Module Series Overview

Four interventions around diversity and inclusion across first-year WPI project-based courses

1st Intervention - an out of class ‘privilege walk’ and written reflection

2nd Intervention - a module on differential experiences of ‘the problem’ for people of different backgrounds and identities (race, class, gender, etc)

3rd Intervention - a module in the beginning of the second term on diversity in teams and team dynamics

4th Intervention - a reflection on learning across all three interventions
Module 3
Team Dynamics, Diversity, and Inclusion: Diverse Personality Styles, Learning Styles, Races, Genders, National Origins, and Other Identities (110 minutes)
Required student class preparation

Student Self Assessments: Discussion, Presentation, and Problem-Solving Styles
Used Poll Everywhere to Begin Discussion on Benefits of Diverse Teams

Student Answers to Questions Answered Live in Class using Poll Everywhere
Used Team Conflict Video to Discuss, Analyze, and Strategize Managing Conflict on (Diverse) Teams
Discussion of Implicit Bias

Introvert/Extrovert Activity

How do extroverts unwind at the end of the week?

How do introverts unwind at the end of the week?

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Discussion of Implicit Bias

Shared Preliminary Data from WPI

Have you, a friend, or (for faculty) one of your students had the experience of being excluded from the main work of the project (e.g. organizational role, input ignored, etc) at some point during the project?

When poll is active, respond at PollEv.com/teamdynamics

- yes 79%
- No 21%
Discuss research about how to effectively engage diversity on teams to prep for activity

- introvert
- competitive discussion style
- self-deprecating presentation style
- holistic problem solver

Students write IDs on Name Tag

Revise Team Charter
One thing, and the most important thing, that I have gained from the class lecture, readings, and exercises is that everyone has a wealth of information to share with everyone because everyone comes from such diverse and different backgrounds. We can all learn so much from each other, and I do not think that this aspect of group work is practiced enough...Someone from a different background from you (i.e. culture, first language, dis/ability, race, religion...) all can have different outlooks on different problems based on what they have experienced ... This can benefit teams because suddenly each person in the group has a different way to attack the issue...This can also hurt teams when members can have trouble communicating and will not negotiate because a team member’s idea is so different from theirs. It is important to respect where everyone is coming from, take everyone’s ideas into account, and stay open to the communication necessary to effectively and efficiently work in a team.

In order to make room for the diversity present within my team, we have decided to always attempt to fully discuss any topic, with all members presenting their own ideas, so that we do not present any resolutions too quickly without thinking them through, or having one member’s opinions dominate those of the other members. Since XXX is the only girl in the team, we are also making sure that she isn’t left out of discussions in particular, and will let the rest of the team know if she feels uncomfortable.

If we weren’t in the same group for this project, we probably wouldn’t be friends, but ironically this makes our team work more successfully together. In a recent study done by Harvard, “working on diverse teams produces better outcomes precisely because it’s harder” (Rock, Halvorson, & Grey, 2016). This applies to our group because we are all different in many ways which makes us more productive especially when working together. I am also the only girl in the group, so I naturally feel like I have to pull my full weight on the project to prove that I am a very important group member. Because I am different from the rest of my group members gender wise, this naturally motivates me to do more.
Student Quotes: Team Conflict among Two Women of Color and Two White Men (Lisa)

• Student Racial, Gender, and Personality Backgrounds (self identified)
  • Two white male students, both introverts
  • Two female students of color, both extroverts

• Dynamics According to all Four of the Students via their Reflections
  • White male students dominated the conversation, which was a surprise for all after the personality tests showed they were introverts and the female students of color were extroverts.
Prior to our discussion about communication, I had assumed that Grace and Theresa wouldn’t participate in conversations because they had nothing to say. I was surprised when they told Karl and I that they feel excluded from our conversations and often have things to say but don’t say them. I felt awful about this because I never meant to exclude anyone, me and Karl would just get caught up in our debate over ideas.

