

**MQP Center Director Retreat
Thursday May 14, 2009 1 to 3pm
Forkey Conference Room, WPI**

This retreat dealt with three areas identified by center directors as being important: how to choose the right students for your site; how to work within a multi-disciplinary center; and facilitating good writing.

In attendance: Rick Brown, Dan Dougherty, Rick Vaz, Ted Clancy, Art Gerstenfeld, Terri Camesano, Susan Zhou, Kevin Rong, Alex Wyglinski, David DiBiasio, Fred Hart, Charlie Morse, Leanne Johnson, Susan Wenc and Natalie Mello

1. Choosing students for your center – Charlie Morse, facilitator

Some of the horror stories shared regarding difficulties with students included travel issues, student misbehavior, helicopter parents, students' inability to function well on teams, students' inability to work together with partners, matching students to the projects.

Characteristics of successful students at MQP centers:

- Intellectual curiosity, flexibility
- Maturity, independence
- Ability to work effectively on a team
- High energy
- Commitment and passion for the project
- Can follow through
- Leadership abilities
- Good team member
- Shows initiative, self motivated
- Can make good technical contributions beyond what they have learned in class
- Good time management skills
- Good listeners

How to get to those in an interview? Grades are not the best indicator of potential success. It is very important to follow up with references. Inquire about challenging internship experiences. *Perhaps the interview is not the best mechanism for getting this sort of information? Are there other ways to determine if an applicant has these characteristics? This should be explored further...*

Are there programs or resources available to help with teaming skills?

- Student Development Center (SDC) offers teamwork consultation – provides vocabulary, tools, and models for students to talk about group dynamics. This consultation can be provided for all teams – not just teams that are exhibiting problems. Problem teams can have a more intense follow up with Charlie's staff.
- "Boot Camp" immediately preceding departure or upon arrival at a site
- SDC can facilitate focus group discussions between alums of program and prospective students

Are there programs or resources available to help with leadership skills (perhaps make acceptance conditional upon the students' participation)?

- Introduction to Leadership (Student Life)
- Advanced Leadership (Students Life)
- Student Support Network (Student Development Center)

There are instruments available to help determine students' strengths and weaknesses:

- Self Directed Learning Inventory
- DiSC

Are center directors willing to participate in development of training specific to the needs of MQP centers?

Suggestions from Charlie:

- Ask weekly "What are the challenges that your team is facing?" Avoid asking "are there problems?"
- Stay connected with your students (discourages email, encourages phone or skype) by asking about more than the project: "What did you do this weekend? What is life like there? Where have you gone to eat? Who's

traveling together?” These questions should NOT be part of the conversation with the liaison (sponsor/mentor) but should happen in addition to those project related conversations.

- Articulate clearly what the expectations are:
 - Professional behavior (including office savvy, listening skills, etc.)
 - Dress
 - Alcohol
 - Student behavior on site (health and safety)

Natalie will work with center directors to develop modules that all can use on these and or other areas that are needed.
 - Some prompts that might help you determine a student’s potential for success at an off campus MQP site include:
 - Tell me about your leadership positions held on campus.
 - Tell me about a time when you have been “in over your head” – how did you manage the situation?
 - Tell me about any experience you have had with leaving home and functioning independently
 - What hopes, expectations and fears do you about participating in the project?
 - What are you most passionate about?
 - Students WANT personal support from their faculty advisors – they want to know that you are interested in them *beyond* the project.
-

2. Multi-Disciplinary Issues - Ted Clancy, facilitator

How to efficiently advise when teams need advisors from other disciplines? Does efficiency matter?

- It is quite a commitment on the part of a faculty member to advise a one term project – use of skype with video can reduce the need for travel to a site.
- Some ask co-advisors to just sign off on a grade suggested by the center director – the CD does all the “heavy lifting” with regard to the project advising.
- Some pay co-advisors for their time (\$ needs to match the commitment)
- Collaborative (affiliate) appointments might solve the problem. Either pursue the collaborative appointment yourself if you think necessary or ask Rick Vaz and he will pursue this effort on your behalf.
- NB Double majors MUST have 2 different advisors on the 4/3 unit MQP.
- Adjuncts can be co-advisors if the Provost has approved them to advise for that year
- You should have a commitment from a department head or a co-advisor in the other discipline BEFORE a commitment is made to a student. Students should not be responsible for securing the co-advisor.
- Usually most technical advising done on a day to day basis is done by the liaison at the sponsoring institution. WPI should be providing supervision on scope, direction and writing up of the project.
- Sponsor must understand that this is NOT a paid internship where the students do their bidding – this is an ACADEMIC project and there are requirements that must be satisfied for WPI to grant credit.

Other issues discussed included:

- Some centers are research based, others are company based. There are intrinsic differences.
- Some centers allow students to complete the write up the following term. They come home with a draft but need more time to process and write it up.
- Do they need more time or more credit? Some advocated NRing the post 1/6 credit unless the extra credit is really merited.
- Some directors feel strongly that there is something to be said about having a hard deadline that must be met.

Consensus that it is quite reasonable and necessary to have different models at different centers – each center is unique and that must be recognized.

3. Issues around Writing - Rick Brown, facilitator

Dealing with writing has evolved from editing grammar to focusing on ideas, development of argument and not the mechanics until the very end. The five rhetorical moves focus on:

- Big picture
- Specific problem
- Past work done
- Gaps that exist
- How project addresses the gaps

<http://wpi.edu/Academics/Depts/IGSD/IQP/Docs/rhetoricalmoves.pdf>

General discussion of writing included that usually the project writing is too lousy and too much: the reports are way too long; tend to be verbose, vague and irrelevant.

It is possible to have different format and still satisfy the requirements of the MQP

- Perhaps look to client for what they expect - Henckel Loctite abbreviated format
- Client deliverable (“how to” manual) plus the MQP deliverable (manual plus intro, background, literature review, capstone design)
- Traditional, academic format with deliverable as an appendix
- Again, research MQPs differ from company MQPs
- Sponsor not all that concerned generally with the written report – there is more emphasis on the “product”

Does the report have to stand as evidence for a unit’s worth of work? This is the artifact that will survive past all else.

Three “things” drive the existing behavior surrounding MQP reports

- Reports are used as evidence in tenure and promotion decisions for faculty
- Reports are reviewed for evidence to satisfy accreditation agencies
- Reports can be found by search engines and could possibly impact WPI’s reputation

Opinions expressed on this subject:

- Writing a good report is one of the most important MQP outcomes for the student – it is part of their education. The other things are secondary
- Technical accomplishment must match the written report: good technical work that is fully described. “If you didn’t write it down, you didn’t do it.”

Consensus that it is quite reasonable and necessary to have different models at different centers – each center is unique and that must be recognized.

4. Other issues:

- Possibility of involving graduate students in the off-campus MQP centers as co-advisors? Possible funding models through NSF include PIRE and IGERT.
- Should we be tying sponsorship of MQPs to graduate student sponsorship for new sponsors?
BOSE model (Rick Brown): theoretical project A completed by grad student; development project A1 completed by MQP team.

5. MQP operational issues:

- Email to be sent from IGSD on behalf of center directors informing students when their applications have been forwarded to other sites for consideration.
- Timing for interviews and decision making seems to be okay.
- Directors will be sent the application for review very soon. They are encouraged to look at the essay prompts and change it to meet their disciplinary needs.