.	Instructor assists learners in planning and preparing appropriate artefacts such as reports, videos, and models, and helps them to share their work with others.
Phase 5: Analyse and evaluate the problem-solving process.	Instructor helps learners to reflect on their investigations and the processes they used.

Discussion

Discourse and discussion are key ingredients for enhancing student thinking and uniting cognitive and social aspects of learning. They are an inevitable part of online learning. Through forum, chat and alike environments, learners and instructors exchange knowledge, have discussions about the phenomenon, and display their thinking processes publicly. Hence, the main instructional goals of an online discussion are to improve learner thinking, to promote involvement and engagement in

academic materials, and to learn important communication and thinking skills (Arends, 2012, p. 458).

The general flow or syntax for a discussion lesson consists of five major phases: provide objectives and set; focus the discussion; hold the discussion; end the discussion; and debrief the discussion. The structure of the learning environment for discussion lessons is characterised by open processes and active student roles (Table 6.6).

Table 6.6 - Flow of Discussion Method

Phase	Instructor Behaviour
Phase 1: Clarify aims and set the scene.	Instructor goes over the aims for the discussion, gains students' attention, and gets them ready to participate.
Phase 2: Focus the discussion.	Instructor provides a focus for discussion by describing ground rules, asking an initial question, presenting a puzzling situation, or describing a discussion issue.
Phase 3: Hold the discussion.	Instructor monitors students' interactions, asks questions, listens to ideas, responds to ideas, enforces the ground rules, keeps records of the discussion, and expresses own ideas.
Phase 4: End the discussion.	Instructor helps bring the discussion to a close by summarising or expressing the meaning the discussion has had for him or her.
Phase 5: Debrief the discussion.	Instructor asks students to examine their discussion and thinking processes and the meaning the discussion had for them.

3. Conclusion

In e-learning, it is important, yet it is also difficult, to motivate learners and manage interactivity. Instructional methods are the only means we have in which we can manage the learning process, with the help of LMS tools. Hence, as instructors, we should use narrating techniques which can be described as knowledge delivery by the e-instructor. We should use question-answer techniques during virtual classrooms, and especially, we should use brainstorming techniques via forums to get learners suggested solutions and thoughts about a specific problem or topic. Finally, e-instructors should encourage group work, and forming groups of learners (2-6 people) which are instructed to produce an output in order to gain knowledge and skills.

4. References

Arends, R. I., 2012. Learning to Teach (9th edition.). Mc-Graw Hill, New York.