

3.4.2 Designing Teams and Assigning Roles

Peter Smith (Mathematics & Computer Science, St. Mary's College, Emeritus)

For many faculty members, the issues surrounding team construction and management are significant. This module explores methods for implementing the use of roles in the classroom, including assigning students to teams and requiring team members to perform in roles. Because the workplace has become much more team-oriented over the past two decades, it is important that students learn to work well in teams; and students who participate in team environments are much better prepared to succeed on the job than are those without teaming experience. Although it is not yet common for business or industry to employ formal process-oriented roles for team members, graduates who have used roles frequently in undergraduate courses realize that the use of roles would dramatically improve team performance.

Why Roles are Important

Using roles helps team members to become interdependent (Johnson, Johnson, & Smith, 1991) and to be individually accountable for team success. It helps them to increase their learning skills (Apple, Duncan-Hewitt, Krumsieg, & Mount, 2000), and speed up the four stages of team development: forming (goal setting), storming (conflict resolution), norming (problem-solving), and performing (Tuckman, 1965). Roles should be rotated frequently so that each student has the opportunity to practice each role and to realize that effective learning requires that teams use all of the roles simultaneously. Rotating roles discourages dominance by one person and gives all students opportunities to practice social, communication, and leadership skills (Millis & Cottell, 1998). The roles introduced in this module are effective for enhancing team performance because each team member is empowered by his or her role to make a unique and significant contribution to the learning process.

Cooperative versus Collaborative Learning

The use of roles in learning activities is at the heart of the controversy between cooperative and collaborative learning. Although both approaches use small-group learning and encourage cooperative behavior, positive interdependence, and individual accountability, collaborative learning advocates hold that interdependence will occur naturally and that no attempt should be made to structure it. Therefore, the facilitator should not assign teams or roles, and should neither assess learning skills and performance, nor structure their development (Davidson, 1994). Cooperative learning is much more structured. The facilitator strives to ensure that the teams have diverse membership, he or she constantly assesses the skill level and performance of each student, and plans activities that will allow students to improve. When fulfilling the responsibilities of team roles, students must use many learning skills, so the facilitator has opportunities to intervene to help the individual student while ostensibly helping the team improve its performance (3.2.3 Facilitation Methodology).

Table 1 Various Team Roles and When to Use Them

E = Essential O = Optional NA = Not Applicable

Learning Situation	Captain	Recorder	Reflector	Spokes- person	Technology Specialist	Planner	Time Keeper	Skeptic	Optimist	Spy
Cooperative Learning	E	Е	Е	0	0	0	0	0	0	0
Laboratory	Е	Е	E	NA	Е	0	0	0	0	0
Project	Е	E	E	0	0	Е	0	0	0	0
Problem Solving	Е	Е	Е	0	0	Е	0	0	0	NA
Student Presentation	Е	0	Е	Е	0	0	E	0	0	0
Student Teaching	Е	0	Е	Е	0	0	Е	0	0	0
Committee Work	Е	Е	E	E	0	E	0	0	0	NA
Department Business	Е	Е	0	NA	E	Е	0	0	0	NA
Grant Writing	Е	Е	Е	0	0	Е	0	0	0	NA
Peer Assessment	0	E	E	Е	NA	NA	0	0	0	NA

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Performance Criteria for Team Roles

Captain

- 1. Facilitate the team process, keeping it enjoyable and rewarding for all team members.
- 2. Make sure each member has a role and is performing within that role.
- 3. Ensure that all team members can articulate and apply what has been learned.
- 4. Manage time, stress, and conflict.
- 5. Accept accountability for the overall performance of the team.
- 6. Contribute to the group as an active learner.

Recorder

- 1. Record group roles and instructions at the beginning of a task or activity.
- 2. During an activity, record and collect important information and data, integrating and synthesizing different points of view.
- 3. Document group decisions and discoveries legibly and accurately.
- 4. Accept accountability for the overall quality of the recorder's report.
- 5. Control information flow and articulate concepts in alternative forms if necessary.
- 6. Contribute to the group as an active learner.

Reflector

- 1. Assess performance, interactions, and the dynamics among team members, recording strengths, improvements, and insights (4.1.9 SII Method for Assessment Reporting).
- 2. Be a good listener and observer.
- 3. Accept accountability for the overall quality of the reflector's journal.
- 4. Present an oral reflector's report positively and constructively if asked to do so.
- 5. Intervene with suggestions and strategies for improving the team's processes.
- 6. Contribute to the group as an active learner.

Spokesperson

- 1. Speak for the team when called upon to do so.
- 2. Ask questions or request clarification for the team.
- 3. Make oral presentations to the class for the team.
- 4. Use the recorder's journal to share the team's discoveries and insights.
- 5. Collaborate periodically with the recorder.
- 6. Contribute to the group as an active learner.

Technology Specialist

- 1. Use the available technological tools for the team activity.
- 2. Listen, converse, and collaborate with team members; synthesize inputs, try suggestions and/or follow directions for the technology.
- 3. Retrieve information from various sources; manage the available resources and information.
- 4. Help team members understand the technology and its use.
- 5. Be willing to experiment, take risks, and try things.
- 6. Contribute to the group as an active learner.

Planner

- 1. Review the activity, develop a plan of action, and revise the plan to ensure task completion.
- 2. Monitor the team's performance against the plan and report deviations.
- 3. Contribute to the group as an active learner.

Timekeeper

- 1. Observe the time resource for the activity and/or record the time allocation announced by the facilitator.
- 2. Keep track of the elapsed time for various tasks and notify the captain when the agreed-upon time has expired.
- 3. Contribute to the group as an active learner.

Optimist

- 1. Focus on why things will work.
- 2. Keep the team in a positive frame of mind.
- 3. Look for ways in which team discoveries can be applied or used to the team's advantage.
- 4. Contribute to the group as an active learner.

