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OFFICE CIRCULAR

Sub: ACTIVE LEARNING METHODS –reg.

Ref: Letter dt.21.01.2022 from Dr T V Rama Krishna, Coordinator, IQAC

Active learning is a process whereby students engage in activities, such as reading, writing, discussion, or problem solving that promote analysis, synthesis, and evaluation of class content. "Active Learning" thus is, in short, anything that students do in a classroom other than merely passively listening to an instructor's lecture. This includes everything from listening practices which help the students to absorb what they hear, to short writing exercises in which students react to lecture material, to complex group exercises in which students apply course material to "real life" situations and/or to new problems.

TECHNIQUES OF ACTIVE LEARNING

1. **ONE MINUTE PAPER** - This is a highly effective technique for checking student progress, both in understanding the material and in reacting to course material. This may be modified to five minutes.

PROCEDURE: a) Ask students to take out a blank sheet of paper, pose a question (either specific or open-ended)

b) Give them five minutes to respond. This tells you whether the students are viewing the material in the way you envisioned.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies and summarizes the problem at issue	Accurately identifies the problem and provides a well defines summary	Identifies the problem but provides a poor summary or identifies an inappropriate problem	Does not identify the problem at all nor provides a proper summary.

2. **Group Discussion**- They provide an efficient structure for class presentations when the subject matter easily divides into opposing views or 'Pro'/'Con' considerations. Students are assigned to debate teams, given a position to defend, and then asked to present arguments in support of their position on the presentation day. The opposing team should be given an opportunity to rebut the argument(s) and, time permitting, the original presenters asked to respond to the rebuttal. This format is

particularly useful in developing argumentation skills (in addition to teaching content).

PROCEDURE:1.The faculty can act as an observer and divide the class into groups of 8-10 members. 2. Declare the topic and allow five minutes of time for preparation. 3. Allow the teams to debate/discuss on the topic for 10 minutes.

RUBRIC

Marks to be awarded	5	4	3	2	1
Content	Strong	V good	good	Fair	Poor
communication	Initiation, Vey effective. Able to convey his/her views	Effective. Able to convey but not too effectively	Had strong views but couldn't convey effectively	Weak in conveying	Couldn't express at all.
Body language	confident	Less confident	Passive and neutral	diffident	Arrogant
Closure	5	0	0	0	0

3.STUDENT-CREATED PPT, CHARTS, MATRICES, FLOWCHARTS, MODELS: Students are encouraged to build charts, matrices, flowcharts, and models as contexts for extending their understanding of key course-specific concepts.

Procedure : Faculty can provide the basic guide lines and the skeleton for the students to develop their presentation.2. Faculty remains as a facilitator and limits himself/herself to asking probing and meaningful questions.

Rubric:

Marks to be awarded	5	4	3	1
Creativity	Highly Creative	Creative	Effective but lacking creativity	No Creativity
Presentation	Powerful Presentation, intelligent use of animation and sound	Good Presentation with good use of animation and sound	Average presentation lacking in captivating the audience	Poor presentation
Content	Meaningful content	Good and relevant content	Average content	Poor content

4. **The Fish Bowl** - Students are given index cards, and asked to write down one question concerning the course material. They should be directed to ask a question of clarification regarding some aspect of the material which they do not fully

understand; or, perhaps you may allow questions concerning the application of course material to practical contexts.

PROCEDURE: At the end of the class period (or, at the beginning of the next class meeting if the question is assigned for homework), students deposit their questions in a fish bowl. The instructor then draws several questions out of the bowl and answers them for the class or asks the class to answer them.

Rubric:

Marks to be awarded	5M	3M	1M
Identifies and summarizes the problem at issue	Accurately identifies the problem and asks pertinent questions	Identifies the problem but asks not very pertinent question.	Does not identify the problem at all nor frames a proper question.

5. **DEBATE-** They provide an efficient structure for class presentations when the subject matter easily divides into opposing views or 'Pro'/'Con' considerations. Students are assigned to debate teams, given a position to defend, and then asked to present arguments in support of their position on the presentation day. The opposing team should be given an opportunity to rebut the argument(s) and, time permitting, the original presenters asked to respond to the rebuttal. This format is particularly useful in developing argumentation skills (in addition to teaching content).

PROCEDURE: 1. The faculty can act as an observer and divide the class into groups of 8-10 members. 2. Declare the topic and allow five minutes of time for preparation. 3. Allow the teams to debate/discuss on the topic for 15 minutes.

