FACETS Assessment Report: Reflections on the Three Seminars (Year 1 - 2004)

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The purpose of this document is to provide a brief report of the assessments regarding the perceived strengths and weaknesses the three seminars of the FACETS program (Year 1 – 2004). Participants of the seminars completed a preseminar assessment, assessments following each of the three seminars, and an overall postseminar assessment. Each assessment contained self-assessment items along with items designed to evaluate the FACETS program. Open-ended questions for both purposes were also included. The assessments show a generally positive reaction toward the issues addressed in the seminars, the quality of the seminars, and the utility of the information.

Although university and college faculty are masters of their content, many may be at a point of deep concern and frustration because their historic array of traditional pedagogical practices, ones that used to be successful, no longer work. Even faculty recognized for teaching excellence may find it difficult to understand the learning needs, and the attitudinal and perceptual differences of new students, especially as many students fail to respond positively to lecture or discussion formats. Instructors' insufficiencies in awareness and understanding have the potential to create deep rifts between the academic expectations of incoming students, and the perceived effectiveness of post-secondary teaching.

In order to address these concerns, the Faculty Alliance for Creating and Enhancing Teaching Strategies (FACETS) held a series of seminars in the Spring of 2004. This program contained three seminars: Exploring Generational Issues, The Impact of Cognitive Science on Teaching and Learning, and The Backwards Design of Teaching. Each seminar contained a brief presentation of relevant theory and research, a interactive task designed to flesh out the main issues for that seminar's topic, and facilitated discussions among the participants. More information is available at the FACETS web site.

The purpose of this document is to provide a brief report of the assessments regarding the perceived strengths and weaknesses the three seminars of the FACETS program (Year 1-2004). Both qualitative and quantitative data are presented.

Method

All participants of the assessment were university faculty, local public school administrators, or businesses leaders in the Central Wisconsin region involved in the FACETS program. University faculty, the primary (though not only) target group for the sake of evaluation, were from the University of Wisconsin – Stevens Point and University of Wisconsin – Marathon County.

Participants were asked to complete a pre-seminar self-assessment which was conducted prior to all of the seminars. (This survey was presented in print form as a web-based version of the survey was non-functional.) This instrument contained ten 5-point Likert-type scales (see Table 1) and three open-ended questions all designed to gauge the participants' teaching self-efficacy in areas relevant to the three FACETS seminars. Nineteen participants completed this assessment.

Table 1: Assessment Statements for the FACETS Program

Parallel Pre- and Post-Seminar Assessment Statements

- 1 I understand the characteristics of the millennial generation.
- 2 I feel that I make references that the millennial generation understands.
- 3 I am comfortable developing materials that take advantage of students' and employees' learning styles.
- 4 I am comfortable with my knowledge of newer educational findings (i.e., learning styles, brain-based education, etc.)
- I am comfortable using reflective practice to improve my students'/employees' learning.
- 6 I am comfortable using various assessment techniques to improve my students'/employees' learning.

Parallel Post-Seminar Assessment Statements

- The inclusion of business leaders in the FACETS seminar contributed to a better understanding of [relevant topic].
- The inclusion of non-university faculty in the FACETS seminar contributed to a better understanding of [relevant topic].
- The seminar on [relevant topic] has caused me to think more about my students/employees.
- 4 I have discussed or intend to dicuss issues [relevant topic] with my colleagues.
- 5 I believe that other faculty and business leaders would be receptive to information on [relevant topic].
- 6 I have begun thinking about ways to incorporate knowledge of [relevant topic] into my work.
- 7 I have read some of the FACETS readings/materials on [relevant topic].
- 8 I believe that I know more about [relevant topic] now than I did before.

Post-Seminar Series Assessment Statements

- 1 As a result of the FACETS seminars, I have become more aware of the strengths in my interactions with my students/employees.
- As a result of the FACETS seminars, I have become more aware of the weaknesses in my interactions with my students/employees.
- 3 As a whole, the FACETS program met my needs and expectations.

Note. All statements were measured on a 5-point Likert-type scale ranging from Strongly Disagree (1) to Strongly Agree (5).

