

Chapter Seven

Obtaining and Giving Feedback to GSIs for Instructional Improvement and Evaluation

An essential part of any training program is providing GSIs with feedback about their teaching. This chapter outlines several methods for obtaining such information and providing feedback to GSIs.

Before designing a GSI evaluation program, a department needs to think about goals for obtaining information about GSIs' teaching. In many cases, possible goals would fall into the following categories:

- **Summative Purposes**: Evaluating a GSI's progress as a teacher for the purposes of making re-hiring decisions.
- **Formative Purposes**: Giving instructional feedback in order to enhance a GSI's teaching and professional development. Departments also can obtain an overall picture of GSI performance, in order to provide more support to some, or perhaps special recognition (e.g., GSI teaching awards) to others.
- **Course or Curricular Purposes**: Gathering feedback from multiple GSIs' sections in order to evaluate a department's GSI training program (e.g., next time, should a workshop on time management be added?) or a course's structure (e.g., how does course content presented in lecture align with activities in sections?).

Although a GSI evaluation program can simultaneously meet multiple goals, certain methods are more appropriate for some objectives than others.

This chapter is divided into two main sections: end-of-term and early feedback. End-of-term feedback is most frequently administered as student ratings, distributed by the Evaluations and Examinations Office. These data are most commonly utilized for summative purposes. The term "early feedback" means that information about a GSI's teaching and student learning is collected well before the term is over, often as early as the fourth week of the term. Early feedback is most frequently used for formative and course/curricular purposes. If used for summative purposes, it is best to pair early information with other sources of data about a GSI's teaching effectiveness, such as end-of-term ratings or repeated evaluations later in the term. Additionally, before making any decisions not to rehire a GSI, departments will wish to consult the GEO contract, which is available online.

Methods of Providing Early Feedback

With any early feedback system, information about a GSI's teaching effectiveness is collected before or around the middle of the term. Additionally, the feedback collection process is paired with a consultation, which helps the GSI interpret the information and decide on next steps. Research shows that the most positive impact on a GSI's student ratings is seen when feedback is paired with a consultation (Abbott, Wulff & Szego,

1989; Cohen, 1980). CRLT research also shows that it is as important to provide early feedback to both new GSIs and experienced GSIs, because some experienced GSIs who do not obtain support can receive sub-par evaluations for several terms, negatively impacting the learning experience of hundreds of students (O’Neal, Wright, Cook, Perorazio & Purkiss, 2007). An early feedback program can help a department provide targeted support to struggling GSIs early in the term.

Although end-of-the-term evaluations are one important piece of information about a GSI’s instructional effectiveness, the information comes to a GSI after the time when improvements can be made for the students who completed the evaluation. Collecting feedback has benefits for both the GSI and the students they are currently teaching. Through early evaluation, GSIs can get a sense of how well they are doing and also gain valuable insights into how they might improve by asking their students for feedback. Additionally, if student input comes early enough in the semester, a GSI can respond to suggestions and consider changes that would benefit the very students who participated in the assessment.

Best Practices for Early Feedback

Several methods exist for collecting feedback from students during the term. However, there are some general guidelines for administering the process. Coordinators of GSI programs can help GSIs get the most out of early feedback if they:

- Are clear about the methods and purposes of the feedback. If the feedback will be used for summative purposes, coordinators also should be explicit about the criteria used to make the evaluation and what the possible outcomes might be.
- Pair the feedback with some way for the GSI to process the information. Many departments use a post-consultation with the GSM, faculty supervisor, or CRLT consultant to help the GSI decide what and how to improve. An alternative method used by the Chemistry Department involves a workshop, where multiple GSIs discuss the early feedback results in groups.
- Collect student feedback early enough in the semester so that it is still feasible to make changes – but late enough for students to have a clear sense of how things are going. Many instructors choose to ask for feedback sometime around the fourth week of classes. If possible, feedback should be collected after students have completed their first test or graded assignment so that they can comment on issues such as testing, grading, clarity of assignments, etc. Asking for input well after the mid-point of the semester is of dubious value to students currently enrolled in the course, since it will be difficult to make substantive changes at that point in the semester.
- Use early feedback for departmental purposes, or to provide ongoing support to struggling GSIs. As GSM and faculty time are often limited, early feedback can help a department determine how to allocate resources to those who need them most. Once struggling GSIs have been identified, the faculty or GSM and the GSI

can work together to develop a professional development plan. It is critical to get the GSI's buy-in into the plan, as improvement is unlikely without this sense of ownership. Some possibilities to discuss with the GSI are:

- An initial consultation (or series of consultations) with faculty, the GSM, or a CRLT consultant to identify the key challenges and next steps.
- If it has not already been utilized, a midterm student feedback may be especially helpful to raise end-of-term student ratings (Finelli, Gottfried, Kaplan, Mesa, O'Neal, & Piontek, 2006).
- Specific challenges might be addressed by a meeting with a CRLT consultant or attendance at a particular CRLT workshop (See <http://www.crlt.umich.edu> for workshops or email crlt@umich.edu to set up a consultation.) Some issues that CRLT consultants have worked on with instructors include grading assignments, developing engaging lesson plans, cultivating inclusive classrooms, and developing voice capabilities (e.g., volume and projection).

For challenges that the GSI and department determine are language-related, the English Language Institute offers a wide range of support services (see Chapter Six).

GSIs will get the most out of student feedback if they:

- Let students know in advance when and how feedback will be collected. GSIs should also explain why they are soliciting input and emphasize that students' responses will not affect grades.
- Leave the room while students complete the feedback activity. It can be difficult for students to be honest about their views of the class when the instructor is present.
- Conduct the feedback exercise in class. If students take it home, a significant number of responses will be lost.
- Set aside time as soon after the feedback session as possible to discuss the results with students. This discussion should non-defensively include a summary of both positive comments and suggested changes, a plan for how the GSI will make certain changes, and an explanation for why particular suggestions cannot be adopted.

The following sections describe four main types of early feedback systems that can be utilized: classroom observations (including videotaping), midterm student feedback, departmentally-administered early evaluations (e.g., Evaluation & Examination forms), and GSI-designed feedback forms. If needed, departments should feel free to modify these methods to best meet the needs of their GSIs. As well as examples of possible methods, the following section offers recommendations about how to adapt each to summative, formative, and course/curricular purposes.