RUBRIC

Marks to be awarded	5	4	3	2	1
Content	Strong	V good	good	Fair	Poor
communication	V effective. Able to convey his/her views	Effective. Able to convey but not too effectively	Had strong views but couldn't convey effectively	Weak in conveying	Couldn't express at all.
Body language	confident	Less confident	Passive and neutral	diffident	Arrogant
Rebuttals	Strong	V good	good	Fair	Poor

6. **VIDEO SYNTHESIS:** This helps develop the analytical abilities of students and help them forecast the intangibles. Mu Sigma employs Video Synthesis for their campus recruitment.

PROCEDURE: 1. Students are shown a movie clip of 8-16 mins duration. 2. They are then expected to synthesize (not summarize) the essence of the clip in not more than 8-10 words or 3 bullets. 3. This technique not helps in developing the analytical

skill and critical thinking, it also improves the vocabulary and hence articulation as the student has to describe the whole clip in condensed language.

RUBRICS:

Marks to be awarded	5M	3M	1M
Able to analyse, synthesise and succinctly describe with minimal usage of words.	Excellent analysis, brilliant synthesis and accurate description.	Good analysis, but a little verbose.	Inability to either analyse or synthesise correctly or able to articulate well.

7. **QUIZ/TEST QUESTIONS** - Here students are asked to become actively involved in creating quizzes and tests by constructing some (or all) of the questions for the exams.

PROCEDURE: This exercise may be assigned for homework and itself evaluated (perhaps for extra credit points). In asking students to think up exam questions, we encourage them to think more deeply about the course material and to explore major themes, comparison of views presented, applications, and other higher-order thinking skills. Once suggested questions are collected, the instructor may use them as the basis of review sessions, and/or to model the most effective questions. Further, you may ask students to discuss the merits of a sample of questions submitted; in discussing questions, they will significantly increase their engagement of the material to supply answers. Students might be asked to discuss several aspects of two different questions on the same material including degree of difficulty, effectiveness in assessing their learning, proper scope of questions, and so forth.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies and summarizes the problem at issue	Accurately identifies the problem, effective in assessing, proper scope of questions	Identifies the problem but provides a poor assessment or identifies an inappropriate problem	Does not identify the problem at all nor provides a effective assessment or scope of questions

8. **BRAIN STORMING SESSIONS** - They provide a non-structured option of discussing the topic.

PROCEDURE: 1. The faculty can act as an observer and divide the class into groups of 8-10 members. 2. Declare the topic and allow five minutes of time for preparation. 3. Allow the teams to discuss on the topic for 15 minutes. 4. Faculty must control the flow of discussion ensuring that there is no chaos and the process goes smoothly.

RUBRIC

Marks to be awarded	5	4	3	2	1
Content	Strong	V good	good	Fair	Poor

Defining the topic	Able to define the topic and offer strong views	Able to define the topic and offer good views	Able to define the topic and offer fair views	Weak in conveying	Couldn't express at all.
IIrd level of brain storming : Creating new ideas out of the given topic	Able to create new ideas	Less confident	Passive and neutral	diffident	Offers no new insight.
IIIrd Level of Brain storming. Innovating the idea.	Able to innovate the 2 nd level	Partially successful in innovating	Unable to offer much, but active.	Diffident	Offers no new innovative ideas.

8. IMMEDIATE FEEDBACK

These techniques are designed to give the instructor some indication of student understanding of the material presented during the lecture itself. These activities provide formative assessment rather than summative assessment of student understanding, Formative assessment is evaluation of the class as a whole in order to provide information for the benefit of the students and the instructor, but the information is not used as part of the course grade; summative assessment is any evaluation of student performance which becomes part of the course grade. For each feedback method, the instructor stops at appropriate points to give quick tests of the material; in this way, she can adjust the lecture mid-course, slowing down to spend more time on the concepts students are having difficulty with or moving more quickly to applications of concepts of which students have a good understanding.

RUBRICS : Since this is only a formative assessment and not a summative assessment, no Rubric has been provided.

9. **CASE STUDY:** An analysis of a particular case or situation, either real or constructed, that is used as a basis for the application of knowledge and/or drawing conclusions in similar situations.

