

Supplemental Material

CBE—Life Sciences Education

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Interview Script for AACR Faculty, Spring 2014

I. Introduction and Informed Consent

Thank you for agreeing to be part of this study.

As a reminder, I have available the consent form that you signed when you agreed to participate in this study [Have this form available in print form or to screen share].

Remember, this study is confidential. Data will be made anonymous prior to dissemination. This means that no names or identifying information about you or the institution where you work will be included in any materials or publications resulting from this research. The public will not have access to identifiable data collected from you.

Also, this study is voluntary. You don't have to participate, and you can withdraw at any time. During the interview today, if there are any questions you do not want to answer, you may feel free to say so.

II. Warm-up by verifying demographic information

At this point, I want to verify that I have your demographic information correct. You are at [insert name of university]. You have been there [insert number of years at institution] years. You are a [insert position]. You teach [insert course name], which is directly relevant to your involvement in the AACR project.”

III. Motivation, Background, and Department/Institutional Context

I'll start the interview with some questions about your decision to participate in the AACR project.

1. How did you learn about the AACR project, and why did you agree to participate?
2. Have you ever participated in any other professional development opportunities related to your teaching? If so, why did you participate and what did you gain from the experience?
 - A. IF THEY'VE PARTICIPATED IN MULTIPLE TEACHING PROFESSIONAL DEVELOPMENT OPPORTUNITIES: So you've participated in several professional development opportunities in the past. Which one of those opportunities has been most influential to your professional development as a teacher? Tell me more about it.
 - B. IF IN PART 2 AND 2A THEY DON'T TALK ABOUT FLCs: So is this your first FLC?
3. Think of 1-2 of your close colleagues in your department or institution. How does your level of participation with projects like the ones you've just described compare with them? With other members of your department? Institution?

IV. AACR Questions and Reports

At this point, I'd like to ask you several questions about the AACR questions and the AACR reports.

A. AACR Questions

4. In your mind, what's the ideal use of AACR questions?
5. Let's say you want to see how students are doing a couple weeks before an exam. For that purpose, what's the difference between using an AACR question and a multiple-choice question?
6. When you responded to the survey about AACR, you said you have a [insert "impression"] of the AACR questions you reviewed. Tell me more about your impression.
7. You selected to administer the [insert question used by faculty participant, e.g., "Central Dogma"]. Why did you choose this question?
8. In the AACR survey, you said you expect the AACR questions to have [insert "impact"] on your teaching. Tell me more about your expectations.

B. AACR Reports

EvoGrader Reports – Only ask these questions of faculty who have asked EvoGrader questions in their course.

At this point, I want to ask you a few questions about EvoGrader reports.

9. In the AACR survey, you said that EvoGrader reports provide [insert "insights"] insights into student thinking. Will you provide an example of the type of insights you've gained from the EvoGrader reports so far?
10. In the survey, you said you expect the EvoGrader reports to have a [insert "impact"] impact on your teaching? Tell me more about that.
11. In the survey, you [insert level of agreement] with the statement that you were able to interpret the reports. Tell me more about that.
12. HERE IS THE REPORT YOU RECEIVED FROM AACR THIS SEMESTER [hand them or provide via screen share their report]: Is there anything missing from EvoGrader reports that should be added?
13. Do you have any suggestions for modifications to the EvoGrader reports?

Reports for Other AACR Questions – Only ask these questions of faculty who have asked questions other than Evolution questions in their course.

At this point, I want to ask you a few questions about AACR reports on question topics other than evolution.

ALTERNATIVE QUESTION SET FOR #s 9-13

9. In the AACR survey, you said that the reports on questions other than evolution provide [insert "insights"] insights into student thinking. Will you provide an example of the type of insights you've gained from the non-EvoGrader reports so far?
10. In the survey, you said you expect the reports on questions other than evolution to have a [insert "impact"] impact on your teaching? Tell me more about that.
11. In the survey, you [insert level of agreement] with the statement that you were able to interpret the reports. Tell me more about that.
12. HERE IS THE REPORT YOU RECEIVED FROM AACR THIS SEMESTER [hand them or provide via screen share their report]: Is there anything missing from the AACR reports (non-EvoGrader) that should be added?

13. Do you have any suggestions for modifications to the AACR reports (non-EvoGrader)?

C. Summary Question

14. One of the main goals of this project is to identify how to spread the use of AACR questions and reports to more faculty. Do you have any additional comments or suggestions about the AACR questions or reports that could help us meet this goal?

V. AACR FLC/Motivation for Professional Development

Now I would like to ask you some questions about the AACR FLC.

15. What are your impressions of your FLC so far? What benefits are you receiving or do you anticipate receiving from your FLC?

16. In the AACR survey, you said you expect the FLC to have an [insert “impact”] on your teaching. What did you mean by that?

17. In the AACR survey, you said you believe the FLC will be [insert “importance” level] important to your success in using the AACR questions in your classroom. Why is that?

