



Republic of Iraq
Ministry of Higher Education
and Scientific Research
University of Diyala
College of Education for Humanities
Department of English



Foundion Education

CHAPTER 2

Teaching and Learning

Asst. Inst. Asmaa Hasan

CHAPTER 2:

Teaching and Learning

2.1: Bloom's Taxonomy

2.2: Instructional Strategies

2.3: Creating Objectives

2.4: The students you will be teaching

2.1: Bloom's Taxonomy

Bloom's Taxonomy

- Bloom's Taxonomy is a hierarchical system that classifies levels of thinking from lower to higher order. It is widely used in education to help teachers identify learning objectives, write appropriate verbs for each level, and determine whether students are using higher-order thinking skills during lessons.
- In 2001, Krathwohl and Anderson revised the taxonomy, making it easier for teachers to recognize the cognitive complexity required in different learning tasks and activities.
- Verbs linked to different thinking levels help teachers write clear lesson outcomes. Lower-level outcomes focus on simple recall, while higher-level outcomes involve more complex thinking like analysis. Understanding these levels allows teachers to create balanced lessons that develop a range of student skills.

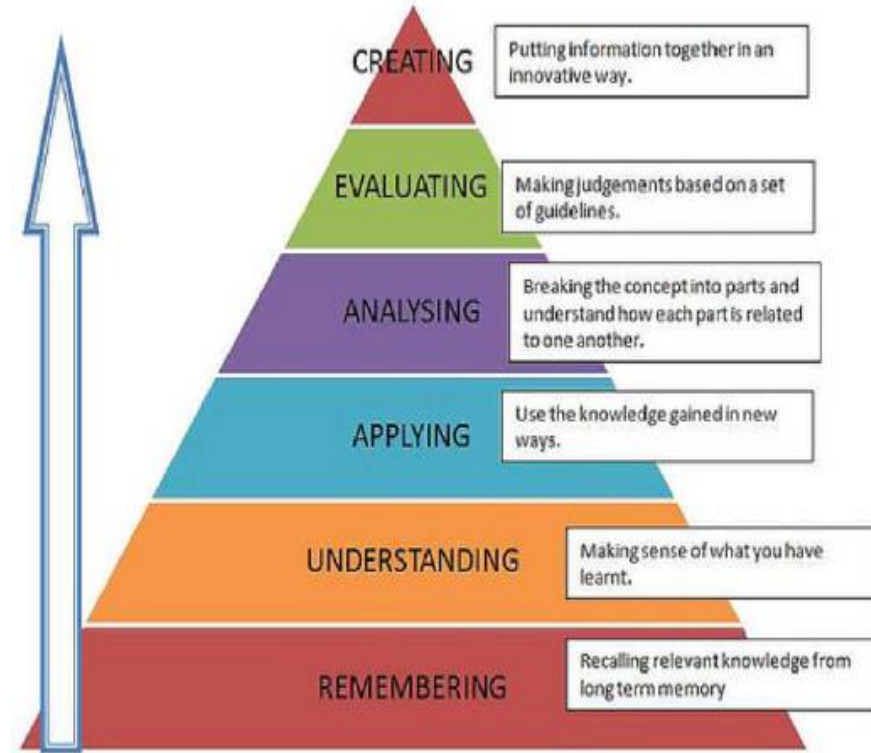


Figure 1. Revised Bloom's Technology

lower order thinking skills			higher order thinking skills		
remember	understand	apply	analyze	evaluate	create
recognizing - identifying recalling - retrieving	interpreting - clarifying - paraphrasing - representing - translating exemplifying - illustrating - instantiating classifying - categorizing - subsuming summarizing - abstracting - generalizing inferring - concluding - extrapolating - interpolating - predicting comparing - contrasting - mapping - matching explaining - constructing models	executing - carrying out implementing - using	differentiating - discriminating - distinguishing - focusing - selecting organizing - finding coherence - integrating - outlining - parsing - structuring attributing - deconstructing	checking - coordinating - detecting - monitoring - testing critiquing - judging	generating - hypothesizing planning - designing producing - constructing

2.2: Instructional Strategies

Direct instruction is a structured, teacher-led approach in which teachers present academic content through lectures or demonstrations. It includes setting clear learning objectives, organizing lessons in a logical sequence, modeling tasks, explaining concepts clearly, and checking student understanding. These techniques form the foundation of effective teaching. In practice, teachers blend direct instruction with other strategies. Negative views of this method usually come from overuse, not from its actual value in the instructional process.

