Workforce Education Implementation Evaluation

Instructor Interview Protocol

Introduction

Before conducting this interview, review the survey responses from the interviewee. You may need to follow up on some of those sections. Here are the key points to cover in the introduction. You may summarize in your own words.

Thank you for participating in the online survey. <u>This is a follow-up interview</u> in which I will go over some points that are easier to address in conversation than survey form.

The study aims to describe the different instructional programs and classroom activities in workforce training programs.

In order to support this work, I want to understand as much as I can about your instructional approaches to technical education classes.

Introduction –Cover sheet Info about Interviewee

1. Interviewee's name and role at the college:

2. Name of institution and course that is the focus of the interview:

Section 1 –COURSE CONTENT, MATERIALS, & STUDENTS

Course content

3a. What are the main learning goals for the course? What are the intended knowledge and skills that students are expected to develop during the course? [Probe for professional/soft skills]

b. How were these learning goals established? [Probe for industry standards, instructor work experience, industry partner or advisory board, embedded in "canned" course etc. Also, probe for how did you determine these learning goals? What resources and supports did you use (admin edict, industry standards, ATE program, personal discretion, etc.). Of these sources, which informs MOST of the learning goals for this course?]

c. Are there any pre-requisites or expectations related to prior math, science, or technical knowledge or coursework?

d. How much of content covers foundational math and science concepts?

Course materials [Review syllabus and course Website if available]

4. a. **What instructional materials do you use in this course?**

- **Textbooks**
- **Other sources of readings**
- **Supplemental instructional materials (including video, podcasts, online resources]**
  [Probe for How did you find these materials? What resources and supports did you use to find them or what service providers referred them to you? Which sources provide MOST of the materials?].

b. **Equipment and simulators?**

- Probe for details on student use of/exposure to and practice on equipment/simulators.
- Has industry been involved in the provision and change of the equipment?
- If so, in what was role of instructor in work with industry?
- Which source provides the MOST influence on decisions regarding the equipment?

Student characteristics

5. What types of students enroll in this course? [Review response to survey

- [Probe for ranges of ages, job experience, recent HS grads v returning students v out of work and retraining v employed and upskilling]
- [Probe for how composition of students influence what they teach and how they teach]

Section 2 – Your Perspective on Instruction

[Review survey and classroom observation notes]

6. Describe your approach to the use of different modes of instruction and how they are sequenced within a particular unit of instruction– lectures, class discussions, hands-on practice, group work, labs/simulators ? [Ask for an example, from the critical unit]

- What is the most important mode and why?
- How do these modes of instruction support the achievement of the different learning goals?
- What is the role of hands-on activities? How do they support the learning goals?

7. To what extent do students have opportunities to practice skills and procedures associated with the learning goals?

8. To what extent do students have opportunities to practice "hands on"/"real" skills and procedures expected of technicians in the workplace? How "realistic" are these opportunities?

- [If relevant, ask for example from critical unit. If not ask instructor to provide example from other source.]
- What is the purpose of the hands on activities?
- What is the product of the hands on activities?
- [Probe for the role and frequency of labs and work on simulators and actual workplace equipment]
- [Probe for relative importance of hands on v conceptual understanding]
- [Probe for groupwork v individual work and why the emphasis on one or the other and how groupwork is assessed (group product v individual contributions)]
- How are hands-on activities assessed?
  [Probe for emphasis of professional/soft skills v. procedural skils v problem solving]

9. To what extent do students have opportunities to explain and justify solutions to problems and in what forms (written, presentations, class discussions)?

10. How much reading and writing is required in the course? What determines the level of reading and writing expected?

- ▪ [Probe for students, instructor preference, workplace expectations etc.]

11. Do your students do out-of-class work for this class? If so, what kind of work do they do?

12a. Do your students do projects (either in class or outside of class) as part of this class?

b. If your students do projects, do the projects typically get more difficult as the class goes on through the semester? If so, how?

13a. Do students submit homework for your review, or is it used mostly to prepare them for an upcoming class?

b. How do homework assignments get factored into the student's overall grade?

14. How often do students receive different types of feedback on their performance (instructor v peers, written v oral)? To what extent do instructors use technology (class discussion forums, email) to provide feedback? [Review response to survey on feedback provided by instructor and peers]

> - [Ask for example from critical unit]

15a. In what form (i.e. verbal in class, written on reports) do you most commonly give feedback to students?

b. Why is feedback given this way and how well do you feel it works?

