Board 82: Lessons Learned: Using a Faculty Developer’s Skillset to Facilitate a Challenging Revision Process – A Student Evaluation of Teaching Example

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Introduction
This lessons learned paper highlights how the skillset of a faculty developer may be used to address the challenges of a contentious process. The student evaluation of teaching (SET) revision process is used as an example of how a faculty developer's activity design and facilitation expertise is leveraged. The focus of this paper is the development and facilitation of the review process and not the research on the SET instrument itself (for example, see Barre, 2015; Barre, 2018; Benton & Cashin, n.d.; Stark & Freishtat, 2014; Iowa State University, n.d.; Vanderbilt University, 2016). For the reader who is interested in the example case of the SET, additional background on SETs is presented in this section. The paper also summarizes the strategies intentionally selected and used to address challenges hindering progress and lessons learned from the example. The evidence-based strategies described in this paper can be adapted and extended to other revision processes in engineering education, such as ABET assessment, promotion and tenure guidelines, or an engineering curriculum redesign or design.

The debate on the value of SETs (also known as course evaluations and student ratings of instruction) and the use of SET data is received by faculty with concern and sometimes skepticism. This is evidenced in the literature (Benton & Ryalls, 2016; Harrison et al., 2004; Uttl, White, & Wong Gonzalez, 2017) and published editorials (Berrett, 2017; Bunge, 2018; Flaherty, 2017; Gannon, 2018) that point out issues regarding validity, reliability, and implementation. Moreover, evidence indicates that SET results can vary depending on the course subject or discipline and have biases related to the instructor’s gender, ethnicity, race, or national origin, and those who teach in STEM (Boring, 2017; Boring et al., 2016; IDEA, 2017). Research also highlights the important considerations and principles of an effective SET (Benton & Li, 2017; Iowa State University, 2017).

Nevertheless, SETs are part of the faculty teaching evaluation process, where some institutions rely solely on SET data and others consider additional information to evaluate teaching effectiveness. Linse (2017) provides recommendations for the appropriate administrative use and interpretation of SET information. Additional components of the teaching evaluation process include peer observations and a teaching portfolio (Benton, 2018; Boyer et al., 2016; Brent & Felder, 2004) to evidence a faculty member’s growth and development in effective teaching practices and supporting student learning. In engineering education, additional data from instruction observation on active learning and student-center practices can be used, such as Classroom Observation Protocol for Undergraduate STEM (COPUS) (Smith et al., 2013), Reformed Teaching Observation Protocol (RTOP) (Piburn et al., 2000), Teaching Dimensions Observation Protocol (TDOP) (Hora, 2015), and PORTAAL (Eddy et al., 2015). Observation protocols typically are intended for reflective teaching and measuring changes in teaching practices rather than for summative evaluation. With the growing focus on incorporating the assessment of student learning into teaching evaluation, engineering education is well-situated, in which faculty members can draw from ABET student outcomes assessment data and research-based student evaluation tools such as CATME for teamwork skills (Ohland et al., 2012).
The SET Revision Example

Background. The University of Southern Indiana (a public, comprehensive institution) initiated the review of its existing SET instrument during Fall 2016. The SET was previously reviewed approximately ten years prior. The goal was to recommend revised SET questions that could apply across multiple course formats (e.g., face-to-face, online, and laboratory). An ad-hoc SET review committee was formed in April 2017, consisting of faculty members across colleges and members from the faculty development, online learning, and institutional research offices. This committee embarked on a process that included discussions around many aspects of the SET such as implementation issues and use of the SET data from the faculty’s perspective. However, after one year, the ad-hoc committee had not conducted a systematic review of the existing SET questions or drafted revisions. A more focused effort was needed, and thus a two-day working meeting of the committee convened in May 2018 with the goal of developing recommendations for revised SET questions. This activity resulted in recommendations that were piloted and evaluated during the following semesters. The remainder of this paper focuses on the development and facilitation of the two-day working meeting with strategies to overcome the challenges previously encountered, and not other aspects of the SET revision process, such as the psychometrics and evaluation of the instrument.

