Team Dynamics and Support for Effective and Equitable Teamwork

Learn about WPI’s SWEET Center
WPI Teamwork Ecosystem

The WPI Plan: 50 Years of Project-Based Learning

GLOBAL SCHOOL
ENGINEERING
FOISIE BUSINESS SCHOOL
ARTS & SCIENCES

PROJECTS:
- GPS
- COURSES & LABS
- IQP
- MQP
- GQP

UG Learning Outcome #: 5 TEAMS
UG Learning Outcome #8: Intercultural Competency

WHO WE ARE:
Identity
Experiences
Expertise

INNOVATION AND ENTREPRENEURSHIP

GLOBAL LAB

WHO WE ARE:

SDCC
DEAN OF STUDENTS
ACCESSIBILITY SERVICES

CDC
ACADEMIC ADVISING
MULTICULTURAL AFFAIRS

SWEET CENTER
WPI LOs Related to Teamwork

UG LO #5: Graduates of WPI will function effectively both individually and on teams.

IQP LO: Maintain effective working relationships within the project team and with the project advisor(s), recognizing and resolving problems that may arise.
Teamwork and Collaboration are Valued by Employers

Learning Priorities of Executives and Hiring Managers, 2018
Very Important* Skills for Recent College Graduates

- Able to effectively communicate orally: 85% in 2014, 80% in 2018
- Critical thinking/analytical reasoning: 81% in 2014, 78% in 2018
- Ethical judgement and decision-making: 81% in 2014, 77% in 2018
- Able to work effectively in teams: 83% in 2014, 77% in 2018

https://www.aacu.org/liberaleducation/2018/fall/watson_mcconnell
Challenges of Teamwork in PBL at WPI

• Authentic, open-ended projects create lots of ambiguity
• All teams struggle some, some teams struggle a lot
• Faculty are advising students on project content and teamwork, and then grading students
• Students are people, too
• Faculty and sponsors are people, too
Students envisioned a new resource:

“[My advisor] had no idea my whole team was going through what they were going through...

I think [the support person] needs to be like an intermediate, like someone who is not responsible for you and your project and who isn’t grading you...so they’re not, like, judging you on your performance.”

-Anonymous WPI student comment from 2018 MS Thesis by Katherine Elmes
Mission: to ensure that every WPI student has at least one highly effective and equitable team experience and that they graduate with skills and tools to collaborate effectively and equitably in teams throughout their careers.
SWEET Fellowship Program

- Initiated in 2020
- 43 students, staff, faculty and alumni
- 16-hour preparation course
- Offer drop-in hours for individual consultations and team consultations by appointment
Individual Consultations

• Students can attend drop-in hours to:
  ○ Talk about teamwork questions, concerns, and challenges
  ○ Talk about how to make teamwork more effective
  ○ Find tools to help support more effective and equitable teamwork
Team Consultations

- Expanded from the Outside Consultation Model developed by Charlie Morse at WPI’s Student Development and Counseling Center
- Team is referred by faculty or self-refers
- 2 sessions are scheduled
- First session= group chat, then 1:1 conversations
- Second session= review themes that arose in 1:1’s, team sets shared goals, actions to support, desired growth areas, and “personal asks”
- Report provided to team and sent to instructors and advisors at team’s request
As a result of working with the SWEET Center:

“I learned things about either myself or my team that helped me see we could overcome our challenges” - 79%

“My team learned things that helped us overcome our challenges” - 50%

“I learned how I could be a better teammate” - 50%

“I learned things about my teammates that helped me appreciate them more” - 38%

“I am more likely to communicate my needs to my teammates” - 38%

“I am more comfortable making suggestions to the team” - 38%
Things we’ve learned:

• Students appreciate having a third party to talk with about their teamwork experiences, and consultations help students to speak up and have more of a voice in how their teams are functioning.

• Advisors appreciate having a third party to direct under-functioning teams to, and a resource to check in with about challenging teams they are advising.

• #1 factor in students seeking help from SWEET Center is advisor referral, but students also contact SWEET on their own or are referred by friends.
Your Experiences

• Remember your very best group experiences. What made these teams so good? List as many qualities of these positive groups as you can.

• Remember the worst group experiences you've had. What made these groups so difficult? List as many of these negative group qualities as possible.
1. Psychological Safety
   Team members feel safe to take risks and be vulnerable in front of each other.