16. During lab assignments or other classroom activities, what do you see as your role in class? Are you mostly there for support? Is most of the discussion and feedback between students? Do you do more of the leading at the beginning of the assignment?

Section 3 – COURSE ASSESSMENTS

Nature of assessments, assignments, and projects [Review responses to survey]

17. What information/evidence about student performance do you use to determine a student's final grade? Do you have a rubric to determine student grades on assignments? What is the role of the different assessments you use?
> [Probe for the frequency of the use of assessments indicated in the survey]

18. If you use quizzes in your class, how many do you give and when are they given?

19. What opportunities do students have to practice and *demonstrate* that they know how to the type of problem solving or troubleshooting that's required on the job?

- [Ask for examples from critical unit]
- [Probe for details on the type of problem solving/trouble shooting required of technicians graduating from program]

20. To what extent do the assessments measure conceptual /content knowledge vs. the hands-on demonstration of a particular skill or procedure?

21. Do any of the assessments require students to be judged on a "hands on"

performance of a particular skill (including problem solving strategy), procedure or the design or creation of a physical product?

- [Ask for example from critical unit]

```



```

22. Can you describe the culminating project for the course?

- How is it structured? What do students have to do? What materials/equipment must the draw upon?
- Is this a group project or individual project?
- How is it assessed?
    - o Probe for…
        - ▪ conceptual understanding
        - ▪ Problem solving/trouble shooting
        - ▪ Demonstration of procedures
        - ▪ Written report or presentation
        - ▪ Quality of work product relative to industry standards
        - ▪ Workplace/professional/soft skills

```



```

23. How would you rate how well your course prepares students for industry work? Please provide an example that illustrates our judgment. Are there tests that students

must pass to attain an industry credential? What are those? Does the department receive reports on student success rates?

Section 4 – INSTRUCTOR SUPPORT & INFLUENCES

24. What external support do you have for creating and teaching this course?

- ▪ [Probe for institutional support, support through professional associations, industry support, peer support, and training, professional development, self-development opportunities]

25. What are the primary sources of influence for what and how you teach?

- ▪ Probe for…
  - • Industry influence and provided training
  - • Participation in professional societies and conferences
  - • Institutional influence (training, standards, reviews)
  - • Own work experience
  - • Student composition (knowledge and experience; certificate track v. AS track).

26. What are the most significant challenges of teaching this particular course?

- ▪ Probe for…
  - • Range of student experience and knowledge
  - • Changing industry standards
  - • Obsolete instructional materials, equipment, simulators
  - • Instructors lack of training in field
  - • Institutional budget cuts
  - • Economy and workplace opportunities for students

Section 5 – FINALIZING SITE VISIT

27. I wanted to review a few items for the upcoming visit. First, I reviewed the materials you sent, and I wanted to verify some information with you. You sent me the following critical units:

a. Critical Unit #1:

b. Critical Unit #2:

c. Critical Unit #3:

d. Final Project:

Site Visitor: Please clarify any questions about the following elements, and arrange to obtain further documentation to address those gaps when you visit.

- ☐ **Gaps in Critical Units**
- ☐ **Gaps in correspondences with syllabus**

28. The week of the site visit, I will be observing [XX**], which corresponds with [**Month, Day **] in the syllabus.**

   Site Visitor: Please clarify any issues about lacking associated lesson assignments and materials for the observed class and arrange to obtain further documentation, preferably in advance of the visit.

29. I wanted to obtain your recommendation about what student work samples I should gather. First, I'd like you to recommend just two of the Critical Units for data collection, and second, I'd like you to identify the specific culminating assignment for each of those Critical Units.

Site Visitor: Please ensure that it is *feasible* to collect student work data for the Critical Units. In other words, if the culminating assignment is a presentation, discuss the feasibility of collecting representative student work. For example, you might obtain their PowerPoint slides, but you might not see videos of their performance, which is problematic. So, it might be best to focus on assignment or product formats that lend themselves to the most comprehensive documentation sharing.

CLOSING

Is there anything else we haven't talked about that you can share to help

Is there anything else we haven't talked about that you can share to help me understand your courses and learning goals?

Thank the interviewee for his/her time.