Gemstone Best Practices Guide for Mentors

This guide is designed to be used in conjunction with the Timeline for Team Success, and it provides tips and guidance to mentors as their teams progress through the three year research project.

Sophomore Year

Bringing in Experts

Many mentors use the first semester to bring in a variety of experts to speak on areas related to the team's topic. Listening to guest speakers can help the team learn about the broad topic area as not all team members come in with the same basic knowledge of the topic. This effort can also help the team focus on their specific research question and make connections with people in the field who will hopefully stay involved with the team.

Coordinating GEMS 296 with GEMS 202

The fall semester is meant to be a joint effort between GEMS202 led by Gemstone staff for two credits and GEMS296 led by the team mentor for one credit. In order to make this semester as productive as possible, the GEMS202 instructors will inform the mentors about what their team is doing in GEMS202 so mentors can help the team make connections specific to team's topic. The GEMS202 syllabus is designed to help the team meet some important goals, such as developing a research question, conducting a literature review in their topic, exploring methodologies and methods appropriate for the study, drafting an initial draft of the research proposal, and setting group norms. Mentors should consult the GEMS202 syllabus regularly to keep up with what the team is doing in the course.

Setting Roles/Switching Roles

Team members will just be getting to know one another and discovering how they best work together. Some mentors find it helpful to set some roles (such as meeting facilitator, note taker, agenda writer, etc.) to make sure nothing slips through the cracks. Some mentors also find it helpful to rotate these meeting roles each week. This rotation gives all the team members an opportunity to try out the different roles. Sometimes students who may not jump at the chance to facilitate at the beginning turn out to be the most effective facilitator for the group. If at some point down the road, it seems to make sense to set these roles on a more permanent basis that can work well, too!

Why a Team Website?

The goal of the team website is to allow prospective students and possible donors/partners to see what our teams are doing. Teams should have substantive material on their website before they open it to the public. The site may also be a good place for teams to keep information or draft documents on a secure page only for team members.

What is a Liaison?

Throughout the year, the Gemstone staff meets with a group of representatives, or liaisons, from the teams. These meetings are a great way to hear how all the teams are doing, receive tips from staff and other teams, and remain up-to-date with program events and requirements. It is also important to make sure that at least one member of your team responds to Gemstone staff correspondence in a timely manner. Sometimes whole teams find themselves lacking important

information because an e-mail isn't read. Put at least one person in charge of being "in-the-know."

In addition to team liaisons, all teams are also asked to appoint financial liaisons and web liaisons. These roles are great opportunities for students to get involved on their team and in the program. You may want to develop additional roles for other students on the team.

Ways to Collect Articles

During GEMS202, each student will be asked to summarize two articles for the Summary of Resources assignment. We will give them an outline to follow that keeps all the important information about this article in one place (full citation, summary of the article, description of the research methods used, analysis of how this article could be used or applied to the team's research, etc.). Many teams have found this structure to be very helpful and have started keeping a database online where every article a team member reads is summarized following this structure and filed for future reference by all team members. There are also various bibliographic software packages that can also help manage this task. EndNote Web is a free program available to UMD students, faculty, and staff, and teams are encouraged to use this or a similar program.

Research Writing Style

Because the Gemstone Program is a multidisciplinary program and the types of research projects span multiple academic disciplines, traditions and majors, we will not require that your team adhere to one research writing format, such as APA 6th edition (American Psychological Association). There are several styles of writing research such as *Chicago*, *MLA*, *MLS*, and others. Guide and direct your team on which research writing style is most appropriate for their study.

Although the Gemstone Program will leave it to you as to decide which style to follow, we do strongly encourage that you do adhere to *some* research writing style. Because of the requirements of the larger academic community, it is a requirement for many academic exercises such as journal writing, proposal writing, grant writing, conference presentations and the like.

Finally, the major writing assignments (such as the research proposal and thesis drafts) must adhere to the University of Maryland Graduate School formatting for theses and dissertation. The guide can be found on line at this address:

http://www.gradschool.umd.edu/current students/electronic thesis and dissertations at um.html

One-on-One Mentor Meetings

Some mentors have found it extremely helpful to meet periodically with team members on an individual basis. This meeting gives them the chance to deal with any individual issues one-on-one or to extend special praise. Sometimes students take mentor suggestions more willingly in this format.

