Virtual Visits to Colleagues’ Classes

FACULTY FOCUS ON TEACHING

Visit: isites.harvard.edu/focus_on_teaching
INTRODUCTION

Faculty Focus on Teaching is a collaborative effort of faculty at the Harvard Graduate School of Education (HGSE) to develop and share pedagogic insights, ambitions, and techniques. This project, which began in the fall of 2010, uses inventive video strategies, a dedicated website, and face-to-face meetings, to foster a professional community for learning about teaching.

We hope this guide will help to:

» advance the innovative work on teaching at HGSE

» share the fruits of this effort, and the underlying approach, with colleagues in other Harvard schools

» convey the theory and procedures underpinning this work in a form that can eventually be disseminated to other universities.

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History of the Project

In the summer of 2010, Dean Kathleen McCartney asked Senior Lecturer Joe Blatt to lead an initiative to support and enhance teaching at HGSE. Joe recruited the assistance of the School’s Committee on Curriculum and Instruction, with enthusiastic support from Chair Susan Moore Johnson and Associate Dean for Academic Affairs Matt Miller.

The Committee compiled a list of approximately 15 pedagogical challenges that arise in our classes. At a meeting of the full HGSE faculty, Joe asked colleagues to rank order, via a paper ballot, the three challenges from this list that they would most like to explore. The first priority proved to be “conducting deep and highly interactive discussions in large classes.” Subsequent Focus on Teaching topics have included engaging students in active learning during class time, and the appropriate and effective use of lectures.

Joe decided to use documentary video, a website, and faculty discussion meetings as core mechanisms for the Focus on Teaching initiative. He produced the first video example in late November, 2010. The Focus on Teaching website now contains eight diverse examples of pedagogy – typically two cases are added each semester – and we have held several faculty meetings each year to view and discuss these examples.
Project Rationale:
THE ADVANTAGES OF USING VIDEO

Previous experience at HGSE revealed that faculty find it difficult to schedule and carry out classroom visits to observe one another’s teaching. From a pragmatic standpoint, therefore, the use of video enables “virtual visits” that can take place at individual faculty members’ convenience.

But beyond this practical aspect, video provides many other advantages. Here is a brief summary of benefits we have observed:

» Many people can participate in a video visit at the same time, which would otherwise be difficult without disrupting a class session.

» A video recording provides a permanent resource for the HGSE community, including those unable to attend discussion meetings and those who join the faculty in future years.

» Because video playback can be paused and is infinitely repeatable, we can conduct close study of specific moments and interactions, listening for every nuance and even “zooming in” on students’ facial expressions.

» Selecting a limited-length video clip gives us a shared text for discussions, and concentrates our attention on the most pedagogically interesting material. An HGSE faculty colleague participating in a Focus on Teaching discussion session commented: “I sat in on this same class session, right there in the room the whole time — but I saw so much more watching the ten-minute video clip!”

» In discussion sessions, video fuels perceptive questions and thoughtful responses because participants can readily refer to concrete examples.
> Our discussions afford reassurance to participants that even experienced faculty members are wrestling with teaching challenges. Gradually these sessions create a feeling of support, and generate an active network of peer “consultants” – empowering participants to take the risk of changing their pedagogic behavior.

> From a cognitive science perspective, seeing the actual teaching behavior – and being able to replay it and observe how students responded – enhances the modeling effect. Over time, as we review the video, we become able to grasp more deeply a particular pedagogic approach, to extract it from specific course content and imagine how to transfer it to our own teaching settings.

> Putting the video on a website enables us to add important contextual material, such as assigned readings, handouts, and slides.

> The website also provides a place for reflective commentary from the instructor (as explained in a later section of this guide.)
Foundations from Research: LEARNING THEORY AND COGNITIVE SCIENCE

Cultivating Authentic Learning

Research on the professional development needs of experienced faculty indicates that faculty members value exploring practice-centered and complex teaching problems, particularly in conversation with peers who have similar levels of experience and who also value good teaching (Huston and Weaver, 2008). Faculty members prefer to talk about problems that are specific to courses being taught within their institution and to find out how their colleagues teach.

