Course: General Methods of Teaching (8601)
Semester: Spring, 2023

Assignment No. 2

Q.1 What are group projects? How are group projects used in schools?

Group work can be an effective method to motivate students, encourage active learning, and develop key critical-thinking, communication, and decision-making skills. But without careful planning and facilitation, group work can frustrate students and instructors and feel like a waste of time. Use these suggestions to help implement group work successfully in your classroom.

- Determine what you want to achieve through the small group activity, both academically (e.g., knowledge of a topic) and socially (e.g., listening skills). The activity should relate closely to the course objectives and class content and must be designed to help students learn, not simply to occupy their time. Roberson and Franchini (2014) emphasize that for group learning to be effective, students need a clear sense that group work is "serving the stated learning goals and disciplinary thinking goals" of the course (280). When deciding whether or not to use group work for a specific task, consider these questions: What is the objective of the activity? How will that objective be furthered by asking students to work in groups? Is the activity challenging or complex enough that it requires group work? Will the project require true collaboration? Is there any reason why the assignment should not be collaborative?
- Consider giving a relatively easy task early in the term to arouse students' interest in group work and encourage their progress. In most cases collaborative exercises should be stimulating and challenging. By pooling their resources and dealing with differences of opinion that arise, groups of students can develop a more sophisticated product than they could as individuals.
- All group members should feel a sense of personal responsibility for the success of their teammates and realize that their individual success depends on the group's success. Johnson, Johnson, and Smith (2014) refer to this as positive interdependence and argue that this type of cooperative learning tends to result in learners promoting each other's success. Knowing that peers are relying on you is a powerful motivator for group work.
    - Allocate essential resources across the group so that group members are required to share information. Or, to come up with a consensus, randomly select one person to speak for the group, or assign different roles to group members so that they are all involved in the process (e.g., recorder, spokesperson, summarizer, checker, skeptic, organizer, observer, timekeeper, conflict resolver, liaison to other groups).
    - Another strategy for promoting interdependence is specifying common rewards for the group, such as a group mark.
- The size you choose will depend on the number of students, the size of the classroom, the variety of voices needed within a group, and the task assigned. Groups of four-five tend to balance the needs for diversity, productivity, active participation, and cohesion. The less skillful the group members, the smaller the groups should be.

- Division based on proximity or students' choice is quickest, especially for large and cramped classes, but this often means that students end up working together with friends or with the same people.
    - To vary group composition and increase diversity within groups, randomly assign students to groups by counting off and grouping them according to number. Another idea is to distribute candy (e.g., Starburst or hard, coloured candies) and group students according to the flavour they choose.
    - For some group tasks, the diversity within a group (e.g., gender, ethnicity, level of preparation) is especially important, and you might want to assign students to groups yourself before class. Collect a data card from each student on the first day of class to glean important information about their backgrounds, knowledge, and interests. Alternately, ask students to express a preference (e.g., list three students with whom they would most like to work or two topics they would most like to study), and keep their preferences in mind as you assign groups.
- Recognize that you won't be able to cover as much material as you could if you lectured for the whole class period. Cut back on the content you want to present in order to give groups time to work. Estimate the amount of time that subgroups need to complete the activity. Also plan for a plenary session in which groups' results can be presented or general issues and questions can be discussed.
- You won't be able to expect the unexpected, but by having some idea about what students will come up with, you will be better prepared to answer their questions and tie together the group work during the plenary session.
- pairs, small groups, large groups, online synchronously, online asynchronously, etc. Some students might be better at contributing after they have had time to digest material, while others might be better at thinking on the spot. Other students will defer to others in large groups but actively contribute in pairs. All roles should be valued and included.

Introducing the group activity

- Students must understand the benefits of collaborative learning. Don't assume that students know what the pedagogical purpose is. Explicitly connect these activities to larger class themes and learning outcomes whenever possible.
- If you try to give instructions first, students may be too preoccupied with deciding on group membership to listen to you.
- Students work best together if they know or trust each other, at least to some extent. Even for brief group activities, have students introduce themselves to their group members before attending to their task.
- This means both telling students exactly what they have to do and describing what the final product of their group work will look like. Explaining the big picture or final goal is important, especially when the group work will take place in steps. Prepare written or visual instructions (e.g., charts, sequential diagrams) for students. Remember to include time estimations for activities.

- Especially for extended periods of group work, establish how group members should interact with one another, including principles such as respect, active listening, and methods for decision making. Consider making a group contract.
- Even if you believe your instructions are crystal clear, students may have legitimate questions about the activity. Give them time to ask questions before they get to work.