Classroom Observations

When faculty or GSMs visit graduate students' classes, they gain valuable insights into their style, confidence, and the way they interact with students. A useful, descriptive picture of the class session encourages instructors to reflect on their teaching. The observation and consultation process can help GSIs develop strategies to build on their strengths and to make changes in those areas that need improvement. Course coordinators can also use the observation process for course/curricular purposes: to gather information about the course (e.g., how the lectures and discussions fit together) and/or to inform those in charge of the GSI training program about what the GSIs need in order to become more effective teachers. For example, by visiting several classes the coordinator might observe that the GSIs are not able to sustain good discussions. To help GSIs develop this skill the coordinator might then include a workshop on discussions in a weekly meeting or in a separate program.

Classroom observations can be done by a CRLT consultant, a faculty member, a GSM who has had some instruction in the process, or a peer GSI. For both faculty and GSMs, CRLT offers a training workshop titled, "Observing Classes and Conducting Midterm Student Feedbacks." (See <http://www.crlt.umich.edu/gsis/gsmgsicoordprog.html> for more information.) With appropriate preparation, GSIs also can conduct peer observations, where they exchange classroom visits and then meet to share observations. Peer observations can benefit GSIs by giving them a chance to see other instructional approaches, exchange ideas about teaching, and get peer support. CRLT graduate teaching consultants also can conduct observations and conduct feedback, although as a policy, this feedback will be held confidential between the GSI and consultant. (Upon request, the consultant can provide a letter to the GSI that documents that the observation has taken place. The GSI can give this letter to the department. To request an observation, a GSI should email crlt@umich.edu. If many GSIs in a department will be requesting an observation, the department should first contact CRLT to discuss the process.) However, of all of these possibilities, only faculty should conduct summative evaluations, as graduate students should not be put in the position of conducting evaluations of their peers and CRLT provides only formative feedback to instructors.

Following is a brief description of the process you might use to observe a class and give feedback to the instructor. Typically, this involves a *four-step process*, with a pre-meeting, observation session, report writing, and post-meeting. Variants to this process, such as different ways to record classroom activities, also are discussed.

1. Meet with the instructor before visiting the class.

An observation is usually enhanced if the observer has a context within which to view the class. When possible, meet with the instructor prior to the classroom observation to discuss the visit and gain a knowledge of the class. (For a summative evaluation, this pre-observation meeting is essential.) In a pre-observation meeting you can:

- Establish a relationship of trust and credibility.
- Get the instructor thinking and talking about his or her teaching. What are the GSI's perceived strengths and weaknesses. Is there something in particular the instructor would like you to watch for? What kind of feedback would he or she like?
- Establish the purpose and uses of the observation. Will the observation notes be kept confidential, only to be seen by the observer and the GSI? Or, might the observation be seen by other members of the department? (This may be the case, for example, if observations are used for departmental purposes, or to identify struggling GSIs.)
- Mutually establish some criteria for your observations. If this is a summative evaluation, be very clear about criteria that you will be using to evaluate the class.
- Let the GSI know when the evaluation will take place. Surprise visits can be traumatic and, consequently, you may end up seeing a very uncharacteristic class period.
- Have the GSI preview the class session you will observe. What does the GSI plan to teach? What readings and assignments are students expected to do to prepare for this session? What are the goals for the class? What are the students expected to learn in the class? (Sometimes GSIs may not have thought about having goals for a particular class, nor thought of what they want students to learn. This is a good opportunity to help them think along these lines.)
- Discuss logistics: Where and when does the GSI's class meet? Where should you sit? When will you and the GSI meet again to discuss the observation? When will the GSI introduce you to the class and explain why you are there?

2. Observe the class and record observable data.

To make a classroom visit useful for the instructor it is important to record observable information that is descriptive rather than evaluative, specific rather than general, and is focused on behavior rather than the instructor's personality. There are several different ways to record data that will be useful to the instructor. Below are a few methods you might use individually or in combination.

Keep a written timeline of what you see.

Get to the class early and take notes on the environment, interactions, and reactions: the set up of the room, how the students come in the room, where they sit, how they interact with each other and/or the instructor, how the instructor starts the class, the questions he/she asks, how much time is left after the questions for students to think, etc. Pay close attention to the students and record their behavior throughout the class. Try to keep opinions out of the data you are recording and be as specific as possible.

Draw a map of the room, students, and record the interactions.

When observing a class to give feedback to an instructor (or during peer observations), a map is an effective way of recording objective information on classroom interactions. See the sample map below in Figure 7.2. A map is an excellent tool for getting instructors to visualize their own class. With a picture in front of them it is easy to see the tenor of the class and the interactions between themselves and the students. A map provides quantitative information such as the number of questions asked, the number responded to, and how participation might vary by student demographics (e.g., gender or race/ethnicity). Mapping works best when used in conjunction with a method for recording qualitative information, such as the written timeline described above. A specific record of what was said and done during class presented along with a map can give the instructor a good sense of the dynamics of the classroom.

Use a checklist to record what you see

Checklists are often used for summative evaluations because they are fairly easy to use, help you focus observations, and provide a common baseline for making the assessment. If a checklist is to be used, give it to the GSIs well in advance of your visit so they will know what you will be observing. For an example of such a list, please see Figure 7.1, used by the Department of Germanic Languages and Literatures. Other suggestions for checklist items can be found in Weimer, Parrett & Kerns's (1988) *How am I teaching?* Copies can be found in CRLT's and UM's libraries.

Figure 7.1: Sun-Young Kim, Department of Germanic Languages and Literatures, University of Michigan

Things to look for in a German class

- Do students speak German? Do they speak German to the teacher and/or to each other?
- Does the instructor speak German? Do students understand the teacher?
 - o Some signs to look for:
 - do students answer?
 - attentiveness: are they following?
 - eye contact with instructor
 - how do groups interact?
 - What answers does one get after an activity?
- When and how does the instructor correct students' mistakes?
- Movement of instructor:
 - o which side of the room is the teacher addressing most of the time?
 - o eye contact?
- Media: how much and when?
- Participation of students:
 - o Who is participating?
 - o Distribution
 - o When are students participating?
- Seating arrangements:
 - o How do students cluster?
 - o Who works with whom?
- More on interaction between instructor and groups:
 - o Atmosphere in class:
 - E.g., Do people laugh?
 - Does everyone feel comfortable?
 - How is the set up of the class?
 - Do students and/or instructor use informal language?
 - o Waiting time on questions
 - o Ratio of instructor talk to student talk (how much do students talk?)
 - o How does the instructor encourage/enforce participation?
 - o How does the instructor start an activity? (intro?)
 - o How long do introductions (to an activity) take?
 - o What does the instructor do during the activity?
 - o Is there an appropriate amount of time given for activities?
 - Some Signs:
 - Completion
 - Confusion
 - Follow-up
 - o Relevance/ Priorities of Activities
- What is the general pace? Coverage? How do things move along?