Research also points to the benefits of faculty observing videos of their colleagues rather than videos of unknown educators teaching in an unfamiliar setting (Borko et al., 2008). Having faculty pay attention to a familiar teaching context enhances the possibility of making connections between what they are viewing and their own teaching practice.

These findings also reflect the more general principle of the value of promoting “authentic” learning experiences (Perkins, 2009) – learning experiences that pay attention to real-world, complex issues and typically involve collaborative learning within a community of learners. Likewise, research and situated learning theory point to the social nature of learning and the important role that learning communities can play in terms of promoting professional knowledge and practice (Borko et al., 2008; Brophy, 2004).

Promoting Transformational Learning

“Instrumental” learning involves technical or practical knowledge; “transformative” learning, which is more powerful, involves questioning our usual thinking and experiencing a shift in perspective (Mezirow, 1991 and 2000). On one level the Focus on Teaching project supports instrumental learning among faculty in that it exposes them to new teaching techniques they can straightforwardly add to their existing repertoire.
However, on another level our initiative promotes more profound learning. Watching a video together can cultivate an analytic approach toward teaching in ways not normally possible in everyday practice. Stepping outside of the constraints and pressures of teaching can help faculty to imagine new ways of doing things and to explore different options for dealing with pedagogic dilemmas (Brophy, 2004, p. 14).

**Fostering a Community of Learners**

While faculty could presumably benefit from watching the videos in isolation, transformational learning is often best done through discourse. Listening to others’ views and ideas can make faculty members think about their own practice in a new light (Cranton and King, 2003) and help them gain new insights by comparing their own practice to those of others.

A substantial body of scholarship has shown how “communities of practice” help participants develop both working knowledge and professional identities (e.g., Brown, Collins, and Duguid, 1989; Viskovic, 2006; Wenger, 1998); and how institutions can help create and support these collaborative ways of working (Becker and Andrews, 2011; Wenger, McDermott, and Snyder, 2002). Such communities have been shown to enhance student learning and to promote instructors’ understanding and interest in work around teaching and learning (Benjamin, 2000; Cox, 2003 and 2004; Nugent, et al., 2008; Smith, et al., 2008).

Our videos and faculty gatherings create collaborative spaces in which the largely tacit knowledge and skills of teachers are made “visible” objects for analysis and discussion. In viewing and discussing the videos together, techniques and ways of talking about teaching are modeled and practiced, and teaching dispositions are created and cultivated (Cox, 2004; Ritchhart and Perkins, 2008). Such faculty collaborations help make departments or schools into learning organizations. Indeed, when individuals’ knowledge is shared and distributed, the organization itself becomes more innovative, flexible, and mission-focused (Tschannen-Moran, Uline, Hoy, and Mackley, 2000).

It is worth noting that some areas of the academy have historically found it challenging to motivate faculty to engage in professional development around their teaching (Bouwma-Gearhart, 2012). Making sessions convivial and a chance to connect with colleagues enhances their appeal.
Procedures: HOW TO CREATE FOCUS ON TEACHING MATERIALS

Overview

The Faculty Focus on Teaching approach begins with pinpointing a specific challenge that a group of faculty choose to tackle. We then identify examples of relevant teaching practices in use by highly-rated instructors. We capture that pedagogy in action by video recording an entire class session (typically two or three hours). Then we select one or at most two short segments of the video recording, totaling approximately ten minutes; we conduct a follow-up interview with the instructor; and we post the products on a dedicated website.

Periodically faculty members gather to view and react to the video. These discussions result in sharing a repertoire of effective teaching behaviors. They also spark deep inquiry into the purposes and limitations of a wide variety of teaching strategies. The videos and associated materials remain available on the website for review, and for new faculty orientation.
Step-by-Step Process

These are the essential ingredients of the approach we have developed to improve teaching practice at HGSE:

During meetings of the full HGSE faculty, in response to a long list of potential topics, we collectively select an area in which to concentrate our efforts. For example, as mentioned above, the first topic we tackled was “leading deep, highly interactive discussions in large (> 50 student) classes.” The full list of topics we have considered is available in Appendix A.