Monitoring the group task

- As students do their work, circulate among the groups and answer any questions raised. Also listen for trends that are emerging from the discussions, so that you can refer to them during the subsequent plenary discussion. Avoid interfering with group functioning — allow time for students to solve their own problems before getting involved. You might consider leaving the room for a short period of time. Your absence can increase students' willingness to share uncertainties and disagreements (Jaques, 2000).
- Assume that they do know, and can do, a great deal (Brookfield & Preskill, 1999). Express your confidence in them as you circulate the room.
- If you come upon a group that is experiencing uncertainty or disagreement, avoid the natural tendency to give the answers or resolve the disagreement. If necessary, clarify your instructions, but let students struggle — within reason — to accomplish the task (Race, 2000).
- If students criticize you for not contributing enough to their work, consider whether you have communicated clearly enough your role as facilitator.

Ending the group task

- Students tend to want to see how their work in small groups was useful to them and/or contributed to the development of the topic. You can end with a plenary session in which students do group reporting. Effective group reporting "can make the difference between students' feeling that they are just going through their paces and the sense that they are engaged in a powerful exchange of ideas".
    - Have each group give one idea and rotate through the groups until no new ideas arise. Or have each group give their most surprising or illuminating insights or their most challenging question. You can record ideas raised to validate their value.
    - Have each group record their ideas and either present them yourself or have a group member do so. One variation on this is to have groups record their conclusions on a section of the blackboard or on flipchart paper that is then posted on the wall. Students then informally circulate around the room and read each other's answers. Alternately, you can ask students to move around the room in small groups, rotating from one set of comments to another and adding their own comments in response. Another variation on written reports is to have students write brief comments on Post-it notes or index cards. Collect them, take a few minutes to process them or put them in sequence, then summarize their contents.

- When responding to students' answers, model the respect and sensitivity that you want the students to display towards their classmates. Be ready to acknowledge and value opinions different from your own. Be willing to share your own stories, critique your work, and summarize what has been said.
- Recognize that groups might not come up with the ideas you intended them to, so be willing to make your lecture plans flexible. Wherever possible, look for a connection between group conclusions and the course topic. However, be aware that misconceptions or inaccurate responses need to be clarified and corrected either by you or by other students.
- Although the plenary session should wrap up the group work, feel free to leave some questions unanswered for further research or for the next class period. This openness reflects the nature of knowledge.
- They may do so either orally or in writing. This reflection helps them discover what they learned and how they functioned in the group. It also gives you a sense of their response to group work.

Q.2 Explain

(i) the structure of guided discussion method

The guided discussion method is a structured approach to conducting classroom discussions that encourages active participation, critical thinking, and collaborative learning among students. The method typically follows a specific structure to ensure effective communication and meaningful exchange of ideas. Here is a breakdown of the structure of guided discussion:

1. Introduction: The discussion begins with an introduction of the topic or question that will be discussed. The teacher may provide relevant background information or context to set the stage for the discussion.
2. Clear Objectives: The teacher establishes clear objectives or goals for the discussion. These objectives outline the specific learning outcomes or skills that students should aim to achieve through their participation in the discussion.
3. Ground Rules: The teacher establishes ground rules for the discussion to maintain a respectful and inclusive environment. These rules may include taking turns, active listening, and providing evidence to support arguments.
4. Opening Statements: The discussion may start with opening statements from the teacher or selected students. These statements can provide different perspectives or provoke critical thinking about the topic.
5. Facilitated Questions: The teacher poses open-ended questions to the students, encouraging them to share their thoughts, opinions, and arguments related to the topic. These questions are designed to guide the discussion towards the desired learning outcomes.
6. Active Participation: Students actively participate in the discussion by sharing their ideas, responding to each other's points, and asking clarifying questions. The teacher facilitates the flow of conversation and ensures that all students have opportunities to contribute.

7. Evidence and Reasoning: Students are encouraged to provide evidence and reasoning to support their arguments or opinions. This fosters critical thinking and helps students develop their analytical skills.
8. Summarizing and Synthesizing: The teacher summarizes key points and synthesizes the different perspectives shared by students. This helps to consolidate the ideas discussed and provides closure to the discussion.
9. Reflection and Conclusion: Students reflect on the discussion, highlighting key takeaways or insights they gained from the exchange of ideas. The teacher may provide a brief conclusion or connect the discussion to future lessons or activities.