Grading – Mid-term Check-ins

Mentoring a team in this Program is such a different experience than teaching a normal class and mentors often struggle with grading. Many students expect to get an "easy A" in their Gemstone team even though the work effort or quality is lacking. The Program encourages mentors to give the grades the students deserve and have earned. It is important for mentors to be as explicit as possible in their syllabus each semester about how students will be graded and on what criteria. Grades are huge motivators for students. Some previous mentors suggest that giving mid-term grades (or check-ins) can help students understand what they need to do in order to get a better grade. Since there are no exams and papers throughout the semester, they never get an idea of what they are earning, effective communication is crucial for both of you.

Thesis Proposal

The goal of this step in the process is for the teams to decide exactly what they are going to study, how they will study it, and what the importance of this work will be. The thesis proposal is due mid-spring semester of their sophomore year. You can find more specific information on the format of and expectations for the thesis proposal in the "Team Process and Policies" document. With this important information well thought out and planned in advance at a time when there is still a year to actually complete the research, teams will be set up for greater success. The mentor role in this process is to help guide the students in exploring the existing literature, learning about the methodology they select, and providing guidance in designing the research study.

The mentor is also responsible to select at least one person who is an expert in the field of study or in the methodology the team has selected in order to serve on the proposal committee. This expert, along with Dr. Frank Coale, Dr. Kristan Skendall, the team's librarian and you, the mentor, will review the team's proposal and give critical suggestions for strengthening the design at a time when those suggestions can be used to improve the team's work.

Institutional Review Board (IRB)

Teams conducting research that involves human subjects (as with any other research project at the University of Maryland) must submit an application for approval of their research to the Institutional Review Board (IRB) at the University of Maryland. Failure to obtain IRB approval *prior* to beginning the research process will mean that the data collected may not be used in the published thesis. Therefore, a team must obtain IRB approval before pilot testing instruments, conducting interviews, surveys, etc. IRB approval is not required to invite experts to present on specific topics to the team. For details on IRB procedures and a sample application see:

http://www.umresearch.umd.edu/IRB/

Kristan Skendall is the Gemstone Program liaison to the IRB. Please note that all IRB proposals submitted by Gemstone teams must go through the Gemstone office first! There is a more detailed description of how this process works for Gemstone in the "Team Process and Policies" document.

Junior Year

Beating the Clock – Junior Year is Vital

The junior year is really important for the team because the crux of the research must get done. It is also important for the writing to start during this time. The more work that is done this year,

the better the team will be positioned in their senior year for a successful thesis. Teams should be finished with data collection and started on the data analysis and writing the thesis by the end of the junior year. Teams that haven't completed these steps by this time often find themselves very stressed during the senior year. Not all teams can move at the same pace. There are often unavoidable things that will occur that slow teams down, and, more often than not, each step of the research process takes longer than anticipated. So, take this advice to heart – get moving!

The Importance of Early Contact with Possible Discussants

The official list of discussants for your team isn't due until early November of the senior year. However, discussants for past teams have often said that they wished they had been involved in the process sooner since it is often too late for their feedback to be anything other than cosmetic. At that point, the team's project is pretty close to completion and only small changes to the written thesis can be made. This constraint is often very frustrating for discussants who have many suggestions to offer the team regarding methodology or contacts for their research.

Therefore, we have started including tasks in the Timeline for Team Success that encourage a team to make contacts earlier and obtain feedback from potential discussants on early drafts of their work. Teams should work on building relationships with experts early on in their sophomore and junior years. The experts could give talks to the team on the research topic or be one of the people you invite to serve as a committee member for the thesis proposal. Establishing these connections early allows discussants to be able to give their final analysis on how the team completed their work from a knowledgeable perspective, not only of the topic but how the team progressed as well.

Colloquia

During the fall semester of the junior year, teams present their research at Colloquia. These events allow first-year students to hear what our teams are doing as they look toward forming their own teams. It is also an important milestone for the team to make sure they are on track. The Gemstone staff and the team's mentor and librarian are present to evaluate the team's presentation and progress and to give feedback to the team. The staff is mostly focused on presentation skills in our feedback since the wide range of topics covered by all our teams makes analysis of the content of the projects difficult. It is, therefore, critical for the mentor to give feedback on the content part of the presentation.

Poster Presentation

During the spring semester of the junior year, teams present their research at a poster presentation as part of the Undergraduate Research Day. This is an opportunity for the teams to present their research in a broader forum. Often teams have found the posters to be useful tools for giving additional presentations at other conferences.

Data Analysis

As teams analyze their data, they will often feel overwhelmed with the amount of information collected. The most difficult part of analyzing data is learning to make sense of it and then figuring out the best way to communicate the most meaningful results to a lay audience. However, doing this thoughtfully and thoroughly goes a long way toward making the senior thesis presentation, and the written thesis itself, a quality piece of work. Encourage your team to learn about tools that will help in understanding and presenting data (graphs, charts, statistical tools, etc.). You may want to bring in experts to work with your team on this or suggest some

books that can help. Many teams hire a graduate student to help them with statistics if the mentor is not able to provide this assistance.