Direct Instruction

Introduction / Review

- Set the stage for learning

Development

- Model the expected outcomes by providing clear explanations and examples

Guided Practice

- Monitor and engage pupils with assigned learning tasks

Closure

- Bring the lesson to a conclusion by highlighting what was covered

Independent Practice

- Provide Learning tasks that are independent of teacher assistance

Evaluation

- Assess pupil progress

2.2: Instructional Strategies

Drill and Practice

Drill and practice involves repeating small tasks—like memorizing vocabulary or practicing multiplication—to help students master basic skills. Although common in past schooling, it is now viewed as outdated and often ineffective. Repetition for long periods may signal that real learning is not happening, as noted by Jill Sunday Bartoli.



Lecture

- Lecture is an efficient way to deliver material without interruptions.
- It allows the teacher to:

Connect new material to other topics.

Define and explain key terms.

Relate content to students' interests.

- Students take a passive role; the teacher is the primary source of knowledge.
- Students sit quietly, receiving information without actively engaging.
- Retention is often low because students do not create personal meaning or establish memory pathways.
- Teachers may not know if students understand the material due to lack of feedback.

Question and Answer



01

Question-and-answer allows students to apply knowledge and give thoughtful responses.

02

Teachers' questions encourage students to use prior knowledge and interpret information.

03

This method helps determine whether students were listening and understand the lesson.

04

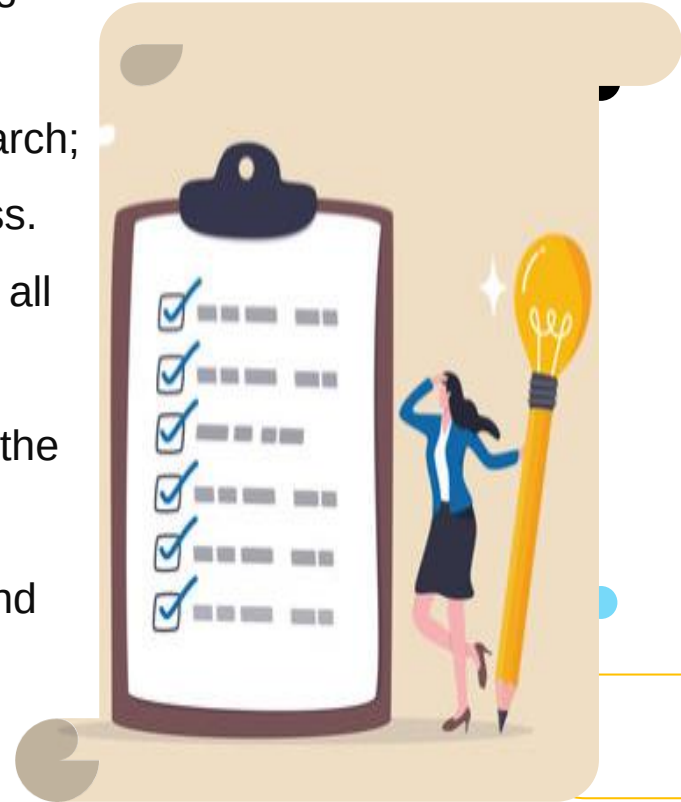
Questions motivate students to stay engaged and help assess their learning.

05

This strategy allows both teachers and students to ask questions, improving overall understanding of the lesson.

Summarized

- Discussion shifts the teacher's role to guiding an exchange of ideas rather than delivering all content.
- Students gain a voice and share their own ideas or research; sometimes they are assigned specific concepts to discuss.
- Students influence the direction of the discussion, so not all planned content may be covered.
- Teachers may need to revisit missed important points in the next class.
- Teachers should ensure all students' voices are heard and encourage active listening during the discussion.
- Key ideas should be summarized by the teacher—or preferably by a student—to reinforce understanding.