Videotape the classroom

A videotape is a valuable way to document the class and allow the GSI to see the classroom as a student might. There are several ways to arrange for videotaping: GSIs, work study students, LS&A Media Services, and for a limited number of classes, CRLT staff. General guidelines for taping a class include:

- Have the instructor tell the students ahead of time that videotaping will be done in class as part of a program designed to give feedback to the instructor on his or her teaching. This will let students know what to expect.
- If the videotape might be shown publicly (such as for other GSI training programs), have both the instructor and the students sign a consent form. CRLT can provide sample forms for this process, but possible wording could be: “I permit the X Department to include me in the tape of [Class] on [Date]. I understand that the video recording on which I appear may be shown to individuals or groups for the purposes on studying and improving teaching.” [space for signatures of the students and instructor]. Students who do not wish to sign the form should be instructed to sit in back of the camera where they will not be filmed.
- Have the camera operator arrive early to set up the equipment and start to tape as students come into the room.
- During the class, have the camera operator try to capture everything that is going on in the classroom: focus on both what the instructor is doing and on what the students are doing. For example, a GSI can learn a lot about her or his discussion section from a shot of students looking involved and alert during a discussion or, conversely, two or three students falling asleep. During small group work the videotape can show an instructor whether or not groups are working.

3. Analyze the data in preparation for giving feedback.

Instead of meeting with the instructor immediately after observing the class, it is recommended that the observer take time to think about the data gathered and how it can be organized to give the GSI a clear picture of next steps.

- Find two or three aspects of the instructor's teaching that seem to be successful. Try to think of ways in which she/he could exploit these strengths even more.
- Choose two or three aspects of the instructor's teaching to discuss that do not seem to be consistent with his/her goals. Pick at least one that you think could be easily remedied.
- Be prepared with additional resources or suggestions for alternative ways of helping students to learn the material.
- If a video has been taken, the observer should select a few illustrative clips to view during the follow-up meeting.

Often, it is helpful to compile the observation items into a report that can be used for the post-observation discussion and the GSI's records. If this is a summative evaluation, the report should not rely exclusively on observations to evaluate GSIs; it should also include other evidence of teaching effectiveness, such as a review of the materials the GSI has developed, student feedback, or self-evaluation from the GSI. An example of a formative report can be seen in Figure 7.2 and a summative reporting form in Figure 7.3. (Please note that the actual form in Figure 7.3 offers more space for notetaking, but blank spaces have been condensed here.) Both of these should be modified for each department to include criteria deemed important by for assessing a GSI's instructional effectiveness in that discipline.

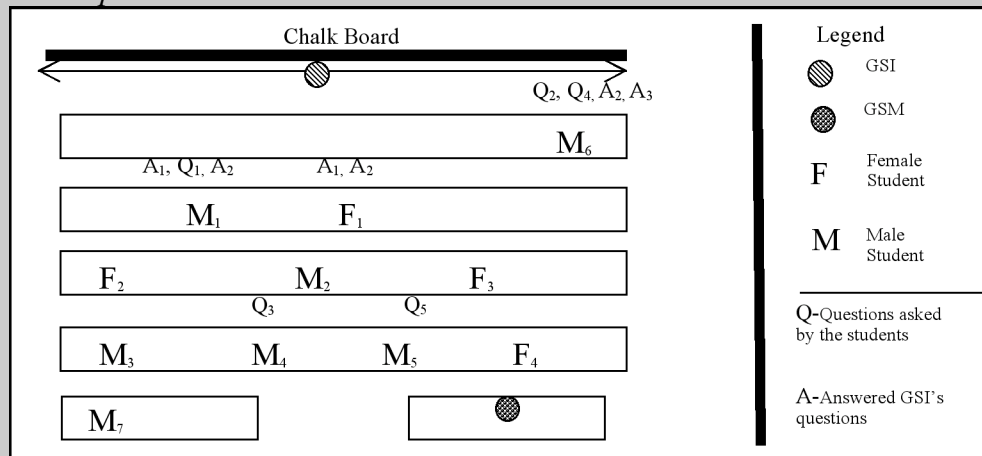
Figure 7.2: Center for Research on Learning and Teaching, University of Michigan*Sample Formative Report for Observation***GSM Classroom Observation (Discussion Section)****Prepared By: Tershia Pinder, GSM***Reflection Questions*

What were your goals for the class?

What information did the students come away with?

How do you know they achieved the goals you set for them?

What would you do differently, if anything?

Classroom Map*Observation*

Note: GSI provides an outline "Today's Menu," on the far RHS of the board and provides the Taylor expression as a reference for the students as well.

3:05 GSI explains the process of linearization by linearizing a complicated expression.

3:10 Two students arrive late.

3:14 GSI asks, "Any questions up to this point?" GSI waits approximately 15sec. No students respond.

3:15 GSI writes the expression for the last linearization and takes a step back from the board. He waits as students write down the expression

3:18 GSI describes in words, the next steps he will do before he actually does it. He refers to the Taylor's Expression written on the RHS of the board. (Note: The GSI separates board work with a vertical line. He draws arrows if he needs to substitute an expression solved previously into a new equation.)

3:20 GSI writes all of the linearized parts back into the original equation. (Note: GSI has already erased the original equation, and the GSI substitutes the expressions without rewriting the original equation) The GSI boxes in all final answers. Then, the GSI poses another question, "Any questions on Taylor expansion, ..., ..., ..." Student (M1) asks a question about partial differentiation.

- 3:25 M6 asks a question about x_0 . The GSI responds to the student and tells him why he chose to solve the problem in this way and refers the student to Matlab/Maple to solve it.
- 3:40 M5 raises his hand to ask a question. GSI doesn't see him and continues writing on the board. Once the GSI turns around he recognizes M5 and answers his question. GSI uses the eraser to try to demonstrate the concept. The GSI asks, "Does this make sense?" The student shakes his head no. The GSI rephrases the answer. The student begins to nod this time and says "Ah." The GSI asks again, "Does this make sense?" This time M5 says, "yes."