I had never thought that our different identities would negatively impact our group. While the most obvious division in our group is between Karl and I (two white males) and Grace and Theresa (two female minorities), I don’t think this is caused by gender and ethnicity, but by something more simple. Grace and Theresa are roommates and have known each other longer than anyone else in the group, making them naturally stick together. Ultimately I don’t think our varying backgrounds have affected our group in many ways. Nonetheless, I don’t have enough experience working in a homogeneous group to know how much of a difference working in a heterogeneous group can make.

Even though I normally lead in group settings, in this group I often do not speak. I feel like every time I say something everyone, except Theresa, shuts my ideas down. Karl and Josh always take charge. They always call the shots. Through this group project I found out that I hate confrontation and I don’t like disagreeing with others. I also hate not being heard. In order to fix this I will try to not be as intimidated by Josh and Karl. I believe they do not ignore me intentionally so I should not be scared to speak up for what I believe even though I might be shut down.

I think it is very easy for me to make sure my voice is heard and the team knows what I want. I notice that Theresa and Grace tend to talk less than Josh and myself. This is partially because of our conversational styles. During a meeting when Josh was absent, I was curious to see what would happen if I refrained from talking. The result was long pauses in conversation and slower progress on the meeting’s objective. So although Josh may dominate conversation during meetings, he also gets the group moving faster. This is not to say that anyone in the group is not working hard or anything, but I think it is important to recognize that there is a balance that must be reached between our productivity and inclusiveness. We don’t want half of our group not to be able to contribute to the project because they are being shut out, but we also don’t want all of us waiting on someone else to take initiative and make a decision, and Josh seems to fall naturally into the leadership role.

Our group is very diverse but the some of the stereotypes we discussed in class were true. There were several incidences when either Grace or I would mention something during our meetings but we’d be ignored and one of the guys would say the same thing as we said and he gets the credit for it. It is usually fine, but one of them is very assertive. I do not like having too many problems, a cause to why I stay quiet. Our group just had minor problems with two people talking too much, and two of us barely talking, other than that, we always communicated very well. During one of the meetings with our PLA, only Karl and I were able to attend and we were telling our PLA about the progress of the project. I was very disappointed when our PLA would direct a question to me and Karl would answer every time. I was getting frustrated that I was not given the chance to answer the questions, which made me feel a little stupid because I was thinking if Karl thinks I don’t know the answers to the questions or if there was something else. I learned from that meeting and I will make sure it never repeats, but that feeling of being looked down on did not feel great.

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Student Quotes: Pros and Cons for Women and URMs of Homogeneity on Teams (Lisa)

**Diverse Races, All Female Students**

We’re from different parts of the United States, and are different races and cultures. But we have much in common as women pursuing STEM pathways. We were in a unique position in which we experienced working with a male and then working with only the three of us. We agreed that we felt more comfortable in challenging each other’s ideas and voicing opinions with only the three of us. This was a positive consequence as we could be more adventurous in our ideas and were not limited by a subconscious bias from males.

**Same Races (White), All Female Students**

Overall, our team is made up of four girls from very similar backgrounds, races, and ethnicities. Because our team is not very diverse, I think that our team/project may not be as successful as it could be, based on the data from the research. The research supports the idea that more diverse teams will be more successful and come up with more creative solutions to problems. Since our team members are so similar, I think we may suffer because we all have similar ways of thinking.
Student Quantitative Ratings of Workshop

Was the workshop worthwhile?

- 84.2% rated 4 or 5 for worthwhile for “Water”
- 41% rated 4 or 5 for worthwhile for “Food”

Was the workshop interesting?

- 47.4% rated 4 or 5 for interesting for “Water”
- 68% rated 4 or 5 for interesting for “Food”
LESSONS LEARNED
Workshop

Team Dynamics, Diversity, and Inclusion: Teaching students strategies and techniques to develop more effective and equitable relationships on teams

June 23, 2017

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