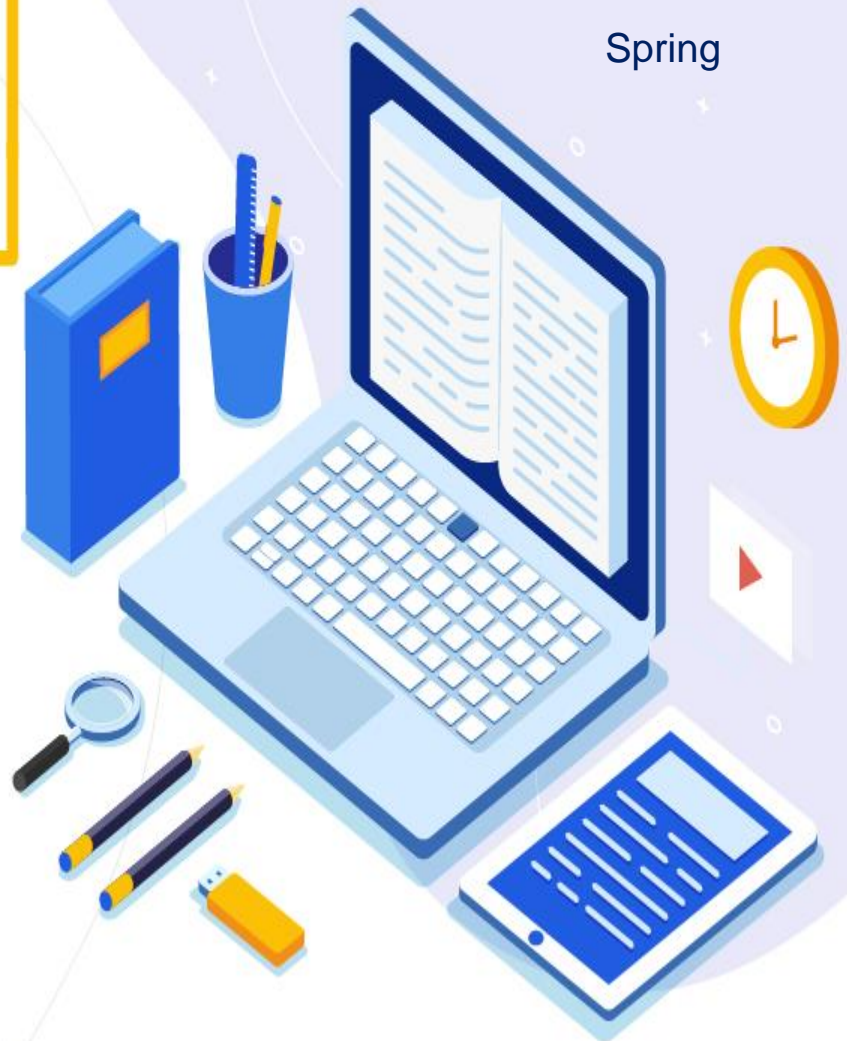


Educational Studies



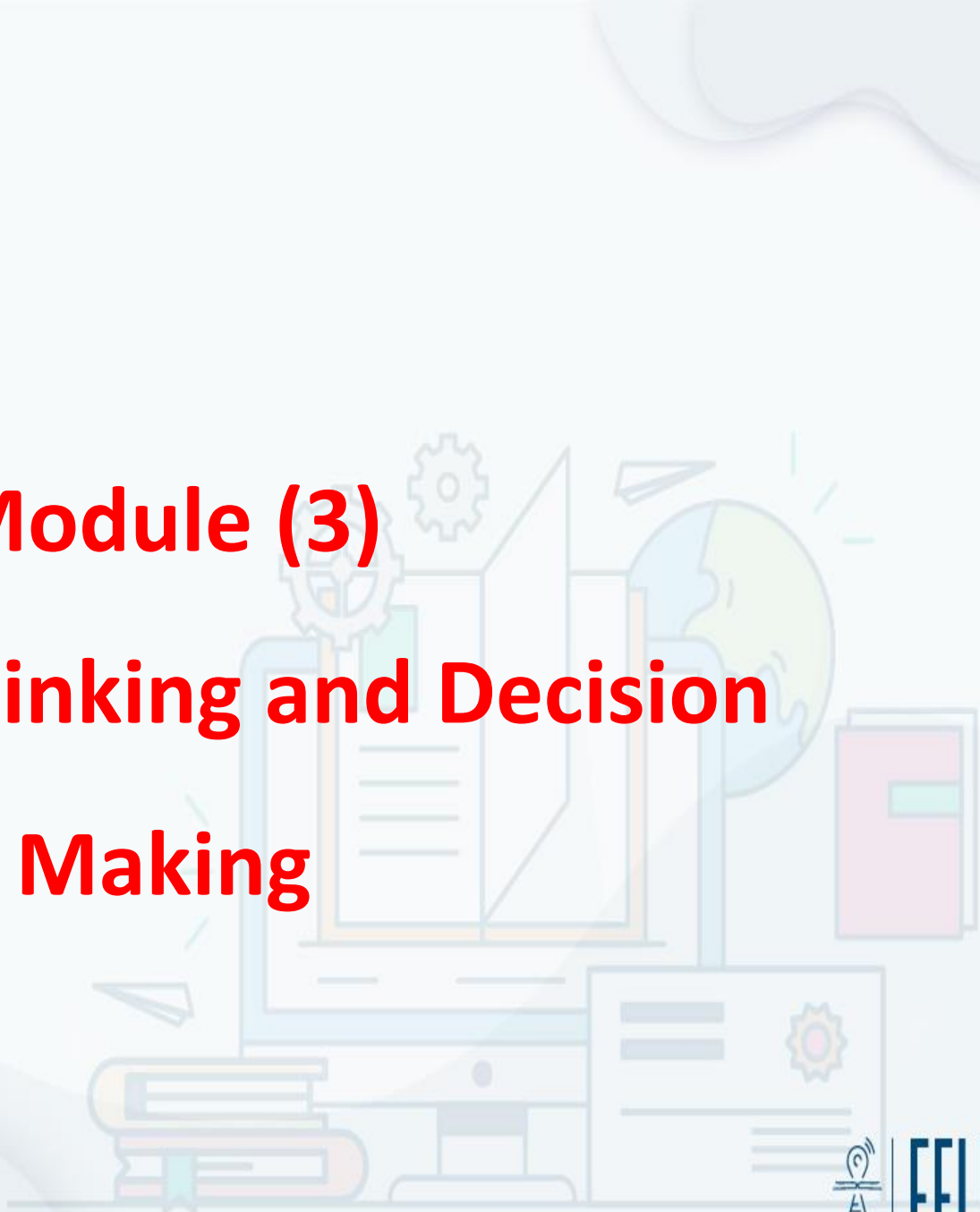
2020/2021
Spring

- ▶ **Creative Thinking and Decision Making**
- ▶ **Dr. Mohamed Elnaggar**



Module (3)

Creative Thinking and Decision Making



Lesson (1)

Solving problems

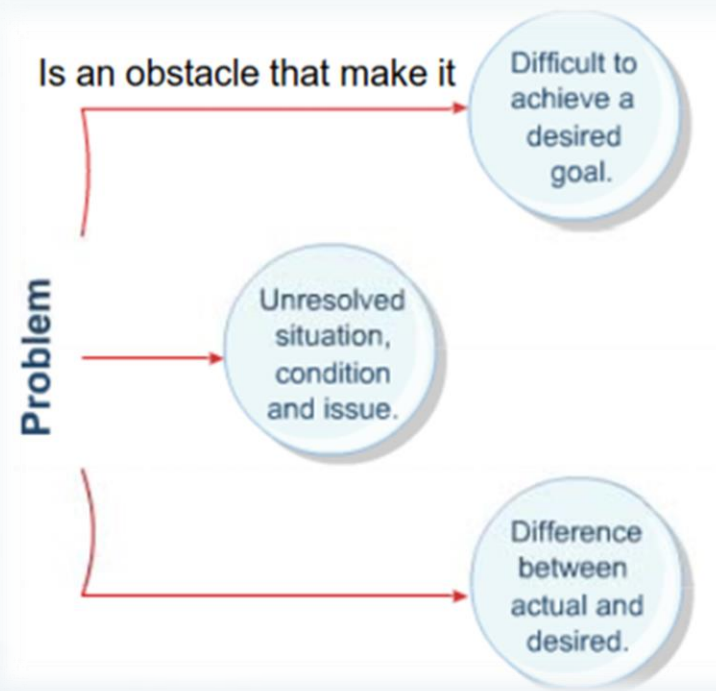
➤ Objectives:

- Define the problem.
- Define Guidelines for recognizing problems.
- Define Guidelines for formulating problems.
- Recognize the seven-steps for solving problems.



What is a problem?

We are continually faced with a series of great opportunities brilliantly disguised as insoluble problems.





What is solving problem?