By soliciting student recommendations, combing through course evaluations, and sharing observations among members of the Committee on Curriculum and Instruction, we identify a few colleagues who are especially gifted in carrying out the chosen skill.

We meet with each of these colleagues individually to enlist their participation in the Focus on Teaching project. To date no faculty member has declined this request.

We visit each selected course to get an advance sense for how the instructor runs the class, determine what kinds of student participation may occur, and assess the classroom as a physical environment for recording.

In consultation with the instructor, we pinpoint a session of the course that is likely to display the pedagogy of interest.
We record this session, using multiple video cameras. (What we have learned about how to determine the best video recording strategy is described in a later section of this guide.)

From the full-length class video, we select an uninterrupted segment (stumbles, missteps, and all), approximately ten minutes long. We then insert shots of student participants, student reactions, and close-ups of the instructor.

Throughout the editing process we adhere to a core policy, fundamental to the entire Focus on Teaching concept: any editing is limited to synchronous footage from other cameras. In other words, we maintain a strictly real-time portrayal of the class session.

We show the clip to the instructor and interview her or him about general reactions to the video, the overall strategy for the class session, the rationale for various teaching moves, moments of elation and disappointment, reflections and recommendations for others, and goals for personal improvement. We ask: What were the goals for this portion of class? To what extent were they met? What do you see and hear in the students’ contributions and behavior? What might you do differently in the future?

We put the video clip on the Focus on Teaching website, along with excerpts from the instructor interview, which we post in both audio and text formats.

The website also features contextual materials, such as directions students receive before the session, the instructor’s lesson plan, and relevant visuals used during the session, such as PowerPoint slides, online videos, and other resources.
We invite colleagues to view the video and other online elements, and then to gather for an informal discussion of insights, ideas, and techniques that could be transferred to different teaching contexts. These faculty gatherings are structured to promote interaction: we (re-)view the video together; have a short period during which the featured instructor answers questions; then share reactions to strategies and methods we perceive in the video (during which time the featured instructor remains quiet); and finally segue into an open discussion of pedagogic ideas and reflections sparked by the conversation.

In essence, we begin with close analysis of a video segment, and end by treating the video as a trigger or stimulus for a wide-ranging discussion—a conversation that helps each of us to understand better what we do in class, and to assess the potential utility of strategies and approaches that we have not previously encountered or considered.

The video, other materials, and notes from the discussion remain on the Focus website, where they are available for review—and, importantly, where they may be examined by new members when they join the HGSE faculty.
Production Considerations

Video and Audio Recording

We have investigated how different recording strategies – including the number of cameras, placement of cameras and microphones, and role of the video director – affect the usefulness of the resulting video. We also wanted to find out whether it is possible to economize on the relatively expensive process of video editing by using “live switching” techniques.

A key consideration is deciding whether to use in-house media staff (such as HGSE’s Learning Technologies Center) or to hire professional videographers and other crew. This decision has implications for quality, cost, and editorial workload. The following table summarizes these factors:

<table>
<thead>
<tr>
<th>APPROACH</th>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Crew</td>
<td>» Greater versatility in terms of techniques used due to their expertise and specialist equipment</td>
<td>» Expensive</td>
</tr>
<tr>
<td></td>
<td>» Superior picture and audio quality</td>
<td>» Considerable set-up time required: up to three hours to record one class</td>
</tr>
<tr>
<td></td>
<td>» Nothing is left to chance</td>
<td>» Scheduling constraints; less flexibility</td>
</tr>
<tr>
<td>In-House</td>
<td>» Relatively inexpensive</td>
<td>» Lower resolution cameras; cameras may not be matching</td>
</tr>
<tr>
<td></td>
<td>» Staff are familiar with the classroom venues and existing sound systems</td>
<td>» Some kinds of editing and audio capture are not possible with typical in-house equipment</td>
</tr>
<tr>
<td></td>
<td>» The approach is less formal and less high-stakes for participating faculty and students</td>
<td></td>
</tr>
</tbody>
</table>
Planning the Shoot

A reconnaissance trip is essential prior to recording a class. There are many things to look out for, including:

**Visuals**

» What is the general landscape/layout of the room? What are the implications for camera shots and the mobility of cameras? Are hand-held cameras going to be necessary? Will there be room for a camera on a dolly?