PROCEDURE: 1. The Instructor should provide a case which could be a person or a group or a unit or a corporate division. 2. The case study can be exemplary, cautionary, or instructive. 3. Exemplary and cautionary case studies are presented in total to serve as a model for success or failure, for example. 4. Instructive case studies can present problems that require identification through clues, symptoms, or outcomes and consist of background information that can be ambiguous, incomplete, or hidden.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies and summarizes the problem at issue and	Accurately identifies the problem, effective	Identifies the problem but provides a poor	Does not identify the problem at all nor provides

reaches a conclusion.	in assessing and reaching a convincing conclusion.	assessment or reaches an inappropriate conclusion.	aeffective assessment or a definitive solution.
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10. SHADOWING : This is a technique developed and modified by Sudhir Kekre, CSS. It is a very effective and powerful way of improving diction, intonation, pronunciation and other nuances of spoken English and has proved to be very popular with students. The aim is to neutralize accent and MTI (Mother Tongue Influence).

PROCEDURE : 1. The teacher plays an English popular song with lyrics displayed on the screen. 2. Care should be taken that the songs are very slow and easy to follow. 3. Some suggestions Stevie Wonder, Elton John, Jason Mraz. 4. The students can enjoy the music and hum with it.

RUBRICS :

Marks to be awarded	5M	3M	1M
Understands the nuances and speaks with proper diction and voice modulation.	Speaks perfectly with proper diction and voice modulation.	Average diction. Can improve with some more training.	Needs a lot of training. Improper diction and improper voice modulation.

11. LEADING QUESTION:A question so framed as to guide the student questioned to respond with a particular obvious answer.

PROCEDURE:1. Ask the student a question.
2. Try to explore the answer in depth.
3.This may lead to an answer that was not so explicit.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies the question and is able to lead to unexplored areas or fosters cognitive dissonance.	Accurately identifies the question and leads to probing answers.	Identifies the question but is unable to provide satisfactory answer.	Does not identify the problem at all.

12.PUZZLE, ENIGMA, CONTRADICTION:Information presented to student that is accurate, but is either incomplete, ambiguous, or paradoxical in nature.

PROCEDURE: 1. The Faculty provides only partial information about the project. 2. The students then are expected to develop the entire project by researching from internet, books or other sources.

RUBRIC :

Marks to be awarded	5M	3M	1M
Identifies the question and is able to lead to	Accurately identifies the	Identifies the question but is	Does not identify the problem at

unexplored areas or fosters cognitive dissonance.	question and leads to probing answers.	unable to provide satisfactory answer.	all.
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13. STATEMENT-OPINION-SUMMARY: Provide an arguable statement and ask student to submit their opinion on it through a write up after allowing discussion.

PROCEDURE: 1. The Faculty provides only partial information about the project. 2. The students then are expected to develop the entire project by researching from internet, books or other sources.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies the question and is able to lead to unexplored areas or fosters cognitive dissonance.	Accurately identifies the question and leads to probing answers.	Identifies the question but is unable to provide satisfactory answer.	Does not identify the problem at all.

14. THINK / PAIR / SHARE: Have attendees turn to someone near them to summarize what they're learning, to answer a question posed during the discussion, or to consider how and why and when they might apply a concept to their own situations.

PROCEDURE: 1. The students learn collaborative learning. 2. The assessment shall be in pairs.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identify the question and are able to find a cogent answer.	The pair accurately identifies the question and summarize well or find the right situation to apply concept.	The pair accurately identifies the question and summarize well or find the right situation to apply concept but to a lesser degree	Does not identify the problem at all.

15. Peer Review: students review and comment on materials written by their classmates.

PROCEDURE: 1. Often students appear dissatisfied with the teacher's appraisal. 2. This provides a platform for student's participation. 3. Students are given material prepared by their peers. 4. They are expected to review and comment on that material.

RUBRIC:

Marks to be awarded	5M	3M	1M
Appraises critically and	Expertly reviews	Reviews well the	Fails to either

offers comments on peer's material.	the material and offers intelligent comments.	material and offers good comments.	review the material well or offer good comments.
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16. **JUST IN TIME TEACHING:** students read assigned material outside of class, respond to short questions online and then participate in collaborative exercises the following class period.

PROCEDURE: 1. The Faculty provides material in advance. 2. Students read this material outside the class and respond to short questions online. 3. In the following period, they then participate in collaborative exercises.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies the question and is able to lead to unexplored areas or fosters cognitive dissonance.	Accurately identifies the question and leads to probing answers.	Identifies the question but is unable to provide satisfactory answer.	Does not identify the problem at all.

17. **STATEMENT-OPINION-SUMMARY:** Provide an arguable statement and ask Student to submit their opinion on it through a write up after allowing discussion.

PROCEDURE: 1. The Faculty provides an arguable statement. 2. The students then discuss that statement and offer their opinions. 3. They then submit a write up of the same.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identifies the question and is able to lead a satisfactory discussion and provides a cogent summary.	Accurately identifies the question and provides a cogent summary.	Identifies the question but is unable to provide satisfactory answer.	Does not identify the problem at all.