All participants were asked to complete web-based post-seminar assessments approximately two week after each of the three seminars. In addition to repeating the relevant assessment items from the preseminar assessment, these surveys included more focused questions about the topic at hand using both Likert-type items (again see Table 1) and open-ended items. These statements remained parallel across the post-seminar assessments to foster comparisons (see below) regarding the usefulness of the seminars, the seminar materials, etc. Thirty-seven, 24, and 12 participants completed the post Seminar 1, Seminar 2, and Seminar 3 assessments respectively.

A post-seminar series (program) assessment was included with the third post-seminar assessment. This assessment also utilized both Likert-type items (see Table 1) and open-ended questions. Twelve participants completed the post-series assessment.

Unfortunately, matching of the surveys across assessments proved to be difficult. The number of participants varied considerably across seminars, and some participants did not provide consistent ID numbers. Thus, statistical analyses treated each set as an independent sample.

Results

Pre- and Post-Seminar Self Assessments

Figure 1 summarizes the ratings on the 6 parallel pre- and post-seminar assessment statements. The bold middle lines represent the average ratings. The bars represent a 95% confidence interval, which can be used to make inferences about the average relative to the scale midpoint (neutral). For each item, two confidence intervals are given: one for the pre-seminar assessment and one for the relevant post-seminar assessment.

For the pre-seminar assessment, the ratings show that participants on average disagreed with the statement addressing comfort with knowledge of recent educational findings. Faculty showed moderate agreement with all other statements about the millennial generation, various learning styles, and pedagogical techniques.

The ratings also show that the participants showed a statistically higher average in post-seminar assessment regarding knowledge of learning styles. All other statements show modestly (but not statistically) higher average ratings on the postseminar assessment.

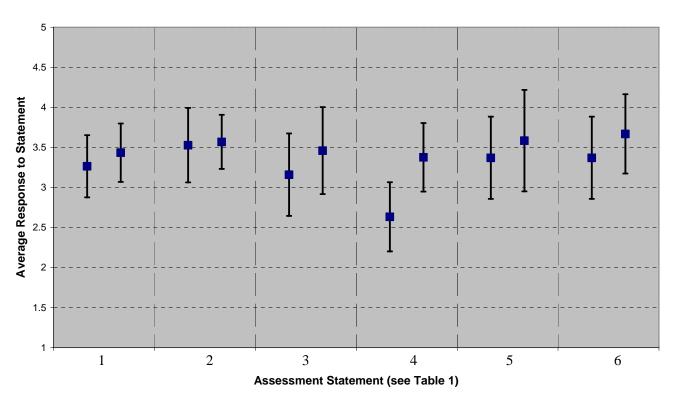


Figure 1: Average Responses and 95% Confidence Intervals for Parallel Pre- and Post-Seminar Assessment Statement Ratings

Seminar Assessments

Figure 2 provides the average responses to the first eight statements of the assessments for each of the three seminars. An two-factor (statement and seminar) Analysis of Variance showed that average responses did not vary statistically from one seminar to another for any of the statements. Also, participants tended to agree with all statements regarding the inclusion of non-university participants, the extent to which the seminars introduced thought provoking material, and the extent to which they taught the participants something deemed useful. Qualitative data also supports these findings. A summary of these responses is available in the Appendix.

Finally, the post-seminar series assessment showed that the FACETS program indeed had a positive effect on the participants. The seminars increased participants' awareness of their own strengths (M = 4.333; 95% CI: 3.919 - 4.747), increased awareness of their weaknesses (M = 4.417; 95% CI: 4.089 - 4.744), and met their expectations in general (M = 4.167; 95% CI: 3.636 - 4.697). It is important to note that these means are all statistically greater than the midpoint (neutral), indicating positive evaluations of the FACETS program as a whole.

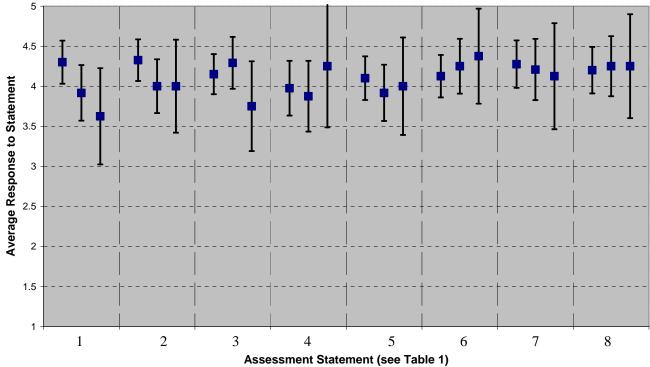
Qualitative data (presented in the Appendix) supports these conclusions, but also provides specific suggestions for improvements.