2.2: Instructional Strategies

- **Mental modeling:**

is a student-centered strategy where teachers show their thinking process to help students understand how to solve problems or make decisions. Students then create and explain their own mental models using observation, questioning, and analysis. It requires high-level thinking, so teachers guide students by providing the right problems, background knowledge, and support.



- **Inquiry**

Inquiry-based learning occurs when students investigate a question about a specific topic. Questions—whether created by teachers or students—should always be open-ended. Inquiry can be done individually, but it is more effective when students collaborate, bringing different viewpoints and resources.

Answering complex questions like “*Why is the sky blue?*” requires higher-order thinking from both teachers and students. Allowing learners to explore broad topics and choose questions that interest them creates a strong environment for successful inquiry projects. Group investigation also helps students learn through shared problem-solving.



2.2: Instructional Strategies

Teachers support inquiry-based learning by:

Assessing students' prior knowledge and providing necessary background.

Ensuring the inquiry question matches students' learning level.

Offering resources or guiding students to reliable online sources.

In this approach, the teacher acts mainly as a mentor and advisor. Students may struggle, but productive struggle is valuable as long as they can eventually succeed. The teacher's biggest challenge is avoiding giving direct answers that would undermine the inquiry process.

Although inquiry-based learning requires time and patience, it prepares students for real-world problem solving throughout their lives.



2.2: Instructional Strategies

- **Discovery Learning**

- ✓ Discovery learning is a method where students build their own knowledge by experimenting and drawing conclusions from the results. It is often referred to today as problem-based or experiential learning. This approach is hands-on and highly interactive, allowing students to explore with minimal teacher guidance.
- ✓ Rooted in Piaget's ideas, discovery learning provides students with a topic and allows them to decide how to learn, explore new information, and synthesize their findings without immediate correction. Feedback from the teacher and classmates comes only after the project is completed.
- ✓ To ensure effectiveness, teachers must set clear goals and use structured methods—such as group work, fieldwork, or collaboration. Without this structure, too much freedom can reduce rigor. According to Mayer (2004), guided discovery is often the most effective form, but the challenge is determining the right amount and type of guidance and clearly defining the learning outcomes.



2.2: Instructional Strategies

Group Work



Group work involves students collaborating with one or more partners using strategies such as think-pair-share or problem-solving. Before beginning, the teacher clarifies the goals, expectations, and procedures so all members understand the task. As groups work, students are expected to teach and learn from one another. Afterward, the teacher may debrief or evaluate a group product.



Students often need guidance on how to collaborate effectively. They should listen respectfully, share ideas without taking criticism personally, and practice compromise. Aligning group tasks with Social and Emotional Learning (SEL) Benchmarks helps build the skills needed for successful teamwork.



During group work, teachers should circulate to check progress, ask about group discussions, and reinforce that the activity is academic. If groups drift off-task, the teacher should address it immediately, emphasizing that each student is accountable for their behavior and cannot simply “hide in the group.”



2.3: Creating Objectives



- A learning objective is a brief statement describing what students should know or be able to do after a lesson. Objectives may focus on knowledge (cognitive) or actions (behavioral), and most teachers naturally combine both approaches.
- While curriculum guides outline broad course goals, teachers must create specific lesson objectives.



These objectives should be:

Measurable

Observable

Content-based

Student-centered

Aligned with state standards



- Teachers must ensure their objectives match the curriculum and can be assessed through formative or summative tools. If students do not achieve an objective, teachers must provide support or remediation. Clear, observable verbs should be used—words like “know” or “understand” are avoided because they cannot be directly measured.
- Having 2–3 objectives per lesson allows teachers to scaffold learning, considering students’ different readiness levels. Using Bloom’s Taxonomy, teachers can design objectives that progress from lower-order to higher-order thinking. Multiple objectives also help teachers identify which specific areas students struggled with and address them accordingly.

Example Objectives



Knowledge (1):

- The student will be able to list the parts of a fish with 85% accuracy
- The student will be able to recognize nouns in a sentence with 85% accuracy.



Comprehension (2):

- The student will be able to paraphrase the results of the survey on the effects of second-hand smoke with 85% accuracy.
- The student will be able to summarize Wilson's Fourteen Points with 85% accuracy.



Application (3):

- The student will produce argumentative essays on school uniforms with 85% accuracy.
- The student will be able to create a graph of emissions of greenhouse gases with 85% accuracy.