Skeptic

- 1. Question and check the assumptions that are being made.
- 2. Determine the issues or reasons why quality is not being met at the expected level.
- 3. Be constructive in helping the team improve performance.
- 4. Contribute to the group as an active learner.

Spy

- 1. Eavesdrop on other teams during an activity to gather information and seek clarification of direction.
- 2. Relay information that can help the team perform better.
- 3. Contribute to the group as an active learner. (Myrvaagnes, Brooks, Carroll, Smith, & Wolf, 1999)

Issues Surrounding Team Design

- 1. Although teams can contain any number of participants, most college and university level practitioners prefer groups of four for cooperative learning activities (Millis et al., 1998). Quads are small enough to engage each student, but large enough to provide a rich mix of ideas. Fourperson teams can also be easily split into pairs for "think, pair, share" activities. Cooperative learning advocates David and Roger Johnson recommend three-person teams, and up to three of these may be necessary if the number of participants is not divisible by four. If absenteeism is a serious problem, five-person teams may be optimal, although regular attendance is vital because each student has a responsibility to contribute to the team's efforts. Sporadic attendance is a severe handicap to success with cooperative learning.
- 2. Project, problem-solving, committee-work, and grant-writing teams can be, and probably should be, larger than four, depending on the task to be accomplished and the number of available participants. It is best to assign permanent roles in these teams based on the strengths of the individual members because consistently high performance is more important than learning growth in these circumstances. The captain should be extremely well organized, self-confident, and able to inspire the team to excel. The recorder should be skilled at synthesizing the essential meaning from team discussion and keeping very organized records. The reflector should excel at multiprocessing and be confident enough to suggest improvements, even if they may imply substandard performance by one or more team members. The planner should be very creative and persistent, but flexible enough to accept changes in the plan as the project evolves.
- 3. Peer assessment and student teaching teams may well be smaller than four, perhaps as small as two, since they have sharply focused goals. All required role activities have to be accomplished, but formal role assignments may not be necessary. The work in these teams is usually divided fairly between the members.
- 4. Cooperative learning teams may be formed in a number of ways, such as random selection by counting off or drawing cards from a deck, student or participant selection, teacher or supervisor selection, or a combination of the last two. The goal is always to provide the greatest diversity within each team. Random teams often provide this diversity, but there is no way to ensure it. Research shows

- that participant-selected teams are not diverse and are unlikely to be successful (Fiechtner and Davis, 1985). Participants can suggest several people they would like to work with, and the facilitator can take these requests into account when assigning teams; the aim being to preserve diversity in gender, ethnic background, academic preparation and ability, and discipline or major. In order to gather the information needed to assign teams, many facilitators delay forming permanent teams until they can collect data sheets from students and observe them in learning situations.
- 5. Teams should be designed to accomplish the task for which they are formed. They can exist for short periods (e.g., formed to complete a five-minute inclass exercise), they can work together for several weeks to complete a project, or they can stay together for a whole semester or longer to provide long-term emotional and academic support (Duncan-Hewitt, 1995). Forming new groups midway through the semester gives students the chance to work with new individuals, thus providing a more realistic simulation of on-the-job teamwork. When deciding if and when to restructure the teams, it is important to carefully consider the learning needs of the participants and how well the current teams are functioning. Younger or more inexperienced students are more likely to need the support that long-term groups provide. Those close to graduation may profit from more frequent team membership changes.
- 6. One of the first team activities should encourage the team members to introduce themselves and learn about each others' learning styles. At this time, the team should agree to expectations or ground rules for all members.

Suggested ground rules for team activities (Silberman, 1998):

- Start on time with everyone present
- Be prepared
- Get to know members who are different from oneself
- Be gender/race/ethnicity sensitive
- Give everyone a chance to speak
- Let others finish speaking without interrupting
- Be brief and to the point
- Share the workload
- Rotate group roles
- Reach decisions by consensus
- Assess team functioning periodically

Guidelines for Implementing Team Roles

- The facilitator must check that students have assumed and rotated roles, must intervene to improve role performance, and give credit for conscientious role fulfillment via learning journal reports or other means (4.1.4 Assessment Methodology).
- 2. To ensure that reflectors improve their performance, the facilitator should take time for reflectors to share oral reports with the class, frequently in the beginning of the term and at regular intervals thereafter.
- 3. Students with roles other than captain, recorder, and reflector often fail to appreciate the importance of their roles. The facilitator should intervene to recognize team members who do well in these other roles or to ask the team if they would like to be informed of specific instances when using these roles would enhance performance.
- 4. Reflectors may withdraw from active participation in the group in order to observe and write down their assessments. The facilitator should encourage them to observe while fully participating and to take a minute at 15-20 minute intervals to jot down their assessment.
- 5. Recorders may complain that they are so busy writing that they have no time to think or to process what the team is doing. They need to be encouraged not to write everything down, but to synthesize the discussion in a few well-constructed sentences.
- 6. When the captain is very shy, introverted, or not confident, another team member is likely to take over that role. To fix this situation, the facilitator should address all team intervention questions to the captain, refer to the team using the name of the captain (unless the team has chosen another name), hold the captain responsible for time management, and attempt to make eye contact with the captain when giving positive nonverbal feedback to the team.
- 7. The nature of the team roles and the responsibilities of those fulfilling the different roles may well change as the team moves through stages of development. More permanent roles may be appropriate in the latter stages of team development.

Concluding Thoughts

The effort needed to establish team roles and train students in their use pays big dividends in increasing learning. Roles also help ensure fair participation in the group process by all the learners. Students who value and experience defined roles in the group process will be prepared to assume a variety of roles in the workplace and in community and extracurricular activities as well.

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