BESTEAMS Introductory Interpersonal Effectiveness Module

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BESTEAMS Module Implementation Plan (MIP)
Intermediate Level Interpersonal Module

Topic: Conflict Resolution in Engineering Project Teams

I. Introduction/Motivation for Module Instructor

This is one of the intermediate BESTEAMS teamwork training modules for engineering students and faculty members. The three intermediate modules address personal knowledge, interpersonal effectiveness, and project management in a team setting. The overall goal of this module is to give students an appreciation of the difference between positive (functional) and negative (dysfunctional) interpersonal team conflicts, and the tools to diagnose and resolve dilemmas. The delivery plan presented assists the instructor in presenting the material in either a typical 50-minute class or in an expanded session such as a studio or laboratory (90+ minutes).

Virtually no team can function without some degree of conflict or disagreement. Often people shy away from conflict because it is uncomfortable and the outcome can be uncertain. In engineering, there is sometimes the perception that interpersonal conflict can be avoided by staying focused on the task. However, experienced team members and instructors know that avoiding conflict slows team progress and may entirely derail a project. Therefore, the goal of this module is to give students and instructors a straightforward means of:

1. Classifying team conflicts: While most think that conflict is by definition destructive, some degree of conflict or dissention on a team can be constructive.
2. Understanding five typical ways of managing conflict: This concept is addressed in the “Conflict Management Styles” section.
3. Providing a concrete tool to work through interpersonal conflicts on teams: This tool is the XYZ Model for Conflict Resolution.
4. Handling deadlock: Specific practices are offered for extreme cases of team conflict.

The extended session provides additional material on conflict management in teams. This material addresses:

5. Diagnosing conflict: An additional means of characterizing dysfunctional teams and how to handle these conflicts.
6. Introducing third party negotiation as a conflict management option.

Expected Outcomes of the Module

As a result of this module, it is expected that students will experience multiple positive outcomes that will enhance their understanding of conflict management, with consequent improvement of their team skills.
Module Part I (Slides 1-19)
Students will:
- Gain insight into why team conflict occurs and how it can be resolved
- Learn five different approaches to conflict management
- Learn a conflict management tool and have the opportunity to practice

Module Part II (Slides 20-29)
Students will:
- Learn more about how to characterize conflict
- Consider the option of a third party negotiator
- Consider redefining notions of team conflict and failure

II. Delivery Plan A: 50-minute Class Option

A. Establish class interest and the contextual background to the module (slides 3-5). Ask students to describe an experience of team conflict. As they outline that experience (either verbally or on paper), students should include all the points on slide 4. Convergers will value the immediate link between their concrete experience and the academic material that will be presented. Slide 5 provides the overview and rationale that appeals to diverging students, who want to know why a topic is important.

B. The next slides (slides 6-8) introduce the idea that not all conflicts are negative and to be avoided. Instead, critical discussion and disagreement should be part of the creative process. The instructor should emphasize that conflict should not be avoided; rather, it should be managed in a way that increases interpersonal competencies. As mentioned in the Introductory Interpersonal Module, team themselves are characterized by predictable stages of development (forming, storming, norming, performing, adjoining). Thus, conflict is a usual part of team process and development. Slide 8 summarizes some of the major reasons for conflict on engineering project teams.

C. The Conflict Management Styles slides (slides 9-12) discuss how different individuals, both team leaders and members, may respond in the face of team conflict. While individual reactions to conflict will vary depending on context, there is some evidence that, as with learning styles, individuals also prefer certain ways of dealing with conflict (Felder, 2002). Thus it is useful for students to consider how they typically react to conflict and to understand how their style may help or hinder the conflict’s resolution. Slide 9 puts all five styles into context and shows how they differ in terms of varying degrees of “cooperativeness” and “assertiveness”—both of which are necessary for a mutually acceptable solution to team conflict. Assimilators will benefit from slide 9 because it presents the theoretical model from which conflict styles are derived.
D. Slides 13-15 introduce the “XYZ” model of conflict resolution. Really a communication tool, this material is presented in a nuts and bolts format designed to appeal to student engineers who do not want to engage in “touchy/feely” exercises. Set up to be formula-like (a-b-c), the idea is to encourage students to talk about the conflict in specific (behavioral) terms that communicate the consequences of the team breakdown on fellow team members (slides 13-14). An in-class role play option is included (slide 15) which gives students a chance to try out the tool. Role playing may appeal to Accommodators and Divergers who value the human interaction component of the team environment.