Analysis (4):

- The student will be able to compare and contrast mitosis and meiosis with 85% accuracy.
- The student will be able to explain the various ways to solve an equation 85% accuracy.



Evaluation (5):

- The student will be able to critique the New Deal policies with 85% accuracy
- The student will be able to evaluate the effectiveness of U.S. propaganda during WWII with 85%.

Create (6):

- The student will be able to construct a program for addressing flood disaster relief with 85% accuracy.
- The student will be able to create an annotated timeline of the Cold War with 85% accuracy.





Activity



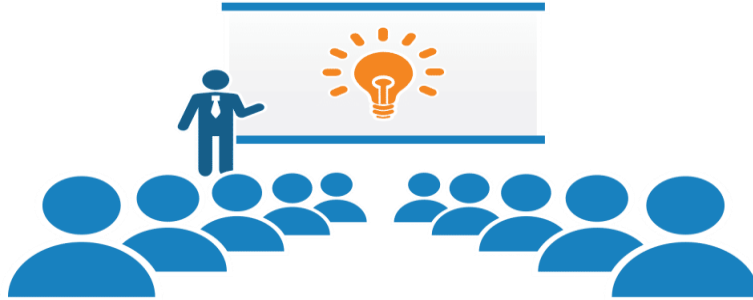
Activity Instructions:

Students will create learning objectives using all six levels of Bloom's Taxonomy.

Steps:

1. Choose any topic (it does not need to be from your subject area).
2. Write six objectives for that topic, each using an action verb from one level of Bloom's Taxonomy. Number them according to:

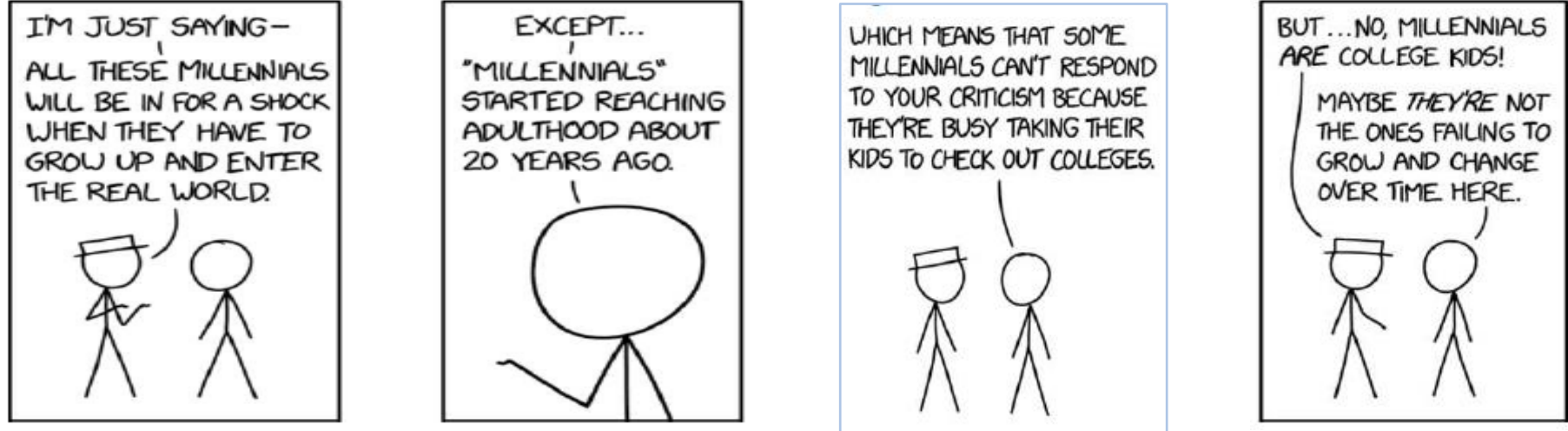
- Remember
- Understand
- Apply
- Analyze
- Evaluate
- Create



3. Print pages 1–4 of the cube template and write one objective on each side.
4. Cut, fold, and glue the template to form the cube.
5. Prepare to share and discuss your objectives in the next class.