Challenges Encountered. Before the design of a revision process, it is critical to recognize and anticipate challenges. Without addressing these challenges, the content expertise and process will not get very far. The challenges described in this example are not uncommon in higher education contexts, and the strategies implemented by the faculty developer can be used by those with positional and informal leadership roles in a group. Having participated in the ad-hoc committee since its formation, but without a formal leadership role, the faculty developer used direct awareness of the challenges and issues that had hindered the ad-hoc committee’s progress during the year. Given the past experiences of the committee, the two-day activity required more than a convening of multiple perspectives and content experts. The challenges that thus far had hindered the ad-hoc committee’s progress in the SET review can be viewed through the dimensions of complex social systems: structural, attitudinal (e.g., beliefs, values, fears), and transactional (e.g., interactions, relationships) (Omidyar Group, 2018).

The structural challenges were similar to issues encountered in a teaching and learning context. During the year-long committee work, there was a lack of clarity in the goals, specific objectives, and scope of the work. During meetings, considerations beyond the SET questions became the emphasis, with some members focused on these additional issues such as implementation and format, while others tried to adhere to the task of reviewing the SET and recommending questions. Moreover, a guiding framework for conducting the SET review process and criteria to evaluate potential SET questions were not established. Other structural issues included the switch from paper to online administration of the SET, resulting in faculty concerns regarding the overall decrease in student response rates, and the timeline for piloting the revised SET questions due to an upcoming change in the software system for SET deployment.

Attitudinal challenges were not surprising and understandable given that the SET is a perennial faculty issue that is fraught with concerns and negative emotions. The topic of SETs can conjure strong opinions, stemming from past faculty experiences and anecdotes with SETs and research. Committee members, who were proxies to the faculty, expressed uncertainty, fear, and mistrust
about how SET data are used, and the weight given to SETs in faculty evaluation by chairs, personnel committees, and administrators. They also were concerned over uncivil and inappropriate student comments in the SET responses as well as the SET issues noted previously. In addition, some members expressed doubts about the value of SETs and questioned the usefulness of the SET results in informing teaching improvements. Nevertheless, committee members expressed the desire for gathering formative feedback from students.

Transactional challenges primarily were the result of the interactions and operation of the ad-hoc committee over the course of the year. The committee no longer had an effective working environment, with individual agendas and emotionally-charged responses, and trust and respect amongst committee members had eroded. Also, academic leaders had not broadly and explicitly communicated to the faculty their views on SETs and how they use SET information. Research from the literature, examples of SET revisions at other institutions, and an external expert in SETs was provided by the faculty developer to help inform the process but were rarely used by the committee. There also was frustration over the lack of progress despite regular meetings. When decisions were made or action was taken on behalf of the committee, input from all committee members was not solicited in some instances. After staying on the sidelines for much of the year, the Faculty Senate and provost eventually leveraged their positional power to express the need for the committee to recommend revised SET questions. The Faculty Senate choose to hold multi-day working meetings at the start of the summer to complete the work, and the provost offered resources (faculty stipends and meals) to support the committee and recommended that the faculty developer serves as co-chair of the committee going forward.

Identifying the challenges along these dimensions helped the faculty developer design a revision process. Many of the structural, attitudinal, and transactional challenges described here apply in other contexts. In the context of ABET outcomes assessment, additional structural challenges of data and evidence collection and closing the loop and attitudinal challenges related to concerns over the extra work required for outcomes assessment would likely exist.

Using a Faculty Developer’s Skillset

With strategies intentionally selected and implemented to address the challenges that previously hindered the ad-hoc committee’s progress, the following framework was developed by the faculty developer. These research-based strategies draw from a faculty developer’s skillset in workshop design and facilitation and expertise in working with faculty, educational development, and education research. The goal was to provide leadership to the committee’s work of revising the SETs, drawing from the expertise and perspectives of all members to contribute to the process. As such, the faculty developer’s skills of identifying the roadblocks, knowing the faculty, bringing in selected key research, and empowering the faculty to make informed decisions required knowledge of both the content and in facilitation. Without the identification of the dynamics and challenges and skills to address them, the expertise in the SET literature, course environments, and faculty and student perspectives would not be fully utilized. These strategies, which are described with implementation details, can be adapted for other working groups facing contentious topics.