Discussion

These data provide general support for the viability of the FACETS program. Participants showed higher levels of comfort with their knowledge in the three FACETS topic areas (the millennial generation, cognitive science, backwards design). The assessments also showed a positive reaction toward the issues addressed in the seminars, the quality of the seminars, and the utility the information. Some suggestions of improvement were given by participants.

Some weaknesses of this assessment must be noted. Response levels on the assessments were far from complete, leading to questions about the representativeness of the findings. Even more importantly, matching of participants' responses was very difficult, potentially leading to a loss of important information on changes in individuals' opinions over the course of the program.

Figure 2: Average Responses and 95% Confidence Intervals for Parallel Statement Ratings from Post-Seminar Assessments



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Appendix: Open-Ended Assessment Questions and Selected Responses

What did you learn about dealing with generational differences from the FACETS seminar?

That they know what they want to learn, or at least think they know what they want to learn and have little patience for other. Show them the worth of what you're teaching them. When they seem to be disrespectful, it isn't always the case, just how they have learned to interact with people. Be up front with them. Things that we take as general knowledge isn't necessarily in their data bank. Check to be sure. Its difficult to get them to read something they're not interested in. I don't by into the fact that they don't read--HARRY POTTER-- is proof. Find short samples that are pertinent to your point.

I must modify some of my classroom strategies in order to reach students from other generations. Perhaps this is why I like non-traditional students so much - we have a natural cultural connection(?) Much of what I would call "student bashing" is actually cultural differences between my generation and the millennial generation. I need to understand where students are, and adjust my course accordingly.

I'm not sure that I learned very much about HOW to deal with generational differences - this seminar mostly reinforced the fact that I somehow must deal with these differences. The message that I'm getting is that higher education is changing in unprecedented ways (whether we like it or not) as an increasingly larger portion of the population wants a college degree (though not necessarily an education).

Specifically, how have you used or do you plan to use the information on generational differences?

I am still working on this, but I am trying harder in class to identify issues that the students might better understand. This can be challenging in my discipline, however, as I ofter deal with abstract examples. I need to figure out how to tap into experiences the students have had to help them apply the theoretical information in my class.

I would like to change paradigms, to develop a more collaborative interactive approach to teaching, rather than just a one-up one-down approach.

I have incorporated more visual aid as well as kinesthetic aid. In my class the students now read the material, view the material and then when appropriate we physcially 'do' the material we are learning about. This varies depending on the subject matter.

What concerns or questions about generational differences do you still have following the seminar?

As I read the book it is highly optimistic and very helpful in understanding the conflicts between the generations and the misunderstandings we may have. So the book is more helpful than the table discussions over our meal (our table got into a heated agrument, from one generation Xer with another from the Babyboom era. After reading the book, it was obvious why they were so heated at each other-differences in their generation perspectives). It would be MOST helpful to have STUDENTS at these meals. I came home to my babysitter (one of my former students) and she asked what this FACETS all about. She pointed out, if there aren't students there how are we supposed to REALLY find out what their like. So really in our academic way we're "talking about them without [their] input." And then pointed out that "so you get chosen for this because you are good teachers, and then ideally you get out of teaching one class in the future, thus, the better teachers aren't teaching us." Good point, leave it to the students to be perceptive!

I think that it is really important that we refrain from assuming that all people in this generation have the same characteristics. The seminar and the text tended to group everyone together and say "this is what this generation is all about." We need to constantly remind ourselves that students are unique and bring very diverse backgrounds to the table of learning.

ASSESSMENT OF FACETS SEMINAR PROGRAM

What are the most important things you learned about memory and learning styles from the FACETS seminar?

That everyone learns at different rates and through different methods. And that finding a way to incorporate all learning styles in the class room increases the chances of reaching every student. I think merely understanding in detail the kinds of varied learning styles that exist among students. I've always had a vague awareness that students were different. But it helps to understand the specific patterns that I might see.