(ii) the assessment procedure of classroom discussion

Assessing classroom discussions involves evaluating the quality of students' contributions, their active participation, critical thinking skills, and ability to engage in meaningful dialogue. Here are some common assessment procedures used in evaluating classroom discussions:

1. Rubrics: A rubric is a scoring guide that outlines the criteria for assessing different aspects of the discussion. It can include criteria such as active participation, listening skills, evidence-based arguments, critical thinking, and respectful communication. Rubrics provide clear expectations and help standardize the assessment process.
2. Observations: The teacher or an assigned observer actively monitors the discussion and takes notes on students' participation, engagement, and adherence to the ground rules. Observations can provide insights into individual students' contributions and the overall dynamics of the discussion.
3. Peer Assessment: Students can assess their peers' contributions based on predetermined criteria. This encourages self-reflection and helps develop students' ability to evaluate the quality of their own and others' participation.
4. Reflections or Self-Assessments: Students can reflect on their own participation and learning during the discussion. They may write a brief summary of their contributions, highlight their strengths, and identify areas for improvement. Self-assessments promote metacognition and self-awareness.
5. Summative Assessment: The teacher may assign a formal written or oral assessment after the discussion, such as an essay, presentation, or quiz, to assess students' understanding of the topic and their ability to apply critical thinking skills.
6. Feedback: Providing timely and constructive feedback is essential in assessing classroom discussions. Teachers can offer individual feedback to students, highlighting their strengths and offering suggestions for improvement.

Q.3 Discuss the importance of asking questions in classroom discussion. State tips to ask effective questions.

Asking questions in classroom discussions is crucial for promoting active engagement, critical thinking, and meaningful learning. Here are some reasons why asking questions is important:

1. Stimulates Critical Thinking: Questions require students to analyze information, evaluate evidence, and make reasoned judgments. By asking thought-provoking questions, educators encourage students to think deeply, develop their analytical skills, and consider multiple perspectives.
2. Promotes Active Participation: Questions provide opportunities for students to actively engage in the discussion. When students are encouraged to ask questions, it creates a participatory learning environment where everyone has a chance to contribute, share ideas, and clarify their understanding.
3. Encourages Reflection and Metacognition: Thoughtful questions prompt students to reflect on their own thinking processes, assess their knowledge gaps, and recognize areas for further exploration. Through self-reflection, students develop metacognitive skills and become aware of their own learning needs.
4. Fosters Collaborative Learning: Questions facilitate dialogue and encourage students to respond to each other's ideas. By asking questions and inviting responses, students can build on one another's contributions, challenge assumptions, and develop a deeper understanding through collaborative learning.
5. Enhances Communication Skills: Asking questions helps students refine their communication skills, both in expressing their own thoughts and in seeking clarification from others. It promotes effective listening, articulation of ideas, and respectful communication.

To ask effective questions in a classroom discussion, consider the following tips:

1. Open-ended Questions: Pose questions that require more than a simple "yes" or "no" response. Open-ended questions encourage students to elaborate, provide reasoning, and explore different possibilities. For example, instead of asking, "Do you agree with the author?" ask, "What are the reasons for the author's viewpoint, and how does it align with your own perspective?"
2. Clear and Concise: Frame questions in a clear and concise manner to ensure students understand the focus of the discussion. Avoid overly complex or confusing questions that may hinder comprehension.
3. Diverse Question Types: Utilize a variety of question types to stimulate different levels of thinking. This can include factual questions (e.g., "What are the main components of a cell?"), interpretive questions (e.g., "How does the character's actions reflect their motivations?"), and evaluative questions (e.g., "What are the strengths and weaknesses of this argument?").
4. Scaffold Questions: Begin with simpler questions to build foundational knowledge and gradually progress to more complex and higher-order thinking questions. This scaffolding approach helps students develop a deeper understanding of the topic and builds their confidence in participating.
5. Follow-up Questions: Use follow-up questions to probe deeper into students' responses, encourage elaboration, and encourage critical thinking. Follow-up questions can challenge assumptions, request evidence or examples, or ask students to consider alternative viewpoints.
6. Wait Time: Provide sufficient wait time after asking a question to allow students to process the question, formulate their responses, and gather their thoughts. Research shows that increasing wait time leads to more thoughtful and articulate answers from students.

7. Encourage Peer-to-Peer Questions: Foster a classroom environment where students feel comfortable asking questions to their peers. Encourage students to ask follow-up questions to each other, promoting peer-to-peer interaction and collaborative learning.

By incorporating these tips, educators can facilitate engaging and effective discussions that encourage active participation and critical thinking among students.

Q.4 Give an account on cooperative learning strategies techniques.