BESTREAMS recommends breaking the class into triads where two students can act the part of disputing students and the third can observe and give constructive feedback. If there is time, let all three students have a turn at using the XYZ conflict management tool.

E. Deadlock and the consequences of team conflict (slide 16). Here the instructor introduces the worst case scenario: When the team conflict brings the project to a grinding halt. This slide introduces three strategies for breaking the deadlock, enabling students to move beyond their own points of view. By keeping in mind the desired results and common goals, these conversations should continue until a common ground or consensus is reached.

F. Choosing to continue teamwork (slide 17), addresses the issue of how to continue to work as a team once conflict and deadlock have been resolved. For example, new ground rules might be necessary, project milestones adjusted, or team member working subgroups changed. Emphasis should be placed on the need for the team to make choices on how to continue to work productively.

G. Summary Slides (18-19). Here the instructor can reinforce the notion that conflict management is an essential professional skill and that conflict is a predictable, even necessary part of team dynamics. While initially using the “XYZ” model may feel “artificial” or not genuine, practice (with resulting modifications of the a-b-c rigid structure) will enable students to incorporate this skill into their communication repertoire and adapt it to their own style.

III. Teaching to the Learning Styles

A. Quadrant 1 (Divergers): Driven to learn by asking the question “why?” (In the case of the classroom, “why is this information important to me?”

Focusing question: Divergers tend to feel comfortable in a classroom that provides opportunity for them to share their own perspective as well as understand those of others. Giving them the chance to speak up (“why is
conflict management so important?”) and answer such a focusing question immediately helps them buy into the goals of the module.

Role Play exercise (XYZ): This activity encourages students to listen to each other and provides a tool to increase team harmony and efficiency—positive attributes for diverging students. Similarly, the team exercise in the 50-minute session also allows students to come together in small groups and explore how the material taught applies to their own experiences.

B. Quadrant 2 (Assimilators): Driven to learn by asking the question “what?” (In the case of the classroom, “what is a conflict management style?”)

Conflict Management Styles: Because assimilators tend to think linearly, they will appreciate the orderliness of this section of material. They will also enjoy the “big picture” provided by the graph which puts the five conflict management styles into context (along two axis: assertiveness/cooperativeness).

C. Quadrant 3 (Convergers): Driven to learn by asking the question “how?” (In the case of the classroom, “how can this material help me succeed on the team?”)

XYZ Conflict Management Tool: Converging students will approve of a specific, doable technique to use in conflict situations. Tending to value the practical, these students might be impatient with “positive” aspects of conflict (not seeing the potential for “out of the box” creative thinking or new solutions).

D. Quadrant 4 (Accomodators): Driven to learn by asking the question “what if?” (In the classroom context, “what if I use this information to help my team?”)

Role Playing: The various role playing exercises will appeal to Accomodating students because they enjoy experimentation, as well as figuring out and applying material to real world situations. Unlike Convergers, Accomodators prefer to apply new material to the world of people, rather than to “things.” Indeed, Accomodating students will generally find all the material regarding managing people in teams more interesting that some others (e.g., Assimilators, Convergers), especially if they are currently involved in a team project where the information can be immediately used.