» What are students going to be doing and where will they be positioned? Will the instructor be stationary or moving around? For example, a large class in an amphitheater is a very different scenario from a small seminar-style class in a confined space.

» What kinds of editing techniques are going to be possible given the constraints of the space? Is there room for an equipment bank to do live switching?

» Given the expected positioning of the cameras, what will be the sight lines for filming? Will there be likely blind spots?

» Is there a seating area for students who choose not to appear in the recording?

**Sound**

In many ways sound is the more essential aspect of the recording process: good audio is essential for capturing student interactions.

» Is it possible to patch into existing sound systems?

» Are wireless microphones going to be the best option for sound?

» Are there distracting background sounds such as air conditioning units?

» Will it be possible to fix clamps on to the ceiling tiles to hold microphones?
**Logistics**

- What is the availability of the room prior to the class for the set-up process?
- If there is a class in the room before the one to be recorded, is it possible to ask the instructor to relocate that class, or will set-up have to occur before the earlier class begins?
- Will the building be open early enough to set up? Will it be necessary to arrange and pay for security to open the building early or to keep it open unusually late?
- How rapid will the breaking down of equipment need to be? Will there be problems if another class is coming in immediately after the class you are recording?

**Permissions**

Announce plans for the recording during the reconnaissance visit. Make clear to students what will be entailed on the production day, and what uses will be made of the recording. Students should be given the option of sitting in a section of the classroom that will not be captured on camera.

**During the Shoot**

Even when using multiple cameras, some important decisions about coverage need to be made in the moment, during the recording of a class. For example, consider the situation in which the instructor asks students to work in small groups:

- Only some of the groups can be recorded – the director has to make choices.
- It may be more effective to remove a camera from the tripod and shoot a group close-up – but the resulting video may be less steady.
- Does the camera follow the instructor’s interaction with small groups, or focus on student groups that are working independently?
It is essential for a member of the team to take notes during the class, recording every change in speaker and noting the clock time. This is a key step in making the editing process more efficient.

**Editing**

Our goal in editing is to select one or two clips from the class, with a total running time of no more than ten or eleven minutes. Choosing the section(s) to use is the most critical decision in the entire process — but the requirement to keep the viewing time brief is essential to the success of the whole venture. Faculty will not sit through long video clips. Moreover, shorter clips help to keep the follow-up discussion more tightly focused and productive.

We also insist on not editing a clip internally. Our model is to present authentic segments of classroom time, complete with stumbles, false starts, and missed opportunities. It is this policy of no internal editing that makes the Faculty Focus on Teaching videos a fair substitute for classroom visits. Ultimately, the goal in choosing a clip is to promote faculty discussion and professional development; it is not necessarily to present individual faculty members in the best possible light.

In fact, as we have argued above, watching the video clips is in some ways better than a live classroom visit. Using multiple cameras, and combining the images — in real time, with no elisions — allows us to see what is happening in the class from more perspectives, and in more close-up view, than a human visitor would find possible.

Questions to consider in making a selection of one or two clips, totaling ten minutes or a bit more, from a class that may last as long as three hours:

» Which section illustrates most effectively the pedagogy of interest for the targeted challenge or theme?

» Which section is the “richest” in terms of the variety of classroom moves and responses taking place?

» Which section is likely to be most useful or informative for other faculty members?

» Which section is likely to promote an interesting discussion among faculty?

