VALENCIA COLLEGE

Facilitator and Note Taker Guide / Protocol

Updated 5-29-2019

The purpose, timeline, and research questions for our evaluation

Project Title: Women in Engineering Forum (NSF E-Path Grant #1712008)

Author of this Guide / Protocol: Lisa Macon and Laura Blasi

Date: Tuesday June 11, 2019
Start Time: 2:30 pm
End Time: 4:00 pm
Location: West Campus 11-236

Goals of current

- Increase number who have completed AA and transfer into STEM BS
- Having professional experiences in STEM
- Dream big
- Think about the future

- **Invite feedback from broader population** (this feeds into number of transfers, subgroup speaks to the deep professional engagement – prior for "scholars" but now multiple ways to have deep professional experiences.) We may think we have a sense of the needs – but do not know the real capacity…. (Questions - Employers? Faculty who teach across UCF and VC? What might we ask? Stay in lane vs. outreach beyond current?)

- Connections / synergy – Siemens – relationships re professionalization

Other alliances NSF funding are being asked including regional questions:

- Why are certain components of the models more effective in different institutional or regional contexts? [B2B alliance institutions - Co-location, pathways lead to? Anywhere? Support from Bachelor's – faculty and staff. Side note – students just surveyed in AA / AS re BASBOL said they think our BS degrees are ONLY STEM. How are they the same of different? Side note: MDC, SACS] Ask partners which BS they have in STEM.

- NSF LSAMP partnership documents
- Whatever we ask our IR / Analytics and Research office create a template for partners so they ask also. Is the baseline LSAMP specific or broader.

- What are the different methods and why are certain ones more effective for increasing the capacity of alliance institutions to produce more well-qualified STEM graduates who matriculate into STEM graduate programs or enter the workforce?

Results and Intended Use

This project has been developed by the Grant Leadership Team for the NSF E-Path Grant, based on a suggestion of our external evaluator who suggested that we gather ideas on how to improve inclusion, retention, and persistence of female students in Valencia College engineering courses. The grant goals include the following:

Table B: Goals and Measurable Outcomes	
Goal #1: Increase commitment to engineering pathways	**Outcome #1A:** 70% of the students participating in recitation sessions will declare or maintain their status in an engineering pathway. **Outcome #1B:** 60% of nontraditional (e.g. URM, and/or female) students participating in recitation sessions will declare or maintain their status in a declared engineering pathway.
Goal #2: Increase persistence of URM specifically Hispanic female students in engineering courses	**Outcome #2A:** 85% of Hispanic female students participating in recitation sessions will successfully complete (grade of C or better) engineering courses on first attempt and persist to the next academic semester. **Outcome #2B:** 75% of URM students participating in recitation sessions will successfully complete (grade of C or better) engineering courses on first attempt and persist to the next academic semester.

The grant project that was proposed and awarded was to add a recitation hour to certain engineering courses, specifically, Statics, Dynamics, Electrical Networks, and Principles of Electrical Engineering. Results have been promising but in envisioning the next proposal focused on female retention and persistence, we would like to gather information from students from this population.

Background of Participants & Purpose of the Conversations:

The participants in the focus group will be currently enrolled female students in engineering courses at Valencia College. The development of the research questions, focus group questions, and analysis will be informed by faculty and staff. The results will be used by faculty and staff as described above.

Goals:

1) Understand students' motivations, support systems, and barriers regarding taking engineering courses at Valencia.

2) Understand the students' perceptions about the culture of the engineering program and department at Valencia.

3) Identify specific strategies that can be implemented to increase sense of belonging, persistence, and retention of female engineering students at Valencia.

Project Research Questions:

1) Why do female students choose engineering as a field of study?
2) What support systems help female students to be successful in engineering courses?
3) What barriers do female students face in engineering classes?
4) How to female students view the courses in terms of culture and belonging?
5) What strategies in place are most helpful to female engineering students?
6) What other strategies can these students suggest?