IV. Delivery Plan B: 90+ Minute Option

A. In this extended session, the instructor can introduce more detail related to identifying characteristics of team conflict (slide 21) and discuss strategies for how appropriate interventions can occur (slide 22). This material can be covered a mini-lecture. Assimilators often like to hear the instructor explain the importance or overview of new material.
B. Slides 23-26 explain attitudinal, behavioral, and structural team conflicts. Instructors can stop during this section and ask students for examples of each of these types of scenarios. This model for conceptualizing conflict also offers suggestions for related types of conflict resolution.

For example, suppose a student is not answering a mentor’s e-mail. A “structural” solution identifies a team member whose role it is to be the official mentor contact. Alternatively, a solution grounded in “behavior” points to the fact that team members are not really invested and need to develop a deeper level of ownership of the project. A solution here then entails discussion with the team about this issue (e.g., why are they not fully participating in the effort?). Finally, viewing the conflict from the perspective of “attitudes” may reveal that the students were annoyed with the mentor and have not addressed the issue. Again, the attitude issue can be resolved by dealing with the root cause of the annoyance.

The exercise at the end of this section (slide 26) asks students to analyze team conflicts they have experienced. This activity helps students learn to use the material in a relevant way.

C. Third Party Negotiation (slide 27) introduces the idea of going to a third party for assistance in a team conflict. A negotiator typically comes from outside the group. In the case of student team projects, the negotiator could be the instructor. When the conflict is between two people or sub-groups on a team, the negotiator could also be a team member both sides trust.

D. Redefining Failure (slide 28). One way of summing up the information presented in this module is to redefine how team members think of “failure.” Students must be taught that conflict does NOT equal failure. Instead, they should understand that team work includes conflict and breakdowns of various sorts. These instances provide chances to learn and grow and are not signs of failure.

E. This module has introduced specific ways of characterizing group conflicts and various ways of resolving them, including student intervention and third party negotiation. Walking students through the lessons learned will help them realize the way these ideas build upon each other. For additional material on conflict management styles, see Organizational Behavior: An experiential approach, by Kolb, Osland, and Irwin.

V. Class Adaptation Strategies:

A. Size: Depending on the class size, the role play exercise may be done by breaking the class down into groups of three and involving everyone, or by selecting volunteers to do a demonstration role play in front of a large class. Again with large classes, in the extended material delivery method, students
could complete the exercise given individually in class (answer in writing) and share their comments with the group as chosen by the instructor. Alternatively, small groups of students could be assigned the task as a discussion topic.

B. Content: There is probably little engineering content per se that could be integrated into this module. However, the timing for teaching material could be chosen based on the sequencing of the course’s project. For example, good timing for teaching this material might be after an intermediate project deliverable. At this point, conflict would likely have arisen either due to team developmental stages or the pressure of completing the deliverable. Thus the information presented in this module would be seen as relevant to the student’s current team effort.

C. Classroom culture: If the class has members from underrepresented groups, working through conflicts are especially important. Resolving team conflicts should help make the classroom environment more comfortable, allowing students of all backgrounds feel that they can succeed. The FAQ section of the BESTEAMS material specifically addresses issues of women and minorities in predominately Caucasian classrooms. The instructor is referred to that material (see BESTEAMS Introductory material). In addition, the instructor can consult the references at the end of this MIP.

VI. Follow-Up Materials

A. Homework: Prior to the class where this material is delivered, ask the teams to make a list of past and current breakdowns and conflicts that they have had on various teams in the past. Use this material as examples in the lecture and small group discussions when the material is presented in class.

B. Classroom follow-up: During the semester have the teams keep a log of the conflicts that arise in their groups. Have them outline the steps to the resolution, including diagnosis of the conflict and interventions used. In the team final report, have the students write a summary of what they learned with regard to managing conflict and the impact it had on the completion of their project.

C. Exam or Quiz Items: Short answer questions (or extra credit items) might include:

- How can team conflict be seen as helpful to members of the team and completion of the project?
- What conflict management style has the greatest chance of success and why?
- Describe your own personal preferred style of conflict management and include the strengths and weaknesses of that approach.
VII. References