» Will two shorter sections better serve discussion purposes than one longer section?
We have followed two approaches for integrating the multiple camera images: live-switching at the time of recording, and combining separate ("isolated") camera feeds in post-production. The live-switching scenario requires additional equipment, a technical director, and an audio mixing technician at the time of recording in order to select sources and direct the camera operators. Editing in post-production requires extensive work to import, select, and edit the raw footage from up to three cameras. Surprisingly, the cost proves to be almost exactly the same for both editorial approaches.

The following table summarizes the features of these two approaches:

<table>
<thead>
<tr>
<th>Live Switching</th>
<th>Post-production Editing</th>
</tr>
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<tbody>
<tr>
<td>videographers use a switcher to select the video footage from various cameras in real time</td>
<td>two or three cameras roll simultaneously; the video is assembled later, back in the edit room</td>
</tr>
<tr>
<td>The recording process is more complicated and expensive</td>
<td>The recording process is cheaper and more straightforward</td>
</tr>
<tr>
<td>Set-up takes longer because of the extra equipment: approximately three hours if three cameras will be used</td>
<td>Set up takes less time</td>
</tr>
<tr>
<td>The process of selecting a clip after the recording is relatively straightforward</td>
<td>Selecting a clip is less straightforward because of the need to look at footage from multiple cameras simultaneously</td>
</tr>
<tr>
<td>The overall process of creating a video segment is shorter; while edits can be made later on, the different camera angles are incorporated in real time</td>
<td>The editing process can be laborious and expensive; however, this cost can be offset if only the selected sections of the video are edited</td>
</tr>
</tbody>
</table>

**Interviewing the Instructor**

We show the selected video clip(s) to the instructor and confirm permission to use them for the project.

Then we record an audio-only interview with the faculty member, reflecting on the specific segments, as well as on his or her teaching
approach in general. Using audio only creates a more relaxed atmosphere than video tends to do.

The interviews are conducted in a conversational style and are fairly free flowing. However, we always prepare a list of questions, trying to anticipate what other faculty members will want to know. An example of planned questions for an interview is available in Appendix B.

We transcribe the interview in full, and then select the most informative and most reflective segments to post on the site. Some of these interview excerpts help set the stage for the video, and are placed before the video on the website; others presume the user has seen the video, and are presented after the clips.

Visitors to the website can choose to listen to audio excerpts from the interview, or to read text transcripts of these extracts.

The Website

The online page for each class includes the following elements:

» a short introduction, outlining the subject of the course and the place of this class in the course sequence

» interview excerpts that set the stage for the video

» relevant materials, such as slides used during the class, handouts, the instructor’s lesson plan, and, in some cases, selected readings assigned for this session

» video segment(s)

» interview excerpts in which the instructor reflects on the video segment

The Faculty Focus on Teaching website is based on the iCommons standard iSite platform – though a shift to a newer Harvard-standard platform is planned in the near future. The site requires only a modest level of editorial management and monitoring, though the scale of that task will grow as we add blogging and wiki features to facilitate idea sharing among faculty participants.
Evaluation

As a direct result of the Focus on Teaching activities, HGSE faculty members are becoming familiar with a broader range of strategies for engaging students in class and promoting their learning. Many of us are trying new approaches and new techniques, and discovering for ourselves whether ideas that surface in the Faculty Focus on Teaching discussion sessions prove to be useful tools in our own classes.

We have a few measures of this activity. More than half the full-time faculty have attended at least one of the Focus on Teaching discussion sessions. Several of these sessions have drawn more than 20 faculty participants. There is a steady flow of anecdotal reports about planning class sessions more carefully and inventively, about trying new techniques, and about one-to-one consulting on pedagogic challenges and opportunities.

In the fall of 2013 we plan to conduct a survey of HGSE faculty regarding their experiences of the Faculty Focus on Teaching initiative.
Summary

By way of summary, we would like to highlight three key points:

The Faculty Focus on Teaching initiative is a promising vehicle for bringing faculty together to learn from one another, and inspire one another, in the pursuit of effective teaching strategies and techniques.