2.4: The students you will be teaching

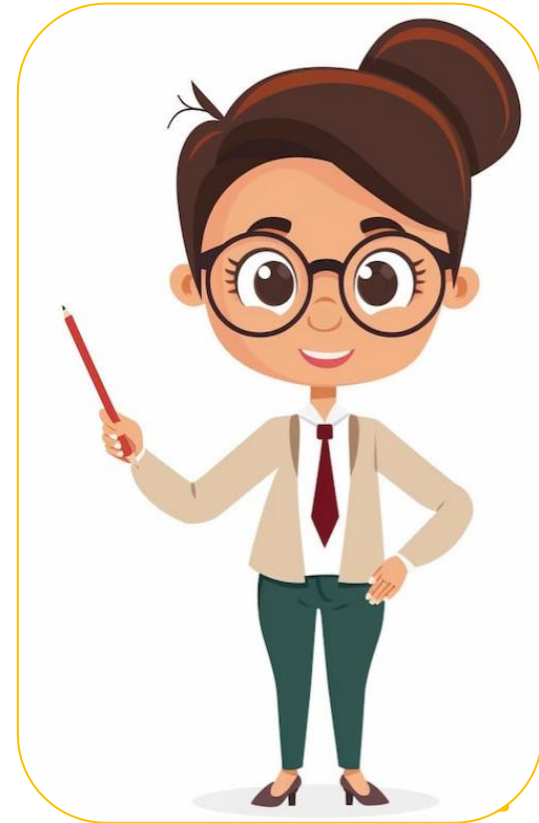


- Most new college students today are part of Generation Z, born between 1996 and 2015. This group represents about a quarter of the U.S. population and will form the majority of students in future classrooms. Gen Z has grown up in a world shaped by terrorism, economic instability, social unrest, and constant access to digital technology.
- They are highly familiar with the internet and digital devices, though they may not always use them cautiously. Despite spending significant time on social media, Gen Z is generally skilled at quickly distinguishing real from false information. They can easily detect insincere or “canned” messages, and they value honesty and direct answers. As a result, Gen Z students expect straightforward communication and will actively seek truthful responses.

2.4: The students you will be teaching

Characteristics of Gen Z Learners

1. Often children of Generation X but may have parents who are Millennials
2. Multitaskers
3. Concerned with money and job security
4. Usually independent
5. Tend to be loyal, compassionate and thoughtful
6. Responsible and determined
7. Value education
8. Future focused
9. Active volunteers
10. Prefer communication through Snap Chat & Instagram instead of email and traditional social media platforms such as Facebook
11. Communicate with images (e.g. emojis)
12. Use the internet to gain information for school and interests
13. Have less face-to-face contact because of smartphones
14. Use social media daily to maintain relationships
15. More stressed and depressed than previous generations

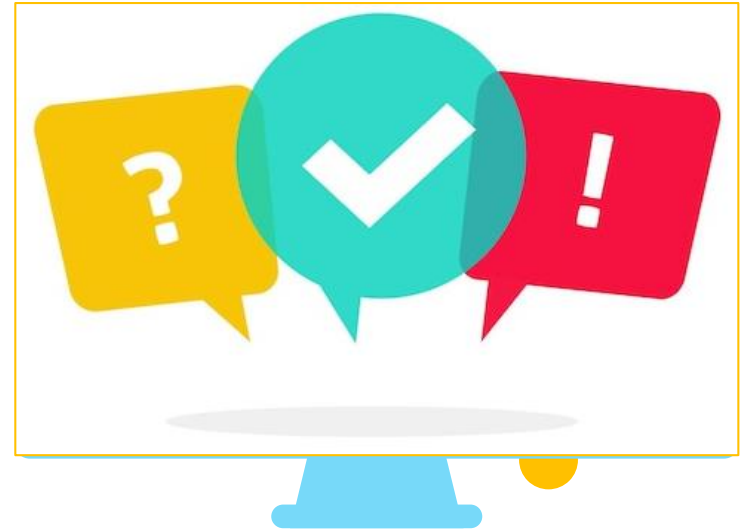




Activity



Using the characteristics of Gen Z and the supplemental resources, create a learning activity that you believe would engage Gen Z students. Prepare to share this activity with other class members. Do they believe this activity would be helpful? What suggestions might they have to improve the activity you have outlined?





Thanks!