The foundation of the two-day working meeting was backward design and fostering a collaborative and inclusive environment for all committee members. Just as the backward design
of course development starts with the end in mind, identifying critical outcomes and then the activities to support them (Wiggins and McTighe, 1998), the outcomes and scope of the sessions were clarified with multiple stakeholders. The committee chair and faculty developer, who served as co-chair during the sessions, discussed their roles and communicated with the Faculty Senate, provost, institutional research office, and deans, to verify that the goal of the working sessions was to review the current SET questions and recommend revised questions, similar in number as the current instrument, that would apply to all course formats. Discussion of issues related to implementation and the use of SET results, while related to the goals, were not the focus of this activity. With input from all committee members, it was decided that two days was needed and appropriate.

With the outcomes identified, key tasks and an agenda were developed. The detailed agenda explicitly described the outcomes (deliverables) of the working meetings, expectations of tasks completed prior to convening, background information for the SET review, and the detailed schedule of the two days. The agenda included bite-sized activities that are 30-60 minutes in duration, with the objectives, goal, and issues to consider for each activity was shared with the committee one week in advance (see Appendix A). Additionally, committee members had access to an online repository of references for the pre-meeting work and during the session and were invited to suggest additional resources. The committee also had the opportunity to clarify expectations when the provost and deans were invited to an opening session on the first day to share their perspectives on the SET and answer questions.

The facilitation of the working sessions and fostering of a collaborative and inclusive environment were key considerations given the previous challenges. Collaboration was desired, and individual choice also was offered to each committee member from the moment one entered the room: they chose the color of marker to create their own name tent, the color of their sticky note pads, their seating location, and candies and snacks to keep at their workspace. While small gestures, they helped to set the tone. The development of rapport and connections amongst committee members was important since new members were added and there was a history of negative interactions between some committee members. Inclusive practices (Ambrose et al., 2012; University of Michigan, n.d.) such as welcoming everyone, getting to know and using each other’s names (with the help of the personalized name tents), introductions, and brief icebreakers (e.g., sharing what they look forward to during the summer) were used. Moreover, guiding principles and ground rules were developed and discussed early on to further facilitate collaboration, a positive environment, and knowledge-informed discussions. Through facilitation, all members had opportunities to share their comments and research-based ideas and ask questions, by intentionally adding pauses during discussions and referencing the literature rather than anecdotes, while also staying focused on the tasks and keeping within the duration and scope. At the same time, everyone was invited to voice additional issues, even if outside the scope while, through a "parking lot" practice in which everyone wrote down their comments on sticky notes. These parking lot issues were reviewed periodically throughout the day and documented in the committee’s final report. Facilitation and following the detailed agenda helped keep the committee progressing on task. If issues came up, they were discussed as a committee and suggested changes to the agenda and process were incorporated as needed.
The framework to guide the review tasks included a systematic and clear process. First, the key categories/dimensions of the SET (Jackson, 1999) were discussed and identified before proposing and reviewing new questions. These discussions were informed by the literature and reports from other institutions who revised their SETs, which committee members reviewed prior to the working meeting. The current SET questions first were reviewed, and then iteratively each member suggested potential questions, based on the literature, and categorized them. Each potential question was systematically reviewed and evaluated using a rubric, going through each SET category. The simple rubric supported objective review and discussion of the potential questions using two criteria (what students are able to evaluate and the usefulness to instructor) and a rating scale of 2=yes, 1=maybe, and 0=no. The rationale of the ratings and discussion comments also were noted on the rubric. To close the loop, the committee presented the recommendations to the deans and Faculty Senate members at the conclusion of the two-day meeting. They shared the working meeting agenda, review process, recommended SET questions with the rubric scores, and additional issues for consideration that were outside the scope (“parking lot” items); these items also were documented in the committee report.

