

## **Board 115: LESSONS LEARNED: A 360 Degree Review of Faculty Development Resources**

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# **LESSONS LEARNED: A 360-Degree Review of Faculty Development Resources**

## Abstract

This paper reflects on the process, results, and lessons learned from a comprehensive review of the professional development resources and program provided for Engineering faculty by a distance education support unit at a large research university. The purpose of the review is to determine the overall effectiveness and value of the resources currently offered and to gain input from the faculty community and other stakeholders that may lead to an improved program. The study considers and compares four different perspectives: input from faculty who have participated in the program, input from faculty who have not participated in the program, input from the facilitators of the program, and data analytics of web-based resources. This lessons learned paper will be presented as a poster session.

## Motivation and Background of the Work

To an increasing degree, Engineering faculty are expected to expand their knowledge and skills related to developing and delivering effective online and distance education courses and using technology to enhance student learning. [1] Support departments that offer professional development programs and resources for faculty want to ensure that the programs they offer provide value to faculty and are well-matched to faculty needs. [2]

360-reviews are a common method of evaluating an individual's work performance. The method involves gathering input from a variety of sources and perspectives in order to inform a more complete and less biased review. [3] Emerging research suggests the 360-review method is also, "suitable for evaluating training performance. Although receiving feedback from many different parties requires more time and effort than conventional methods of training evaluation, the 360-degree method can nevertheless represent a valuable tool in organizations to promote employee development" [4].

This study was initiated at the request of a support department director with the goal of analyzing our professional development program from multiple perspectives (a 360-degree review).

## Methods

During the study, input was collected from four sources: faculty who had participated in the program (Participants), faculty who had not participated in the program (Non-Participants), the providers/facilitators of the program (Facilitators), and data from web analytics. The faculty and

facilitator groups were sent a survey including similar or related questions in order to identify any similarities or differences in perspective and opinion. The questions asked the opinions of each group related to the perceived effectiveness and value of the program and resources. Sixteen faculty Participants responded to the survey, as well as fourteen Non-Participants, and nine Facilitators. The results of selected questions are presented below. Web analytics of the Facilitator’s website were studied to provide insight into which of the department’s on-demand resources were valued by faculty based on usage statistics. Google Analytics 4 and Google Tag Manager (GTM) were used to collect website analytics, gathering data through various events like page views and video events. Video events provide a status such as “start,” “pause,” “seek,” “progress,” and “complete.” The “progress” events were split to capture the percentage of the video watched, including 10%, 25%, 50%, 75%, and 90%. Particular video progression events were designated as “conversions” to gauge how well content performed; those that reached 75% and 90% progress and a “complete” status were marked as conversions in Google Analytics.

## Results

### Type Preference

When asked, “Which type of professional development opportunity are faculty most likely to use or participate in?” some differences in opinion became apparent. Facilitators were of the opinion that faculty would generally prefer brief, on-demand videos and written materials in addition to Live workshops, including guided, hands-on practice. Participant responses generally agreed with that of Facilitators, however Non-Participants tended to favor Structured, In-depth courses and Live presentations, whereas Facilitators did not predict that faculty would be likely to prefer those modes.

In Which Type of Offering are Faculty Most Likely to Participate?	Participants	Non-Participants	Facilitator
Structured online courses that go more in-depth and include performance expectations.	4	5	0
Live scheduled presentations or demonstrations allowing questions from participants.	4	6	0
Live seminars or panels presented by faculty practitioners	5	3	3
Brief, on-demand videos available from a website.	9	4	7
Brief, on-demand written materials or instructions available from a website	9	4	6
Live workshops with guided, hands-on practice to improve skills	5	0	6

## Recognition and Acknowledgement

We wanted to know how much of an incentive it is for faculty to received some type of recognition for completion of professional development efforts. Data show that Faculty who have already been engaged with the program tend to place less value on the recognition they receive for having participated, while faculty who have not yet participated tend to prefer some type of recognition or acknowledgement for their effort, which is in alignment with the expectations of the Facilitators.

Which type of recognition or acknowledgment would be valuable to you after completing professional development activities?	Participants	Non-Participants	Facilitators
Printed Certificate	2	1	1
PDF of Certificate	1	6	3
Digital Badges	1	2	3
None	11	5	4

## Perspective of Web Analytics

Analytics show that the current highest-ranking page is a short-form tutorial with an accompanying 52-second video. It is an estimated 5-minute read. This tutorial is one of many highly-polished, brief, on-demand resources we have developed more recently; several of which are the most popular pages on our site. The resource addresses the topic of accessibility, which may also contribute to its popularity.