**Figure 7.3: Department of Romance Languages and Literatures, French Program,
University of Michigan**

Elementary French Class Observation Form

Name of GSI / Lecturer:

Observed by:

French:

Time:

Room:

Date of Visit:

of students present:

No. enrolled:

Visit was discussed (date):

SUMMARY OF CLASS ACTIVITIES AND TIME ALLOTTED (Circle time allotted for student-centered / small group-activities):

Time	Description

Total time for teacher-fronted activities: _____ minutes

Total time for student-centered/small-group activities: _____ minutes

INFORMATION PROVIDED BY INSTRUCTOR:

COMMUNICATIVE GOALS/GRAMMAR AND VOCABULARY (as stated by instructor):

TEACHING CONCERNS (provided by instructor):

OBSERVED PERFORMANCE

AREAS OF PERFORMANCE	COMMENTS
Instructor's command of French	
Lesson preparation and organization	
Teaching techniques	
Feedback techniques	
Classroom management	
Participation / Use of French	
Climate	

SUMMARY OF TEACHING PERFORMANCE**STRENGTHS:****AREAS IN NEED OF IMPROVEMENT:****PLANS FOR IMPROVEMENT:**

THE INSTRUCTOR SHOULD BE REVISITED:

this semester _____ next semester _____

according to the normal schedule (no follow-up needed) _____

Visitor's signature _____

Instructor's signature _____

The instructor may, if he/she wishes, submit a written response to the report and post-visit meeting within a week of receiving this report from the visitor.

4. Meet with the GSI to give feedback and exchange ideas on teaching.

Soon after the observation, meet with the instructor to give feedback while the details of the class are still fresh for the instructor. The instructor may be nervous, so it is important to put him or her at ease. You might thank the GSI for letting you observe the class and possibly talk about something from the class that impressed you.

- Have the instructor talk about the goals for the class session you observed. (This may have been done in the pre-observation meeting but it is good to reiterate it here.)
- Ask for the instructor's perceptions of the class you visited (How do you think the class went? Do you think it was pretty typical?) and share information that you recorded that reinforces the GSI's view.
- Share other information you gathered.

If a classroom map was used:

- First, orient the GSI to the map and explain the various symbols you used.
- Begin the discussion through reflective questions such as:
 - What do you see in this diagram? Does it portray what you feel happened in class?
 - Are there any patterns you see in the diagram that interest you? Is this typical?
 - I noticed you used a horseshoe (circle, traditional) structure for your class. How is this working for you? (This question can be generalized to any physical structure in the classroom to yield a discussion of the use of classroom space.)
 - How would you describe the pattern of student participation from this map? How closely does the pattern approach your ideal vision of student participation? What would you like to change?

If a videotape was used:

- Ask the GSI if he or she would like to discuss any particular moment of the class. If not, tell the instructor that you reviewed the videotape and selected three moments that you thought might prompt some useful reflection. Fast forward to the first “moment;” introduce the scene and talk a little bit about what you observed. Ask the instructor to try to recall what they were thinking as they taught this particular section. Once you’ve played the three to five minute clip, begin a dialogue with the instructor centered around the following questions:
 - What were you trying to accomplish?
 - What was going on for *the students* here?
 - What did you like about it? (How would you apply this technique to other situations?)
 - What would you do differently? (How would you avoid X?)

If any form of data collection was used (e.g., notes, checklist, classroom map):

- Other possible reflective questions include:
 - What do you think was successful? Why were these parts of the class successful?
 - What might be changed to more fully reach your goals? How would you change a particular activity, situation, etc., to make it better?
 - What do you think a student might be thinking about a particular activity or situation?
 - What areas are of most concern to you, or what areas would you most like to enhance?
- It is useful to end the meeting with a short plan of action: What are the GSIs' ideas for how concerns can be addressed? Does the observer have any recommendations? What are the key next steps?
- A summative evaluation also would include any formal decisions made by the department. Was the course session deemed "satisfactory"? Must certain performance standards or additional professional development be met by the GSI in order to be rehired in future terms?

Midterm Student Feedback

The Midterm Student Feedback (MSF) is an extremely valuable method for instructional improvement. This method pairs the observation process described above with a system for gathering structured student feedback. This type of feedback has several advantages. Since the questions are open-ended, the instructor finds out what issues students think are most important. Because the process involves structured consensus building, it eliminates the isolated comments that can often be very distracting for instructors who collect written feedback from each student. One key drawback is that a MSF can be time-consuming for both the GSI and the consultant. The GSI must devote about 20 minutes of class time to the student feedback process, which can be difficult if a term is packed with course material. Additionally, for a consultant, the MSF process usually takes at least 3-4 hours (pre- and post-meetings, report writing, plus classroom observation time) per GSI. If a GSM is being used to conduct the MSFs, this time must be considered in his or her fractional appointment.

If the MSF results are to be used for summative purposes, it is best for a faculty member to conduct the process. Additionally, prior to the MSF, the department will need to establish both the observation and student feedback criteria that will determine if a GSI is performing satisfactorily.

For formative or departmental objectives, a trained GSM could conduct MSFs for a department's GSIs. For both faculty and GSMs, CRLT offers a training workshop titled, "Observing Classes and Conducting Midterm Student Feedbacks." (See <http://www.crlt.umich.edu/gsis/gsmgcoordprog.html> for more information.) It is not recommended that a peer GSI conduct a MSF, as the student feedback can, at times, be tricky to negotiate and interpret.

For strictly formative purposes, CRLT graduate teaching consultants also can conduct MSFs, although as a policy, this feedback will be held confidential between the GSI and consultant. (However, upon request, the consultant can provide a letter to the GSI that documents that the MSF has taken place. The GSI can give this letter to the department.) To request an MSF, a GSI should email crlt@umich.edu. If many GSIs in a department will be requesting an observation, the department should first contact CRLT to discuss the process.

MSFs also can be very valuable for course/curricular evaluations as well. In this case, a GSM or faculty supervisor will need to aggregate and anonymize the student feedback across multiple sections.

Following is a brief description of the process you might use to conduct a midterm student feedback. Typically, this involves a *five-step process*, with a pre-meeting, observation, student feedback session, report writing, and post-meeting.

1&2. Pre-meeting and Observation: As you would do for an observation, meet with the instructor before visiting the class, visit the class, and record observable information.

See pages 110-114 for more details.

3. Student feedback session.

- When there are 20 minutes left in the class, the instructor should turn the class over to the consultant and leave the room.
- The consultant should introduce him/herself, frame the procedure positively and then divide the class into groups with 4-5 students each. Each group should receive a sheet with the following questions:
 1. List the major strengths in this course. (What is helping you learn in the course?) Please explain briefly or give an example for each strength;
 2. List changes that could be made in the course to assist you in learning. Please explain how these suggested changes could be made.
- Students should then be asked to write down their responses. The consultant may also wish to write down an email address that the students can use if they do not wish to publicly share a comment.
- After 5-8 minutes, the groups should share their responses. As the groups read out responses, the consultant posts them on the chalkboard or overhead projector. Other students are encouraged to comment if they disagree with a particular response, and the consultant might ask for clarification or more specific information.