**Lessons Learned**

This example of facilitating the SET review process by using the skillset of a faculty developer highlights a framework and strategies to incorporate when leading a contentious process. A similar framework can be applied to ABET outcomes assessment, with attention to fostering a mindset that assessment can be mutually beneficial to the faculty member and program and that efficiencies can be identified with the expertise and innovative ideas to address the structural implementation of assessment. From this SET example, lessons learned reveal key design and implementation practices that can be applied to other review processes.

- Take note of the conversations around the topic to understand perspectives and concerns. Identify and understand the issues that may hinder the process. Identifying the challenges and understanding context is critical, and without it this, any content knowledge cannot go far. A takeaway is the faculty developer’s expertise and experience helps to recognize and anticipate challenges and to design processes to mitigate these issues, allowing all involved to contribute to the goals of the working group.
- Hold everyone accountable, with a clear articulation of expectations of effort and interactions. Communicate that this also is a learning process for each individual and the group to produce the desired outcomes.
- Planning and attention to logistics helped to reduce additional friction points during the working meeting. Examples included developing a detailed agenda based on a clear understanding of the goals and contexts of the group and individual members, as well as ensuring appropriate space, technology, and food were available.
- Create a positive and inclusive environment. Setting the tone for positive interpersonal interactions and valuing everyone’s ideas and voices were critical to attaining the goals. Establishing ground rules early, guiding members to note their thoughts in the “parking lot,” adhering to these practices, and coming back to review tabled issues were key.
- Pay attention to facilitation and process implementation. Communicating clear goals and objectives and sharing a detailed agenda that outlined the process and expectations ahead of time helped everyone start on the same page. Flexibility in the process is needed when additional relevant issues emerge. Use facilitation practices to leverage members’ expertise and skills to keep the entire group on track and help each other.
References


https://www.insidehighered.com/news/2017/05/10/study-student-ratings-instructors-dependent-discipline-quantitative-fields-are-most

https://www.chronicle.com/article/In-Defense-Sort-of-of/243325


Appendix A: Detailed Agenda for the Student Evaluation of Teaching (SET)  
Ad-hoc Committee Working Meeting

Goal of Committee
- Review the current SET questions. Background: It has been more than 10 years since the questions have been reviewed.

Primary Outcomes of the Meeting
- Identify categories/dimensions of questions for the SET
- Identify, evaluate, and prioritize questions for the selected categories
- Recommend the SET questions for lecture, online, hybrid, laboratory, clinical courses

Pre-Work (*To be completed prior to the start of Day 1*)
1. Please read this document, which contains the agenda and background information.
2. Review the current SET questions
3. Review the sample questions from other sources
4. Please browse the following references to become familiar with some of the research:
   - Access these documents and additional resources at [online folder].
   - If you would like to suggest additional references that are pertinent to the current charge and goals of our sessions, please share them with the entire committee by [date].