Cooperative learning strategies and techniques are instructional approaches that emphasize collaboration and active participation among students. These strategies encourage students to work together in small groups to achieve shared learning goals. Here are some popular cooperative learning strategies and techniques:

1. Jigsaw Technique: In the jigsaw technique, students are divided into small groups, and each group member becomes an expert on a specific topic or concept. They then regroup with members from other groups who have studied different topics. Each member shares their expertise, and the group works together to create a comprehensive understanding of the entire subject.
2. Think-Pair-Share: In this technique, students are given a question or prompt related to the topic. They first think individually about the question, then pair up with a classmate to discuss their thoughts. Finally, pairs share their ideas with the whole class, fostering collaboration and encouraging active engagement.
3. Round Robin: Round robin is a structured discussion technique where students take turns sharing their ideas or answers. Each student contributes one idea, and the rotation continues until all students have had a chance to participate. This technique ensures equal participation and provides an opportunity for all students to share their thoughts.
4. Numbered Heads Together: Students are grouped into teams, and each team member is assigned a number. The teacher poses a question or problem, and students discuss it within their groups. When the teacher calls out a number, the corresponding student from each group must stand up and share their group's response. This technique promotes both individual accountability and group collaboration.
5. Group Investigation: In a group investigation, students work together in small groups to investigate a specific topic or problem. Each group member takes on a specific role or task related to the investigation, such as researcher, recorder, or presenter. They collaborate to gather information, analyze data, and present their findings to the class.
6. Peer Tutoring: Peer tutoring involves pairing students with different levels of expertise or skills. One student takes on the role of the tutor, while the other is the tutee. The tutor provides guidance, explains concepts, and assists the tutee in understanding the material. This strategy promotes both the development of subject knowledge and the enhancement of communication and interpersonal skills.
7. Learning Stations: In learning stations, the classroom is divided into different stations or learning centers. Each station focuses on a specific activity or task related to the topic. Students rotate through the stations

in small groups, engaging in hands-on activities, discussions, or problem-solving tasks. This strategy promotes active learning, cooperative work, and varied experiences.

8. Group Projects: Group projects involve assigning a task or project to small groups of students. Each group collaboratively works on the project, sharing responsibilities, and utilizing their individual strengths. This strategy fosters teamwork, communication, and problem-solving skills, as students work together to complete the project.

These cooperative learning strategies and techniques promote active engagement, collaborative problem-solving, and positive interdependence among students. They not only enhance students' understanding and retention of the material but also develop important social and communication skills necessary for effective teamwork and cooperation.

Q.5 Classify the audio-visual aids.

Audiovisual aids are instructional tools that combine visual and auditory elements to enhance the learning experience. They can be classified into different categories based on their nature and purpose. Here are some common classifications of audiovisual aids:

1. Projection Aids:

- Slide projectors: These aids use transparent slides to project images or text onto a screen or wall.
- Overhead projectors: They use transparent sheets called transparencies to display written or visual content.
- Data projectors: These aids use digital technology to project images, videos, or presentations from a computer or other media devices.

2. Display Aids:

- Posters and charts: Visual displays that present information, diagrams, or illustrations.
- Maps and globes: Visual aids that depict geographic information and locations.
- Models and replicas: Physical representations of objects or structures to aid understanding and visualization.

3. Audio Aids:

- Audio recordings: Pre-recorded audio material such as lectures, speeches, or interviews.
- Sound systems: Amplification devices used to enhance the audibility of spoken content in larger classrooms or auditoriums.

4. Multimedia Aids:

- Videos and animations: Audiovisual content that combines moving images and sound to present information, demonstrate processes, or engage learners.
- Interactive whiteboards: Interactive displays that combine digital technology with traditional whiteboards, allowing users to write, draw, and interact with multimedia content.
- Web-based tools and applications: Online resources, websites, or software applications that provide audiovisual content for learning purposes.

5. Digital Aids:

- Computer-based presentations: Slideshows or multimedia presentations created and displayed using software such as Microsoft PowerPoint or Google Slides.
- Educational software and apps: Interactive software programs or mobile applications designed for educational purposes, often incorporating audio and visual elements.

6. Real Objects:

- Props and manipulatives: Physical objects or materials used to illustrate concepts, demonstrate processes, or enhance hands-on learning.
- Specimens and samples: Actual or preserved specimens, samples, or materials used to provide firsthand experiences or visual representations.

It's important to note that these classifications are not exhaustive, and audiovisual aids can vary depending on the specific context and educational objectives. The selection of appropriate audiovisual aids should be based on the content being taught, the learning objectives, and the preferences and needs of the learners.