Video events have shown a similar trend, in that, in general, the shorter the video, the more video events and conversions it obtains. In January 2023, our shortest, most popular video (52 seconds) triggered 2,370 video events, 257 of them being self-defined conversion events. Our longest video with conversions was 5:44 (5 minutes and 44 seconds) in length. By contrast, it triggered 68 video events, only five of them conversions. None of our recorded webinars (all above 23 minutes) in January 2023 were watched later, on-demand beyond 10% of it's length. The highest number of video events for our long-form videos tend to be "seek" events, when the watcher skips ahead to find the information they need.

Web analytics also support the long-known fact that the timing of events affects their attendance. Particular recorded webinar pages where faculty can find specific instructions, such as how to create quizzes in the Learning Management System, tend to be accessed more frequently near the start of a semester than at other times of the year.

## Effectiveness

“There is a consensus among scholars in FD (faculty development) and HRD (human resource development) disciplines regarding the application of the Kirkpatrick four-level taxonomy in looking for evidence of FD effectiveness” [5]. Data regarding Level 1, pertaining to participants' reaction to a training event, and Level 2, pertaining to the effectiveness of what was learned by a participant, are primarily gathered immediately after an event has been offered and were not addressed directly in this current study. However, in addition to questions related to formats and preferences, this study touched lightly on Kirkpatrick's Level 3 regarding change in faculty's application of what is learned, and to a lesser degree, Level 4, regarding the resulting impact on student learning. Specifically, the authors wanted to know how participants had integrated what they had learned from the program and how effective the program and resources were in regards to impacting teaching and student learning.

### Impact on Teaching

What has been the impact on your teaching or job performance from your integration or application of the concepts or strategies you gained?	Participants	Facilitators
My teaching improved	1	4
I feel more comfortable using technology in my teaching	6	6
I feel better prepared to design online lessons	4	5
I am better able to make documents accessible for all students	2	5
There was no measurable impact on my teaching or job performance	3	1

### Impact on Student Learning

What has been the impact on student performance from your integration or application of the concepts or strategies you gained?	Participants	Facilitators
Students are more engaged in course activities	5	6
No measurable impact	7	3
Grades Improved	0	2

Data show that in general, Facilitators tended to anticipate that the program would have a greater impact than we reported by faculty who participated. Some faculty did report a positive impact on their teaching and feeling better prepared to teach or design online courses. A majority of faculty reported that the impact of student learning was not measurable, although some faculty said students were more engaged based on their application of what they learned in the program.

## Lessons Learned

By using the 360-review method, we learned that perspectives vary by group regarding the perceived value, effectiveness, and preferences related to the professional development program and its resources. In some cases, data and faculty perspectives seemed to align with that of the program facilitators. In other cases, the 360-review revealed that perspectives and values from faculty groups may vary not only from that of facilitators, but also differ from group to group. It is recommended to continue to gain input from different perspectives and to provide options.

One of the most important lessons learned from this review is that timeliness matters. Looking at the web analytics data and the popularity of different topics at different times during the semester shows that faculty reach out for information when they need it. It is recommended that the program schedulers pay close attention to the cycles of the semesters and corresponding faculty needs.

We also learned that faculty who attended our workshops were more likely to want to use the more brief, on-demand material on the website in the future. It is recommended that Facilitators not only develop a robust selection of brief resources, but also conduct a deeper investigation with faculty to determine the reason for this and explore if and why the workshops may be longer than faculty desire.

Another issue gleaned from some of the responses was our marketing. Faculty, especially new faculty, did not know we offered anything other than studio space or whole course development. A study looking at similar registration and web analytics data from 2020 and 2021 identified that marketing may be an issue and recommended that the workshops be used as another marketing tool [6]. It is recommended that the Facilitators ensure that the program and resources are effectively marketed to faculty who may be interested in participating.

Finally, given that the Facilitators would like to see increased participation, more emphasis should be placed on providing recognition for faculty who have participated. It is recommended that, at a minimum, PDF versions of completion certificates be provided whenever possible.

## References

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