- When the groups have volunteered as many strengths as they choose (or as time permits), the process is repeated for the suggested changes.
- The consultant should thank the students for their time and input. As the students leave, the consultant should collect the student feedback sheets and copy down the student feedback.

4. Analyze the data in preparation for giving feedback.

As you would for an observation report, the consultant's own notes on the classroom should be organized into a format that will be easy for the GSI to read. Additionally, the student feedback should be typed up and added to the observational notes. In addition to the student feedback that was recorded on the board, the consultant should also review the handwritten student feedback sheets for illustrative quotes or other important information. For a sample report, please see Figure 7.4.

Figure 7.4: Center for Research on Learning and Teaching, University of Michigan*Sample Midterm Student Feedback Report*

Midterm Student Feedback for <Class>
 <GSI Name>
 <DATES>
 Conducted by Mary Wright, CRLT

List the major strengths of the course. (What is helping you to learn in the course?)

In large-group discussion, students listed the following key strengths. Quotes are from written comments in small-group discussion.

Section A (# of students)

- <Name> reviews key points of the lecture. She “lets us know what we need to know.”
- <Name> is well-organized.
- Handouts are helpful for learning about writing.
- <Name> takes time to address student questions.
- She is friendly and smiling.
- <Name> is flexible and open to suggestions. We “feel comfortable asking questions if we are confused.”

Section B (# of students)

- The discussion was set up according to student preferences. <Name> “listened to what we told her we wanted.”
- <Name> is enthusiastic, which makes discussion more interesting. She is “friendly and encouraging.”
- <Name> is organized. For example, there is always an agenda.
- <Name> is willing to help us. She wants students to be better writers. She “makes sure we understand by asking us every few times if we get it.” She “cares about students’ learning process.”
- <Name> gives a quick response to emails.

Sample Midterm Student Feedback Report, Continued

Midterm Student Feedback for <Class>

<GSI Name>

<DATES>

Conducted by Mary Wright, CRLT

List changes that could be made in the course to assist you in learning.

In large-group discussion, students listed the following key suggestions. Quotes are from written comments in small-group discussion.

Section A (# students)

- We would like to see more engaging activities, such as when we did the class critique of writing samples. (Other suggestions were movies and optional sending in of discussion questions.)
- The agenda can be overambitious. Often, we don't get to everything.
- Please bring in more material from the readings. "Just take 10 minutes to go over key points."

Section B (# students)

- Rely on student questions to guide discussion about lecture.
- Give a handout that highlights the key points of the lecture or summarize verbally (saying things like, "The take home point is...")

In Section B, there was some disagreement about suggestions, which is explained below:

- About a quarter of students would like to speed up the pacing of the section. Other students felt like the section proceeded at a reasonable pace.

5. Meet with the GSI to give feedback and exchange ideas on teaching.

This procedure is quite similar to the process described in Classroom Observations (see above). However, the student feedback can now be a key frame to initiate the conversation with the GSI about the strengths and challenges of the class. Additionally, the consultant also will wish to discuss with the GSI how the findings of the feedback session will be addressed with the class. Since students have taken time to offer their feedback, they will expect to hear from the GSI about how their ideas will be handled. You may suggest that the GSI thank the class for their feedback, then briefly and positively discuss the changes that the GSI can make, as well as reasons that other student suggestions can not be addressed.

Other Methods of Early Student Feedback

Observations and MSFs offer extremely valuable information to GSIs. However, because they are admittedly time-consuming, this section offers additional methods of collecting and processing early feedback: departmentally-designed forms and GSI-designed questionnaires.

Forms Designed and Administered by Departments

The advantage having a centrally designed form is that a department can offer a uniform feedback tool for all GSIs. Additionally, a centrally administered tool will allow departments to get a picture of the instructional performance of all GSIs, from outstanding GSIs that should be nominated for teaching awards to struggling GSIs who would benefit from additional support.

The Evaluations and Examinations Office (E&E) is the U-M department that administers end-of-term ratings, and departments also may request that E&E administer early feedback. There is a small fee per section for this service. Although it is at the department's discretion, typically, an early feedback ratings form lists fewer questions. See Figure 7.5 for a sample:

Figure 7.5: Sample E&E Early Feedback Form

Instructor Report
Early Evaluation Project
Winter 2004

Office of Evaluations & Examinations
 The University of Michigan
 200 Hill Street
 Ann Arbor, MI 48104-3297
 Tel.: (734)763-2482 Fax: (734)764-4221

Instructor: _____
Class: **BIOLOGY**

Item	Responses from Your Students										
	5	4	3	2	1	SD	NA	Median	Your		
	SA	A	N	D	I				SA	A	I
98 Overall, this is an excellent discussion section.	1	6	4	2	0	0	0	3.58	0	0	0
99 Overall, this GSI is an excellent discussion instructor.	4	2	6	1	0	0	0	3.42	0	0	0
100 I had a strong desire to take this course.	6	2	4	1	0	0	0	4.25	0	0	0
101 The GSI seems well prepared for each class.	4	6	3	0	0	0	0	4.08	0	0	0
102 The GSI puts material across in an interesting way.	2	4	6	1	0	0	0	3.42	0	0	0
103 The GSI presents material clearly.	4	4	4	1	0	0	0	3.88	0	0	0
104 The GSI makes good use of examples and illustrations.	2	6	3	1	0	1	0	3.83	0	0	0
105 The GSI stresses important points in lectures/discussions/lab.	1	8	2	2	0	0	0	3.81	0	0	0
106 The GSI treats students with respect.	7	3	2	1	0	0	0	4.57	0	0	0
107 The GSI provides helpful comments on exams, assignments, lab experiments, etc.	1	4	5	2	0	1	0	3.30	0	0	0
108 Grades are assigned fairly and impartially.	2	5	2	2	0	2	0	3.80	0	0	0