This effort is based on an explicit theory of action: the best, perhaps the only, way university faculty will choose to work on improving their teaching is when they can see, discuss, and evaluate teaching moves practiced by colleagues, in class settings that closely match their own.

The Faculty Focus on Teaching methodology represents a low-threshold approach toward professional development – one which engages faculty participants who have previously given little thought to their teaching skills – while at the same time the design affords deep and lasting learning for participants who are already committed to reflective practice.
Acknowledgements

The Faculty Focus on Teaching project began with internal funding from the HGSE Dean's Office. We have undertaken significant expansion of the project thanks to a generous grant from the Harvard Initiative on Learning and Teaching (HILT). We would like to express particular gratitude to Erin Driver-Linn and Brooke Pulitzer for their support.

The Focus on Teaching project is led by HGSE Senior Lecturer Joe Blatt, who is also the producer and director of the videos and website. The HGSE Committee on Curriculum and Instruction provides valuable guidance, as does HGSE Associate Dean Matt Miller.

Much of the initial video and website work was performed by Susan Geddis Eppling, Instructional Media Developer, with the enthusiastic support of Kristin Lofblad Sullivan, Manager of Instructional Technology, both of HGSE's Learning Technologies Center.

Essential assistance in documenting the project and creating this guidebook was provided by HGSE instructor and researcher Liz Dawes Duraisingh.

This guidebook was designed by Opus Design.
Bibliography of Research Cited


Appendix A

Topics proposed by the HGSE Committee on Curriculum and Instruction for Faculty Focus on Teaching treatment.

» Conducting classroom discussions on challenging issues, and encouraging students to express diverse views related to race, ethnicity, and gender

» Adapting or re-thinking pedagogy when class size jumps from small to medium or from medium to large

» Broadening attention to diversity in class discussions to include dimensions of politics, religion, and sexual orientation

» Using technology more ambitiously and effectively, during class and between class sessions

» Facilitating deep and highly interactive discussions, especially in large classes

» Encouraging students to produce original work, in an era when intellectual property is an increasingly fuzzy concept and in a world where some cultures hold different concepts of originality and plagiarism

» Viewing (edited) video recordings of “master classes,” taught by faculty colleagues, and engaging in debriefing and discussion about pedagogical choices

» Giving feedback on written work in ways that advance student learning

» Supporting students in carrying out small-group work, especially in project-oriented courses

» Giving voice in discussions to students who are shy, slower to speak, or whose first language is not English; and finding ways to limit those who speak easily, so they do not dominate

» Fine-tuning instruction to meet the needs of students with different degrees of prior professional experience in education
» Integrating more extensive international examples, data, and perspectives into courses

» Deciding when to let lively discussions trump lesson plans, and coping with the repercussions (falling behind, dealing with disgruntled students)

» Learning from faculty colleagues with special expertise in particular subjects
Appendix B

Sample of planned questions from an instructor interview. The interview should be tied to the specific course and video segments; this sample is intended just to illustrate the kind of preparation and specificity that contribute to a successful interview:

1. What were your intentions in this class? In two parts:
   » How did you hope students would respond?
   » What did you intend for them to learn?

2. How do you think the students fared, in terms of these two criteria?:
   » performance in discussion
   » learning

3. How do you try to ensure that your learning objectives are met?
   » upfront framing
   » lecturette at end
   » new questions
   » “say more about ...”

4. You move around the classroom a lot. In what ways is this strategic? tactical?
   » e.g., moving close to a student you are questioning; or to a student who has made an unpopular comment
   » moving behind students
   » sitting down

5. What are some techniques for getting students to “take a stand”? When does feeding a provocation become putting words in their mouth?
6. How do you decide between calling on students who haven’t yet spoken versus calling on someone you are pretty sure will advance the case discussion in a helpful way?

7. How important are the physical dimensions?
   » Body language?
   » Facial expressions?
   » Humor?

To what extent are you “acting” to elicit response?

8. How do you respond when a student says something that is offensive to other students, e.g., a racially charged comment?

9. What are the advantages and the risks of using the case method when you are addressing core issues such as equity?