- ✓ Every problem asks for an answer or solution.
- ✓ Trying to find a solution to a problem is known as **problem solving**.
- ✓ The time it takes to solve a problem is a way of measuring **complexity**.
- ✓ problems with no discovered solution are therefore classified as an **open problem**.



2 key skills to use for resolving any problem

✓ key skills A:

Being open to other perspectives.

✓ key skills B:

Defining the conflict as a personal need and not as a solution.





Being open to other Perspectives

- There is no “right” or “wrong” answer, there are only individual perspectives.
- When you know that there are always more ways to see the same situation... then every person’s perspective is important to consider.
- After you are willing to learn from another person... It is more likely they will be willing to listen and learn from you about your perspective.

»» Defining the conflict as a personal need and not as a solution

➤ People in conflict often think of their conflict in terms of their solutions... which are often stated as "you should do this" or "you should do that."



Defining the conflict as a personal need and not as a solution

- Solutions direct others on what you want them to be doing and can actually make things worse.
- Expressing your needs tells others what you are concerned about or what you want to accomplish for yourself.

»» Defining the conflict as a personal need and not as a solution

➤ Solution Statement

Laila says to her housemates:
"I MUST have peace and quiet!

You
have to turn off your music!"

Her housemates say:
"Well, we like our music, you can
go
somewhere else!"

➤ Need statement

Laila says instead:
"I need a quiet place to work
because I have homework to
do."

Her housemates say:
"We will be leaving shortly and
you
will be able to have peace and
quiet soon."

»» Defining the conflict as a personal need and not as a solution

➤ Solution Statement

Tamer says to his classmates:
"You people must do your work!"

His classmates reply:
"Oh do your own work!"

➤ Need statement

Tamer says to his classmates:
"I am concerned that we may
not
make our goal."

His classmates reply: "We
appreciate your concern, and we
will see to it that we all will be
finished on time."

Guidelines for recognizing problems

Define Guidelines for recognizing problems.





Guidelines for recognizing problems

1. Are you sure this is the problem you want to solve? Why do you want to solve it?
2. Are there related problems, perhaps easier ones, which should be solved first?
3. Does anyone need a solution? Are you sure you need a solution? Why?



Guidelines for recognizing problems

4. What is a solution needed for?
5. What effect should a solution have?
6. How much will it cost to solve the problem? What resources are available?
7. How much benefit will be realized from a solution?



Guidelines for recognizing problems

8. If the problem is ignored, will it go away over time?
9. Remove yourself from the problem and look at it. Is it significant? What is your vantage point for judgment?
10. Can a change in existing law or administrative policies eliminate the problem?



Guidelines for recognizing problems

11. Can this be viewed as someone else's problem?
Perhaps you can get that person to solve it or help solve it.

12. Who is the best person to describe the problem? Why?



Guidelines for recognizing problems

Example (1)

Three problems arise at work simultaneously. In what order do you solve the following?

1. The printer in your office is down.
2. You need to finish writing a report to meet a 3:00 p.m. deadline.
3. Documents must be dropped off at the post office by 5:00 p.m.

recognizing problems

Example (1)

Answer

The most sensible order is 1, 2, 3. You can't print the report

Without the printer, so it must be fixed first, and if a repair

person must be called, this task could take the most time of the three. Then, write the report. When you're finished,

print the documents, or if necessary copy them on disk and take it to a printer off-site, and then take the printed material to the post office.

Guidelines for formulating problems

Define Guidelines for formulating problems.





Guidelines for formulating problems

1. Define the problem in a short statement.
2. Describe the history of the problem, concentrating on its causes.
3. State your objectives and the constraints on possible solutions.
4. What is the current solution?



Guidelines for formulating problems

5. What is wrong with the current solution?
6. What is the ideal? What would you really like?
7. Could you implement the ideal solution?
8. What are the minimum requirements for a satisfactory solution?



Guidelines for formulating problems

9. View the problem from the perspectives of others.
How would an economist look at the problem? A lawyer? A clergyman?

9. List all the solutions you can imagine.

The seven-steps for solving problem

Define Guidelines for formulating problems.





the seven-steps for solving problems

Identify the problem.

Gather information.

Develop courses of action.

Analyze and compare courses of action.

Make a decision; select the best course of action.

Make a plan.

Implement the plan.



the seven-steps for solving problems

1. Identify (recognize/define) the problem.
2. Gather information (facts/assumptions).
3. Develop courses of action (solutions).
4. Analyze and compare courses of action (alternatives/solutions).



the seven-steps for solving problems

5. Make a decision; select the best course of action (solution).
6. Make a plan.
7. Implement the plan (assess the results).



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THANK YOU FOR WATCHING

QUESTIONS?