Number of students responding to questionnaire: 13

Instructor: _____
Class: **BIOLOGY**

Instructor: _____
Class: **BIOLOGY**

Item	Responses from Your Students										
	5	4	3	2	1	SD	NA	Median	Your		
	SA	A	N	D	I				SA	A	I
98 Overall, this is an excellent laboratory.	5	7	0	1	0	0	0	4.29	0	0	0
99 Overall, this GSI is an excellent lab instructor.	2	10	1	0	0	0	0	4.05	0	0	0
100 I had a strong desire to take this course.	6	7	0	0	0	0	0	4.43	0	0	0
101 The GSI seems well prepared for each class.	3	9	1	0	0	0	0	4.11	0	0	0
102 The GSI puts material across in an interesting way.	3	7	3	0	0	0	0	4.00	0	0	0
103 The GSI presents material clearly.	3	7	2	1	0	0	0	4.00	0	0	0
104 The GSI makes good use of examples and illustrations.	1	11	1	0	0	0	0	4.00	0	0	0
105 The GSI stresses important points in lectures/discussions/lab.	1	8	4	0	0	0	0	3.81	0	0	0
106 The GSI treats students with respect.	9	4	0	0	0	0	0	4.78	0	0	0
107 The GSI provides helpful comments on exams, assignments, lab experiments, etc.	0	9	3	0	0	1	0	3.83	0	0	0
108 Grades are assigned fairly and impartially.	1	5	5	1	0	1	0	3.50	0	0	0

Number of students responding to questionnaire: 13

If departments wish to administer the results themselves, they instead may choose to photocopy their own ratings forms. Some departments utilize online survey tools (e.g., SurveyMonkey or UM.Quizzes) to the same end. If using an online survey, response rates are an important consideration, and some departments have found it best to have students complete the survey in-class, during a visit to a computer lab.

Another important consideration for surveys is student comments because handwriting can be recognizable to a GSI. In order to avoid any possibility of negative repercussions (or student perception of the possibility of such), comments need to be anonymized. If surveys are administered online, this mechanism easily anonymizes the student responses. If surveys are handwritten, a department will need to have someone re-type the comments in order to ensure student anonymity.

With this type of feedback, GSIs often have to reconcile seemingly contradictory reactions to the same aspect of their teaching or the course. Additionally, some instructors tend to focus only on isolated negative comments or statistical outliers. Therefore, like with any other feedback method, it is useful to follow-up the feedback collection with a consultation or workshop to process the information. This consultation or workshop could be conducted by a GSM, faculty member, or CRLT consultant, but if the department is using the feedback system to gain an overall picture of GSI performance, it is best to use internal personnel.

The consultation or workshop should focus on helping GSIs discuss what trends they noticed:

- In the case of written feedback, what major categories do student responses fall into? Are there some categories that drew more student comment than others?
- If the feedback is numerical, where do most of the student responses lie?
- What positive comments did the students make? Does the GSI find any of these particularly satisfying or surprising?
- What do the data suggest that the GSI should keep doing? What do the data suggest about changes that should be made? What are the GSI's ideas about making those changes?
- After a general picture has been obtained, it may be useful to next look at individual comments or statistical outliers to understand if/how some students' needs might not be met by the GSI. What could the GSI do to create a more inclusive classroom?

For more information, CRLT offers a workshop for faculty GSI coordinators and GSIs about how to consult with GSIs around early feedback and student ratings. (See <http://www.crlt.umich.edu/gsis/gsmgsicoordprog.html> for registration information and details.)

GSI-designed questionnaires

If a department does not need a uniform feedback system, GSIs can construct their own feedback forms. The advantage of this type of feedback system is that it is very useful

for formative purposes: it allows the GSI to decide on the questions that are most salient to him or her. The disadvantage of written feedback is because of its lack of uniformity, it is best not to use this system for summative and course/curricular purposes.

Questions of the forms can focus on any aspect of the course about which a GSI would like feedback, such as organization, clarity of explanations, respect for students, fair grading, and usefulness of feedback. A sample feedback form can be found in Part Eight of the *GSI Guidebook* (http://www.crlt.umich.edu/gsis/gsi_guide.html). CRLT also can consult with individual GSIs or present a workshop for a group of GSIs about constructing an effective early feedback form. (For more information, email crlt@umich.edu.) For GSIs educated abroad, the English Language Institute also offers a workshop that focuses on creating and processing an early feedback form.

In order to get the maximum effectiveness from this feedback system, it also should be paired with a consultation or workshop. Figure 7.6 offers a sample handout from the Department of Germanic Languages and Literatures, which offers directions for making a self-reflection, creating a self-designed student questionnaire, and interpreting the results with faculty.

**Figure 7.6: Department of Germanic Languages and Literatures,
University of Michigan**

Sample handouts for GSIs designing their own early feedback

Midterm Student and Self-Evaluations

General Considerations

- Have your students fill these out in class. If you run out of class time on the day you were planning to do evaluations, do them another day. If you ask students to fill out evaluations at home or by email, the response rate will be low, no matter how hard you try.
- You should ask for written student evaluations at least once, preferably before the middle of the semester, so there will still be time for you to make adjustments to your teaching.
 - You may want to consider doing evaluations twice, especially if you are new to teaching, or if your end-of-term student evaluations have previously been weak. If so, you could have students respond to a few open-ended questions after the first two or three weeks of class, and then around the middle of the semester you could distribute a more complete questionnaire addressing some of the specific issues raised in the earlier evaluations. Samples questions for both types of questionnaires are provided below.
- You should respond explicitly in class to students' evaluations. In doing so, it's important that you thank students for their praise as well as for their suggestions and criticisms, and that you do not appear defensive. In particular, if students asked for a change which you do not want to make, your options are (1) to provide a rationale for the way you are continuing to proceed (e.g., if students want less homework or less group work), or (2) just not to respond to this suggestion, if you do not think you can provide a convincing rationale, or if you think the suggestion does not reflect the opinion of the majority of the class. If you do decide to make changes in response to student comments, students will be glad to hear about this, and you can ask them to help you to remember this if you accidentally revert to your previous way of doing things. Often, students' comments will be divided, and it will be helpful to the class as a whole to know this, e.g., if some students want you to go faster, and others want you to go slower, and others tell you the pace is just right.
- Beware of giving too much weight to isolated opinions in the feedback you get, e.g., a single disgruntled student (though you may try to find a way of giving the student a chance to discuss his/her difficulties/objections with you privately, if you can do so without violating the official anonymity of the student feedback forms, e.g., by offering to meet with him/her when s/he expresses his/her dissatisfaction at some other point). On the other hand, beware of too readily dismissing or ignoring feedback you don't want to hear.
- If you can spare 20 minutes of class time, you may want to consider having CRLT come in to do a midterm student feedback session. This often gives more informative results than a questionnaire, as students are required to reach a consensus in small groups and as a class about both strengths and weaknesses of the class.
- You should plan on discussing the results of your midterm evaluations with the language program director and perhaps the Graduate Student Mentor(s), especially if you are unsure how to respond to them.
- In addition to student evaluations and class observations by the language program director and other GSIs, you can obtain valuable feedback by doing self-observations, and discussing the results with the language program director. Sample questions for self-observations are provided below.