Study Abroad/Co-op Experiences

Students are able to study abroad while being in Gemstone. The semesters during which they can study abroad include the spring semester of the sophomore year or either semester junior year. Students are not allowed to study abroad senior year due to the importance of being present for the writing and defending of the team thesis.

Students who are planning on studying abroad must complete a learning contract with their mentor and submit it to Kristan Skendall, Associate Director. This contract must be completed the semester *before* the student will be away from campus. Students will need to register for the Gemstone credits they miss one year later. The mentor should grade the student on how well they completed those things outlined in the learning contract. Things like bringing an international perspective to the topic, working on data entry into a computer program, or writing chapters of the thesis could all be assignments for students while they are away. There are specifically designated sections of GEMS297, GEMS396, and GEMS397 under Kristan Skendall's name for those students who are making up a class because of study abroad. They should register for one of these sections. The mentor should give Kristan Skendall the grade for that student so she can submit it.

Senior Year

Writing as a Team

Writing as a team is probably one of the most challenging tasks your team will face. Many of our teams use Google Docs or another program to keep track of the most updated version of a document.

Thesis Rehearsal

Usually the team thesis rehearsal will occur just prior to the Thesis Conference. This is done so that there is time to give feedback to the team and give the team ample time to incorporate changes. Mentors should try to attend their team's thesis rehearsal.

Make good use of your discussants

Hopefully, by senior year, you have had contact with some of the people who will be your team's discussants. Having a good relationship with them can only help the quality of what they will share with your team at the conference. Often teams would like to spend more than the one hour provided after the presentation with their discussants. If your team would like to go to dinner with the discussants afterward or have some other type of event, it would be important to invite them in advance. In essence, take advantage of this opportunity. The team will never have the opportunity to have all of their experts in the same place at the same time again.

How to win an award

At the citation ceremony in May of the senior year, teams are awarded their citations and the Gemstone Program presents awards. The team honors given at this time are the James M. Wallace Outstanding Gemstone Team Thesis and the Outstanding Gemstone Team Presentation Awards. The individual honors are the Outstanding Gemstone Mentor Award, the Outstanding Gemstone Scholar Award, the Outstanding Gemstone Team Leader Award, and the Outstanding

Gemstone Citizen and Leader Award. Teams and individuals who win an award will have their names engraved on a plaque that hangs in the Gemstone suite.

James M. Wallace Outstanding Gemstone Team Thesis Award

For this award, the following criteria are considered:

- Did the team create new knowledge? If so, what is the extent of that knowledge?
- Integration of all the parts of the thesis written in one voice. Each part must clearly show how it adds to the reader's growing understanding of the argument being advanced in the thesis that leads to the thesis conclusion.
- A clear statement of the research question/problem the thesis addresses which includes supporting your argument throughout.
- Exposition of the relevant existing scholarly literature.
- A carefully considered approach to research design and methods.
- A clear and concise description of findings.
- A purposeful analysis, exploring links with other research and writing.
- A convincing conclusion that includes the contribution of the research to society and what possibilities exist for extending the work.

Outstanding Gemstone Team Presentation Award

The honor of the Outstanding Presentation is awarded based on a team's clarity, creativity and overall presentation style.

Outstanding Gemstone Mentor Award

This honor will be awarded to the Gemstone mentor who has demonstrated exemplary support and guidance of their team. For mentors to be considered "outstanding," they should exceed the normal job requirements of meeting regularly with the team and providing basic support and guidance. Senior Teams are strongly encouraged to nominate their mentor for this award.

Outstanding Gemstone Scholar Award

This honor will be awarded to a student who has been intellectually engaged and highly involved on their Gemstone team. This award goes beyond the normal leadership behavior of organizing the group, motivating members and running meetings. Nominees for this award should be students that have taken the intellectual leadership role and have served as a driving force behind the topic and content of the research.

Outstanding Team Leader Award

This award is presented to a student who has demonstrated excellent organizational, interpersonal and communication skills as well as clearly motivated his or her team over the past three years.

Gemstone Citizen & Leader Award

This award goes to a student who has been very involved in the Gemstone Program outside of his or her team, such as by holding positions of leadership, planning events, or serving as a positive role model for the Program.

Hopefully these awards will serve as a motivator for your team to produce high quality work, which is a requirement to win a team award. We encourage you and your team members to set high goals to try to win one of these prestigious awards.