2. Dependability
   Team members get things done on time and meet Google’s high bar for excellence.

3. Structure & Clarity
   Team members have clear roles, plans, and goals.

4. Meaning
   Work is personally important to team members.

5. Impact
   Team members think their work matters and creates change.

https://rework.withgoogle.com/blog/five-keys-to-a-successful-google-team/
“a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes”

“a shared belief held by members of a team that the team is safe for interpersonal risk-taking”
Psychological Safety- Amy C. Edmondson

https://youtu.be/LhoLuui9gX8
WHO ARE YOU?
Questions for your team

• What are your “hot buttons” when working on team projects?

• What has worked well for you around fostering trust, respect, and psychological safety in your teams? Not worked well?

• What has worked best for you re: managing task dimension of your work? Not worked well?

• What has worked well for you around managing group process? Not worked well?

• What are your strengths and opportunities for growth?

Thanks to Elizabeth Long Lingo for these prompts!
Go Slow to Go Fast

• Take time to get to know one another
• Share your types and preferences
• Be present with your team
• Create a team charter
• Revisit the charter when the team hits potholes or speedbumps
• Evaluate your team development
• Seek help when you need it: sweetcenter@wpi.edu
Anne T. Ogilvie (she/hers)
Director for Team learning
atogilvie@wpi.edu
Other SWEET Initiatives

• Near-peer teamwork mentorship for MQPs and senior course sequences, Chemical Engineering 2021-22 AY pilot

• SWEET Fellow Mentors partnered with ID2050 courses to increase awareness of SWEET resources and provide support to teamwork exercises such as Asset Mapping, Team Agreements, and mid-term Team Processing Check-Ins

• SWEET facilitation of post-production meetings for theatre department

• Team consultations for executive boards of student organizations
Advisor Feedback:

• “As an advisor, I very much value the services that the SWEET Center provides. Teams can be hesitant to discuss difficulties with their advisors, either because they are worried about their grades or because they don't want to appear to be selling out their teammates. The SWEET Center relieves a lot of this hesitation, and they can get the students to open up and speak frankly a lot more than I would ever be able to do. Further, I can remember many instances where dealing with a malfunctioning team took my attention away from the rest of the cohort for extended periods of time, and I have not had this worry since the SWEET Center came on the scene.”

• -WPI Faculty member advising MQP and IQP Teams
Student Feedback:

• “I worked with the SWEET Center over the summer when I did IQP, and I don’t think my team would have completed a successful project without it.”

• -IQP student who sought individual and team consultation
2017-2020

• Secured funding from the Davis Educational Foundation that included support for:

  - development, implementation, and analysis of impacts of SWEET curricular modules focused on fostering more equitable teamwork and hosted faculty development opportunities to promote use of modules

  - development of SWEET Squad curriculum to train team support network and implementation of SWEET Squad program

• 2020: pandemic pivot to virtual student and team support

• Shifting of team consultation function outside of SDCC
Genesis

- 2017: faculty and staff team went to AAC&U’s Institute on High-Impact Practices (HIPs)
- Developed HIPs Action Plan that envisioned:
  - WPI community (all students, faculty, staff) and WPI community members will understand that equity, diversity, and inclusion matter and are important to the continued success of the WPI Plan.
  - Creating a team support network of students, faculty, and staff who are trained to provide support and guidance to those working in teams, as well as to those advising teams, in both curricular settings and co-curricular settings.
What’s Next:

- Build more proactive measures to support equity and effectiveness:
  - Increase adoption of Asset Mapping, reflections, and other tools in IQP
  - Create “Starting Teamwork Right” module and make it available for all advisors
  - Sponsor collaboration-enhancement events every term
- Expand near-peer mentorship support to other major departments
- Collaborate with Accessibility Services and other campus partners to explore and develop universal design standards for project teamwork
Student Feedback:

“I wish I had someone like this... that I could have leaned on in my IQP. Going to my advisor, which I had to do, was just a little too personal. You know, he was in charge of my grade, and it was really intimidating.

Having an outside person would have helped me a lot, so I would love to give that back to someone.”

-2021 SWEET Student Fellow
Why did your team consult with the SWEET Center?

- Workload distribution: 72%
- Communication style: 64%
- Individual behaviors: 60%
- Ineffective collaboration: 60%
- Time zones: 12%
- Personal issues: 12%
- Mental health issues: 8%
- Other (please explain): 8%
SWEET Connections to Student Success, Equity, and Humanization

• Amelia Parnell’s definition/outcomes of student success:
  - Knows when and how to adapt or attempt to change their environment
  - Understands their own needs and the needs of other and knows how to balance competing individual and community priorities
  - Knows how to manage resources, both those for which they are individually responsible and those they share responsibility for with others
  - Realizes their unique contributions to the world and is prepared to leverage their abilities to improve the conditions around them
After this experience with the SWEET Center, I expect that I will handle team challenges...