Except for (i), the following ideas are adapted from Robert Boice, *The New Faculty Member*. (San Francisco: Jossey-Bass Publishers, 1992), pp 140-4.

Sample Questions and Formats for Student Evaluations

(i) At least: Give students 5 minutes at the end of class to write about e.g.,

1. How is the class going?
2. What do you like particularly?
3. Do you have any suggestions, questions or wishes?

(ii) If you have time, give students a questionnaire with questions such as [**Note: "Less is More!" It would take too long to ask all the following questions: choose ONLY those which seem most relevant for your section!**]

A. Open ended questions:

1. Was ist gut in der Klasse? [*What is good in the class?*] (schreiben Sie auf deutsch oder englisch) [*Please write in German or English.*]
2. Was ist nicht so gut? [What was not so good?] Haben Sie Ideen, wie man es besser machen könnte [=could]? [*Do you have any ideas how it could be made better?*]
3. Do you generally feel able to participate actively in class? If not, what would make it easier for you to participate?
4. Do you have any suggestions as to how class discussion could be improved?
5. What do we spend too much time on in class? What do we spend too little time on?
6. Does the instructor have any annoying habits s/he should know about (e.g. saying "ummm" all the time)? OR: Does the instructor have any mannerisms or habits which tend to interfere with the effectiveness of his/her teaching?

B. Rating items (Benutzen Sie eine Skala von 1 - 7: 1 = Ich denke das absolut NICHT und 7 = Ja, das denke ich absolut): [*Rated on a scale of 1-7, 1=Absolutely not true and 7=Absolutely true*]

The pace of the course is ... [1 = too slow, 4 = just right, 7 = too fast]

The instructor uses enough German in class

Students are given enough opportunities to speak and hear German in class.

I can understand what is said in class well enough to benefit from the class.

The class is fun.

The instructor seems well-prepared for each class.

The instructor uses class time well.

The instructor gives clear explanations.

The instructor answers questions effectively.

The instructor is open to questions and varying points of view.

I generally feel encouraged to participate in class.

The instructor shows respect for all students.

Assignments are graded fairly.

Assignments are clear.

Feedback on assignments is useful.

Graded assignments are returned promptly.

I've been given opportunities to make the work I do for this class meaningful and enjoyable.

I am taking advantage of the "flexible homework" option, and/or of the option to do certain assignments with a partner and hand in just one piece of written work for both of us [don't ask this if you haven't

explained these options in class ☺]

The instructor is accessible and helpful outside of class (at office hours etc.).

I can get help if I have problems/questions.

I know where the German Lab is, and when it is open, and what kinds of questions I can ask there.

I take advantage of the opportunity to get help at the German Lab.

I feel overwhelmed in this class.

The instructor is approachable and helpful.

The instructor is friendly and enthusiastic.

The instructor motivates me to do my best work.

I am learning a lot in this class

I would recommend this class to a friend

Sample Questions and Formats for Self-Evaluations

(iii) Rate yourself on a scale of 0-100 re: the following questions. Becoming aware of your discomfort levels allows you to focus on what aspects of your teaching you want to work on.

(0 = no discomfort; 100 = maximum discomfort):

Entering the classroom

Talking to students before class starts

Beginning the class

Answering initial questions from students

Answering general questions from students during class

Answering questions on grammar/vocabulary from students during class

Dealing with signs of student disapproval or lack of interest

The pace of presentation

Ending the class on time

Talking to students after class

(iv) Something more direct along similar lines:

Pick a class date in advance, and on that date, rate your effectiveness in that class for the following activities

(1 = ineffective; 7 = highly effective):

Preparing for class (including grading and arriving on time)

Ignoring the anxiety that accompanies beginnings of class

Putting myself at ease once the class is under way

Making myself slow down while lecturing or presenting

Listening and reflecting patiently

Answering students' general questions

Answering students' questions on grammar/vocabulary

Displaying obvious enjoyment of the class

Taking unhurried time for previewing and reviewing

Letting moments of classroom silence pass with comfort

Selecting an Early Feedback System

In considering an early feedback system, departments should consider questions of:

- *Resources:* Who will organize the feedback system? How much time will it take, for both organizers and GSIs? Are the costs feasible?
- *Preparation:* What training do faculty or GSMs need to carry out the system effectively?
- *Differentiation:* Is one method more appropriate for a department's new GSIs, while another would work best for experienced GSIs?
- *Departmental culture:* Would a new type of feedback system align well with a department's established values?

Table 1 provides an overview of the options presented in this chapter.

Table 1: Overview of Early Feedback Systems

Feedback Method	Follow-up for Formative Uses	Follow-up for Summative Uses	Follow-up for Course/Curricular Uses
<u>Observation</u> -Record taken by observer -Videotape recording	1. Faculty, GSM or CRLT conducts a consultation after the observation.	Faculty discusses how the GSI met established criteria and next steps (e.g., pair with a follow-up observation later in the term).	Faculty or GSM anonymize and summarize the data across multiple GSIs' sections in order to suggest needed changes for a course or GSI training program.
<u>Midterm Student Feedback (MSF)</u>	1. Faculty, GSM or CRLT conducts a consultation after the MSF.		
<u>Departmentally-Administered Form</u> -E&E form -Online form -Common xeroxed form	1. Faculty, GSM or CRLT conducts a workshop or consultation after feedback is collected.		
<u>GSI-Designed Questionnaire</u>		Not recommended for summative uses.	Not recommended for course/curricular uses.

End-of-Semester Student Ratings

Student ratings of instruction are by far the most common method used to evaluate college and university teaching. Results of these ratings can provide useful information for formative, summative, and course/curricular purposes. At the University of Michigan, departments use student ratings in a variety of ways. While some units (such as the Business School) have an in-house ratings system, most units with GSIs use the Teaching Questionnaires (TQ), the student ratings system administered by the Evaluation and Examinations Office (<http://www.umich.edu/~eande/tq/index.htm>). How the questions are actually chosen does, however, vary from unit to unit: some departments specify a core of questions that must appear on all instructors' forms; other departments leave the selection of questions completely up to the instructor.

The following guidelines will help you and GSIs in your department use student ratings effectively and fairly.

Selecting Questions

- Check over the TQ form to be sure that **all questions actually apply to the type of teaching done by GSIs in your unit**. (See http://www.umich.edu/~eande/tq/design_tq.htm for the catalogue of TQ items.) Having extraneous or inappropriate questions on the forms only heightens students' and GSIs' concerns that student ratings are just a bureaucratic hurdle rather than an attempt to collect data about the course.
- GSIs will feel more in control of the evaluation process if they have some say in which questions are included (or some leeway to include questions of their own choosing). If this is the case, let GSIs know how and when they can select individualized questions for their own sections.
- If you choose any of the Michigan Student Assembly (MSA) question sets, be aware that the results of these questions and the overall items will be published in *Advice* and will appear on the World Wide Web. A list of these eight questions can be found at: http://www.umich.edu/~eande/tq/design_tq.htm.