Agenda

Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Objectives</th>
<th>Issues to Address</th>
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| 10 - 10:30 am| Setting the stage                                                           | Review of charge  
|              |                                                                             | Establish guiding principles & ground rules                                        |
| 10:30-10:55 am| Gain understanding of Deans’ perspective                                    |                                                                                   |
| 11 am - 12 noon| - Discuss the literature (pre-work)  
|              | - Identify categories of questions *Goal: Prioritize categories*            | What attributes are students capable of giving feedback?  
|              |                                                                             | What are the attributes of effective teaching and courses? Which can be measured?  
|              |                                                                             | Which are helpful to faculty to inform their teaching?                             |
| 12 - 1 pm    | Lunch, break                                                               |                                                                                   |
| 1 - 2 pm     | Review current SET questions  
|              | *Goal: Identify categories and questions that need modification*            | Which categories currently exist and are missing?  
|              |                                                                             | Which questions do not apply to all course modes?                                 |
| 2 - 2:45 pm  | Identify potential questions for course-focused categories  
|              | *Goal: Identify potential questions for each selected category*            | Are students capable of giving feedback on this?  
<p>|              |                                                                             | Is this helpful to faculty inform improvements to their teaching?                 |</p>
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<thead>
<tr>
<th>Time</th>
<th>Objectives</th>
<th>Issues to Address</th>
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<tbody>
<tr>
<td>10 - 10:15 am</td>
<td>Setting the stage</td>
<td>Review of Day 1</td>
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<td>Review goals and revised agenda for Day 2</td>
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<tr>
<td>10:15 - 11:30 am</td>
<td>Identify potential questions for instructor-focused categories</td>
<td>Are students capable of giving feedback on this?</td>
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<td><em>Goal: Identify potential questions for each selected category</em></td>
<td>Is this helpful to faculty inform improvements to the course?</td>
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<tr>
<td>11:30 am - 12 noon</td>
<td>Identify potential environment and open-ended questions</td>
<td>What was helpful and not helpful to students, and their suggestions?</td>
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<td><em>Goal: Identify directed open-ended questions (up to 3)</em></td>
<td>What feedback would be helpful to faculty inform improvements?</td>
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<tr>
<td>12 - 12:35 pm</td>
<td>Lunch, break</td>
<td></td>
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<tr>
<td>12:35 - 1 pm</td>
<td>Identify student self-evaluation and “demographic” questions</td>
<td>What student information would provide useful context?</td>
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<tr>
<td>1 - 2:45 pm</td>
<td>- Prioritize recommended questions</td>
<td>Target is ~10-12 questions. If we have more than that, which are a priority?</td>
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<td>- Modify questions for other course types</td>
<td>Is the question appropriate for online, hybrid, lab, and clinical courses? These course types can have additional questions.</td>
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<tr>
<td>2:45 - 3 pm</td>
<td>Break</td>
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<tr>
<td>3 - 3:15 pm</td>
<td>Finalize summary presentation</td>
<td></td>
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<tr>
<td>3:15 - 4 pm</td>
<td>Presentation to Deans, administrators, and Faculty Senate</td>
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**Background - Student Evaluation of Teaching (SET)**

**SET perspectives/stakeholders**: Students; Faculty member who is teaching the course; Chairs, review committees, and other administrators

**Purpose of SETs**: To provide opportunities for: 1) Students to provide constructive feedback to instructors; 2) Instructors to receive formative evaluation to inform improvements in their own teaching; and 3) Summative and formative evaluation for reviewers.

**Context of SETs**: Student evaluations of teaching (SETs) are one part of a comprehensive approach to evaluating instruction and courses that include other methods (such as mid-semester student feedback, peer observations, and instructor self-reflections).

**Goal of Student Evaluation of Teaching (SET)**: Gather student perceptions of the instructor and course in areas that students are qualified to evaluate. The SET should also focus attention on improving teaching and learning outcomes (Iowa State University, 2017).
Students are capable of providing valuable information on: what occurred in class, instructor behaviors, self-perceptions of learning, other self-perceptions, overall impressions of the course and instructor (Ryalls, 2018).

Principles of an effective SET survey (instrument): Survey should be valid, reliable, standardized implementation and scoring, and practical (Benton & Li, 2017; Iowa State, 2017).

Sample SET Categories and Questions

Dimensions/categories of questions
Commonly evaluated dimensions of instruction or categories of evaluation questions from the literature (Vanderbilt Univ, 2016; UC Berkeley Taskforce on Teaching Evaluation, 2009):

Instructor-focused
- Instructor clarity and communication (“understandableness,” presentation of content)
- Teacher-student interaction, rapport
- Instructor’s helpfulness and availability/accessibility
- Clarity of expectations or directions
- Instructor’s stimulation of interest in the course and subject matter
- Instructor’s feedback on student performance (useful/clear feedback on performance)
- Encouraging participation or discussion
- Overall teaching effectiveness

Course-focused
- Course organization and planning;
- Course content (balance/appropriateness)
- Intellectual challenge and critical thinking
- Application and specific skill development
- Course workload and difficulty
- Course overall

Student self-evaluation

Open-ended

Sample SET Questions

- IDEA. Elements of IDEA’s Student Ratings of Instruction. https://www.ideaedu.org/Services/Student-Ratings-of-Instruction-Tools
- The Ohio State University, University Center for the Advancement of Teaching. Feedback on Your Instruction. https://ucat.osu.edu/professional-development/fyi/