18. One of the main goals of this project is to determine the best way to support the teaching professional development of faculty who use AACR questions and reports. Do you have any additional comments about the professional development for AACR or the FLC model that could help us meet this goal?

VI. Motivation to Change or Innovate Teaching

I’m also interested to learn some general information about your teaching.

19. At this point in your teaching career, what’s working well for you?

20. What areas of your teaching aren’t working as well as you would like?

21. What ideas do you have about addressing this concern?

22. Is this area(s) of dissatisfaction or need addressed by the use of AACR questions and report?

a. By participation in the AACR FLC?

VII. Teacher Thinking

To wrap up today, I’d like to return to the AACR question you chose to use in your class this semester – the [insert question name, e.g., Central Dogma].

23. How have you taught [insert topic of question] previously?

24. Why did you choose to [paraphrase their description of previous teaching]?

25. What did you hope to accomplish by choosing this AACR question?

26. What ideas did you expect students to express in response to this question?

27. Were there any ideas students expressed that you did not anticipate? If so, what are your thoughts about that?

28. How else do you think you could have uncovered these ideas, if you hadn’t had access to AACR?

29. How did the your experience with AACR (question, report, FLC) change how you thought about teaching [insert topic of question]?

30. How do you plan to change how you teach [insert topic of question] the next time you teach this course? Why?

Hello [Name]. Thank you so much for taking the time to meet with me today to continue discussing your participation in the AACR project. As a reminder, everything we discuss today will be kept confidential. All data will be made anonymous prior to dissemination and no identifying information about you or the institution where you work will be made available to the public. And, while your answers are helpful for my research, you may decline anything you do not wish to answer.

I'd like to start today with some general questions about AACR, the FLC, and professional development.

1. So just to confirm your participation thus far, you have been regularly participating in FLC meetings at your institution? And just in general, how has your experience with AACR and the FLCs been?
2. Are you currently participating in some other teaching-related PD? Tell me more about that.
3. If you did not have AACR/the FLC, would you participate in any other teaching-related PD? Why or why not?

Okay, thanks. Now I would like to ask some more questions concerning your FLC and the use of AACR in your classroom.

4. What is the biggest benefit that you are getting from your FLC? From the AACR project in general? Can you tell me more about why these are so important to you?
5. What is the biggest benefit that you feel you are bringing to your FLC? To the AACR project in general? Can you tell me why this is important to you?
6. How likely is it that you will continue to participate in the FLC? In the AACR project itself? Tell me more about that.
7. Is there anything you are not getting out of the FLC or the AACR project that you wish you were?

Thank you. Now I would like to switch gears a little bit and talk about the curriculum development teams, such as the Central Dogma Activity.

8. Are you participating in an FLC curriculum development group?

Note: only ask the next series of questions if somebody *could* participate. If they teach evolution and are just waiting for the right team to join, no need to go through this.

9a. Why did you choose to participate?

9b. Why did you choose to not participate?

10a. What is the biggest benefit that you are getting from the CDT?

10b. Did you attend any of the meetings? If so, ask why they stopped.

11a. How likely is it that you will continue to participate in the CDT?

11b. [If the reason is the activity isn't relevant] Would you be interested in working on an activity more relevant to your course? Why or why not?

12a. Is there anything that you are not getting out of the CDT that you wish you were?

13. In your mind, what would an ideal activity look like? Tell me more about that. [push for rationale]

14. Now thinking about your involvement in the FLCs and/or the CDTs, what person or people has had the most influence on how you think about teaching and learning?

Now I would like to ask some general questions about your teaching.

15. In the spring of 2014, you mentioned [insert from last interview] was going particularly well for you.

a. Is this still working well for you? Why or why not?

b. Is there anything else you would like to add that is going well for you this semester? How is this different from last semester?

16. In the spring of 2014, you mentioned [insert from last interview] was not working as well as you would like.

a. Is this still a problem for you? Tell me more about how this not working well affects you.

17a. You suggested [insert from last interview] as a way of addressing this problem.

a. Did you try it? Why or why not?

b. Did it help?

c. Why do you think it was so effective/didn't work?

17b. You suggested that you were still unsure of how to address this problem. Have you come up with any ideas on how to address this problem? Tell me more about that.

18. Do you have any plans to change your teaching in the future? Tell me more about that. [push for rationale]

a. Do you think your answer would be different if you were not involved in the AACR FLC or the CDT? Tell me more about that.

19. Think about a specific topic for this class. What do you know about how students learn this lesson that would be important for a new teacher to know?

a. It's clear from talking to you that student understanding matters to you. How do you know if a student deeply understands a concept?

20. How do you communicate to students what they are to learn?

Learning Objectives

A. What is your process for coming up with these?

B. Do you make an effort to align your exams/assignments with the L.O.s?

It's in the syllabus/textbook/homework, etc.

A. Do you make an effort to align your exams/assignments with what you told them in the syllabus/on homework/in the textbook? Tell me more about that.

What do you mean?

A. How would your students know what to study?

B. Do you align your exams/assignments with [slides, textbooks, whatever they say]

21. How do your exams/assignments influence what you do in class?