Administering Student Ratings

- Results of student evaluations are lower when ratings forms are filled out at the final exam. Have GSIs administer forms during the last week or two of classes, although preferably not on the last day (when attendance may be low).
- Students should know how the information from the evaluation will be used, and this information should be consistent from GSI to GSI. Consider having a standard explanation either printed or read. For example, such an explanation could say that results of ratings are used to help GSIs improve their teaching, to make adjustments to the course, and they are included in decisions about GSI appointments. Also, if there are open-ended questions, GSIs should point them out to students and let them know that their comments provide a valuable context for interpreting the numbers.

- GSIs should assure students that the instructor will not see the results of the student evaluations until after the grades have been posted. To avoid any misunderstandings, have the GSI leave the room and have a third party hand out the forms, read instructions (including how the information will be used) and collect the forms.
- Students need to have sufficient time to complete the form. Most forms will take between 10 and 15 minutes. Some instructors have students fill out the forms at the beginning of the class period. This reduces the temptation to finish quickly since students know the class will continue after they have completed the forms.

Using Data for Improvement

As is the case with early feedback, end-of-the-semester student ratings are more likely to lead to actual improvement in teaching when GSIs have the opportunity to discuss the results. This is particularly important for student ratings results, since GSIs can easily get lost in looking at the numbers. CRLT offers a workshop for faculty GSI coordinators and GSMs that covers how to consult with GSIs around early feedback and student ratings (for more information, see <http://www.crlt.umich.edu/gsis/gsmgcoordprog.html>).

You may wish to schedule individual conferences with GSIs when ratings results are returned (generally at the beginning of the following semester). A conversation about the ratings can lead to a more productive analysis of the ratings. Questions to consider might include: On which items did students rate the GSI highly (which medians were high, which items had a large number of strongly agree and agree)? If there were open-ended questions, what positive comments did the students make? When looking at areas for improvement, consider questions on which the GSI received low median ratings, and questions on which a higher number of students chose from the lower end of the ratings scale. Look also at the written comments: do they clarify the numbers with specific suggestions or criticisms? While these comments can be quite useful, it is important to look for trends (several responses on the same issue) rather than concentrating on isolated comments. Ask GSIs what they think about student criticism: Do they understand it? What surprises them? What confirms their own view of what happened in the class?

Just as with early feedback, end-of-semester ratings should lead the GSI to understand the results of the ratings and to develop a plan for building on strengths and making changes.

Using Student Ratings for Administrative Decision Making

When used correctly, student ratings provide one accurate measure of an instructor's performance. Student ratings results correlate positively with measures of student achievement (final exams), reports of trained observers, and even instructors' self-evaluations—compelling evidence that student ratings do measure teaching effectiveness. In addition, student ratings are consistent within a given course (students tend to agree in their ratings of the course and the instructor) and are reasonably stable over time (instructors receive similar ratings from current students and alumni). For more information, see “Questions Frequently Asked about Student Ratings Forms”

(<http://www.crlt.umich.edu/publinks/crlt.faq.html>) and “Guidelines for Evaluating Teaching” (<http://www.crlt.umich.edu/tstrategies/guidelines.html>).

Student evaluations of teaching do have their limitations. First and foremost, while student ratings can provide useful data, they should not be used in isolation as the only source of information about an instructor's effectiveness. Students are competent to judge certain aspects of teaching: GSIs' effectiveness in the classroom, GSIs' attitudes toward students, the fairness of tests and assignments, and the helpfulness of office hours. Students are not qualified to judge other important aspects of teaching, such as a GSI's command of the subject matter or whether course content is up-to-date.

When created and administered properly, student ratings are sound measures of certain aspects of teaching effectiveness. Some areas beyond an instructor's control do seem to play a role in how students evaluate. It is important for decision makers to keep these trends in mind, especially when using comparative data to interpret GSI ratings. For instance, courses in some disciplines are rated, on average, lower than those in other disciplines. Thus, the average rating of instructors in courses in the natural sciences and mathematics tends to be lower than ratings for similar items in the humanities and social sciences. In addition, required courses are rated lower than electives.

The following guidelines should help you interpret the results of student ratings fairly for purposes of decision making:

- Most researchers of student ratings agree that for decision-making purposes it is best to look at global items ("Overall this is an excellent course," "Overall this is an excellent instructor"), since these items correlate most consistently with measures of student learning. Questions about specific skills as well as students' written responses are useful diagnostic tools to help instructors interpret the global ratings and indicate specific areas for improvement.
- Base decisions on data collected over time rather than on the results of any one class. In addition, GSIs who receive low ratings should be given feedback, suggestions for improvement and time to implement changes before any final decisions are made. (See information about constructing a professional development plan in “Best Practices for Early Feedback,” above.)
- If a class is very small, use caution in interpreting the results of student ratings. In general, responses from at least ten students are needed to provide useful data for personnel decisions. Similarly, do not use data for decision making unless most of the students in a class have completed the survey.
- Comparative data can be useful for establishing a context for interpreting ratings results; however, comparative data must be used carefully. As mentioned above, disciplinary differences influence ratings: instructors in humanities and fine arts courses receive higher ratings than instructors in social science courses, who, in turn, receive higher ratings than in math and science courses. Therefore, when using comparative data you might: 1) compare GSIs' teaching in the same course

- over time, 2) compare GSIs' scores to similar courses in the same department, 3) compare GSIs' scores to courses in related disciplines.
- When using comparative data, do not overstate small differences in ratings results. Only ratings which are considerably lower than the median are likely to indicate serious difficulties in teaching. Similarly, ratings that are considerably higher than the median may help you identify outstanding GSIs who might be able to help with departmental GSI development activities in the future. TQ results include medians divided into three categories: the number above which only 25% of instructors scored; the number above which 50% of instructors scored; and the number above which 75% of instructors scored. When a GSI's median fits into the lowest category (75% of instructors scored higher) there is cause for concern. On the other hand, ratings indicate excellence when a GSI's median falls into the highest category (25% of instructors scored higher).
 - Do not rely exclusively on student ratings to evaluate GSIs' teaching abilities. You will get a more complete and accurate picture of a GSI's ability if you combine student ratings results with other types of data, such as visits to the GSIs' class, reports from peer observations, review of materials prepared for the class, etc.

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