The memory information stressed the need to work with and use information in order to retain it. I basically knew that (or thought it) and it was good to have that reinforced. This inspired me to think about how to do this more consistently in my classes. The learning styles material got me thinking about how hard it is for me to help students with very different styles.

Clear reminders of the importance of presenting / teaching our subject (our passion)using a variety of techniques which will address different learning styles and at the same time help our students to stretch into other learning styles that aren't their favorites. A reminder that students retain best what they can teach to someone else, so that we need to offer them those opportunities. That we must be more conscious of preparing our classes with this information in mind - how we can help our students help themselves to remember what is most important and how they can understand different learning styles and their own preferences.

Specifically, how have you used or do you plan to use the information on memory and learning styles?

I continue to evaluate students based on a variety of assessments relating to the different ways in which they learn or are most adept demonstrating what they have learned. I have spent more time practicing certain structures so that they may be incorporated in long term memory--but I'm not certain that they are the right strategies. I amy need to experiment more.

For a very long time I have been aware of the importance of a variety of teaching methods, of a variety of learning tasks within a class period - through previous training and long experience - but this is an excellent reminder for me, adding newer research results and a renewed energy - so I am looking at each class lesson plan to make sure I am including opportunities for students to work with the material in different ways (for example, discussing ideas to answer a question first in small groups before engaging in a whole class discussion of the question; relating a general topic to their own specific experiences before moving toward a writing project, introducing several possible ways to remember a certain grammar point including a mnemonic device and a visual image, and asking which one works best for different students or if they have devised their own).

What concerns or questions about memory and learning styles do you still have following the seminar?

How do I balance "need to know" and "nice to know" with multi-modal presentations and stories that make emotional connections, while covering the topics in our catalog description? How do I apply learning styles to my assessments?

Applying our understanding about memory process and learning styles to classrooms is not an exact science and needs to be tempered by knowledgeable and reflective instructors. For example, we're encouraged to help students connect to material through their emotions by enriching concepts with (presumably compelling) stories. At the same time we're asked to carefully consider time spent on those topics deemed "nice to know" - like those topics that meet affective needs and emotional connections. Using these stories seems to be crucial to good learning - finding the balance in the classroom is tricky.

Are there studies that show that students retain more content when they are exposed to less content? meaning those people that worry that they aren't covering the content they need to, really are getting it covered because the student isn't able to process it, so better to do less and make sure they've got it.

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What are the most important things you learned about reflective practice and assessment techniques from the FACETS seminar?

I found the idea of more clearly articulating class goals, then incorporating those goals into course design, to be the most helpful aspect of the discussion.

I suppose that this seminar helped me think through what is important in my classes - to visualize what I am trying to accomplish in the classroom.

That what we are currently measuring is very superficial and that we need to use different, creative measures to tap real learning.

Specifically, how have you or do you plan to use the information on reflective practice and assessment techniques?

I've used more open-ended activities in which students are asked to develop or extend laboratory exersices.

I plan to use the information to prioritize my course learning objectives and goals. I often feel overwhelmed by the material to be covered, and the presentation helped me to see how one might better determine what is important.

I hope to improve (or replace with better models) some of my current assignments and tests. I also hope to encourage my department to begin thinking and talking more about our shared ideas about what our students should be able to know and do.

What concerns or questions about reflective practice and assessment techniques do you still have following the seminar?

Most of my questions are discipline-specific and require some careful thinking on my part about how to apply the things I learned.

My concerns really are just about overcoming inertia--at the individual and department level.

Specific teaching techniques to attain the course goals.

Looking back on the FACETS program as a whole, what recommendations do you have for changes (additions or deletions) to the program?

Have more specific roles/duties for the facilitators. I felt that they were a valuable, yet underutilized, resource.

I was interested in how the characteristics of the millennial generation and greater understanding of how people learn would fundamentally change my teaching strategies and philosophies. While I heard many good ideas about how to present "tomorrow's lesson", I felt like we rarely discussed deeper, more fundamental issues of education. I wish I knew something that could be added or deleted to address this, but I don't.

The one thing that has frustrated me is that it's hard to read much of the materials provided or do much with it during the non-stop ride of a typical busy semester. I wonder if it would be helpful to spread the program out more, starting in the fall and extending into the spring so that at least there is winter break to absorb, reflect, and begin using the material from the first seminar or two before coming in for the later ones.