18. **PEER SURVEY:** Each participant is given a grid that is to be filled in according to the needs of the group. Students/group members can be instructed to fill in the grids on their own or they can collect statements from peers and then share in small/large groups. Groups can then generate and share conclusions.

PROCEDURE: 1. The Faculty divides the class into groups and provides only partial information about the project. 2. They are given grids to be filled in according to the needs. 3. Groups generate and share conclusions.

RUBRIC:

Marks to be awarded	5M	3M	1M
Being a group task, the team can be reviewed in a group. Which	Collates information and generates	Collates information and generates	Does not identify the problem at all.

group generates and shares the conclusions effectively.	conclusion and shares exceptionally.	conclusion well.	
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19.FOCUSED LISTING: These are great follow ups to short presentations (whether via video or in person speaker) during which participants are asked to absorb information that is new and that is vital to the discussion to follow. The listing works well to introduce a topic, as an exercise joining/synthesizing two sets of information (lecture plus follow up reading, two lectures), and as something to return to as a wrap up so that participants can compare before/after thinking, by pausing/ after presentations.

PROCEDURE: 1. The Faculty presents the lecture or presentation. 2. The students then are expected to list the salient features by joining/ synthesizing .

RUBRIC:

Marks to be awarded	5M	3M	1M
Able to grasp the essence and is able to synthesize well and list salient features.	Grasps the essence well and accurately synthesizes the exact features.	Grasps the essence well and partially synthesizes the exact features.	Does not grasp the essence.

20.ROLE-PLAYING:The instructor provides either real or imaginary contexts along with a range of relevant characters/roles; students are encouraged to research these contexts, characters, and/or roles, and then to improvise dramatic interactions among their characters during class periods.

PROCEDURE: 1. The Faculty provides a situation for example inside a bank. 2. The students then are expected to use their creativity in playing different roles.

RUBRIC :

Marks to be awarded	5M	3M	1M
Identifies the offered role and plays it with perfection.	Accurately identifies the role and performs it admirably.	Accurately identifies the role and performs it satisfactorily.	Does not identify the role at all.

21. STUDENT FIELD WORK WITH REFLECTION:Any number of organized or individual instructional experiences that are held outside the classroom. Their design is meant to be as authentic as possible or as the instructional topic permits. Students are usually asked to journal, report, or otherwise produce documentation and/or their impression of the experience.

PROCEDURE: 1. The Faculty assigns projects that are conducted outside the classroom. 2. Students can be formed in groups. 3. Students submit a journal or report or any other documentation.

RUBRIC :

Marks to be awarded	5M	3M	1M

Identifies the question and is able to write a concise and well researched report	Accurately identifies the question and prepares an outstanding report.	Identifies the question and prepares a good report.	Does not identify the problem at all.
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22. INFUSING HUMOUR INTO CLASS SESSIONS: Inserting a joke of the day into class sessions is another type of brief energizing interlude that can become a part of one's pedagogical repertoire.

PROCEDURE: 1. The Faculty can encourage students to bring cartoons jokes riddles and humorous mnemonics. 2. Better still, he/she can share the responsibility of bringing some of them to the class. 3. Later he may poll or decide the top 3 or 5 or 10 best jokes himself.

RUBRIC :

Marks to be awarded	5M	3M	1M
Select the top 3 most humorous and relevant to the subject jokes.	Best joke of the day	Good Joke of the day.	Funny joke of the day.

23. INVITING EFFECTIVE GUEST SPEAKERS: Adding the voice of an especially knowledgeable and instructionally effective invited speaker can bring both outside authority and possibly enhanced student inspiration to your classroom. In short, the thoughtful selection of one or more potential guest speakers, combined with skillful pre-class planning to adequately prepare both the speaker and your students, can excite student interest in a topic and stimulate lively in-class discussion.

RUBRIC: Since this is only a formative assessment and not a summative assessment, no rubric has been provided.

BENEFITS OF ACTIVE LEARNING

- Reinforces important material, concepts, and skills.
- Provides more frequent and immediate feedback to students.
- Addresses different student learning styles.
- Provides students with an opportunity to think about, talk about, and process course material.

- Creates personal connections to the material for students, which increases their motivation to learn.
- Allows students to practice important skills, such as collaboration, through pair and group work.
- Builds self-esteem through conversations with other students.
- Creates a sense of community in the classroom through increased student-student and instructor-student interaction.

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