Focus Group Template [Type information needed and then use in the session to take notes]

Project Name: Women in Engineering Forum (NSF E-Path Grant #1712008)

Facilitator Name:
E-mail:

Note Taker Name:
E-mail:

Date: Tuesday June 11, 2019
Start Time: 2:30 pm
End Time: 4:00 pm
Location: West Campus 11-236
How many attended:
Who – students, staff, faculty:

Topic:
Summary of the session (1-2 sentences):

A print version of this document will be provided at the facilitator training and it contains:

1. This overview
2. The Discussion Guide
3. The Participant Details Handout to be handed out at the end (copies will be provided)
4. A Notes Template for the write up of the report and for note-taking

****Note: This guide is only for facilitators and note takers (not for participants)**

Facilitator – Primary Role: Introduce the purpose (i.e. program improvement – document aspects of the student/faculty/staff experience), set the ground rules (i.e. comments will not be linked to names), guide the conversation to cover the topic areas – delve deeper as appropriate (using questions like: "Tell me more about …." "What might be an example of that…" "If another community member were to ask you about x, what would you tell them…?") Take notes as possible, but maintain eye contact as clearly as possible. See related notes and reminders later in The Discussion Guide.

Note Taker – Primary Role: Listen. Take notes to include non-verbals and changes in tone – like sarcasm or humor – facilitators may not be able to capture that level of detail. At the very end ask any unanswered questions or questions regarding unexplored ideas at the invitation of the facilitator (we will not have time to break, confer, and reconvene the participants.) If the activity results in a product (like a map, writing on the board, or participant activities) take a cell phone photo. Document anything that assists in evaluation the participants' thinking process, this include exchanges between participants like "I agree" or "I don't see that."

Discussion Guide

Set up:

- ☐ Room unlocked?
- ☐ Table set up?
- ☐ Chat with the other person in advance (facilitator / note taker team)
- ☐ Recorder tested and placed somewhere accessible
- ☐ Computer with the guide loaded for typing (or paper and pen)
- ☐ Name tents and markers
- ☐ Release form for recording if provided
- ☐ Participant details handout for use at the end
- ☐ Draw a map of the room to note who is sitting where.
- ☐ Figure out how to refer to people in the session and your notes.

Introduction:

- Begin on time and thank participants in advance for their time.
- Introduce yourself and the role of any other note takers in the room.
- Discuss your role as the facilitator explaining the need for frank and honest feedback and that the information is confidential (ask participants to complete the waiver to audio record for accuracy of the data).
- Explain aspects of the process telling why are we leading these conversations and what will happen with the information (i.e. to determine what will be used to start the conversations at Valencia College).
- Stress that this is not an evaluation of individuals or processes at the college.

The statement that must be read verbatim by the facilitator:

Faculty and staff members are interested in learning about the student experience of female engineering students at the college in part to recognize and expand effective strategies for supporting students.

You do not have to answer questions asked if you are uncomfortable and you can leave at any time. We will be recording for easier note taking, but your responses will not be shared in connection with your name.

We don't often talk about this topic at the college so we may need to warm up a bit, but the goal is to have a conversation, sharing ideas and experiences. We understand that you may discuss specific examples of cheating, plagiarism, etc. and you should feel free to share. Your responses will not be shared in connection with your name.

If you share specific things you have seen or done you will not be judged – we aim to learn from everyone in the room. I am the moderator and I am here to guide the conversation but I will not be participating or sharing my opinions.

Do you have any questions?

Questions and Outline for Notes (in Word)

Document Their Responses

Objective A: Get a sense of Valencia's STEM culture through their eyes

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Currently you are enrolled in Engineering courses with the intention of transferring to a 4-year university as an Engineering major.

1. When did you decide to pursue this program and why?
2. What about Valencia has influenced your decision to pursue and or persist in Engineering?
3. Can you share any specific examples?

4. How have faculty members influenced your decisions?

5. Do you know other women at Valencia who were pursuing an Engineering degree but then stopped?
6. Do you have any ideas of the kinds of issues that may have caused them to make this change?

Objective B: Document the kinds of connections being made between their social lives / community and their academic goals

7. In what ways has your family been a support (or not) to you regarding these choices?
8. Do you think there are barriers to women with careers in Engineering?
9. What else could we do to help you to succeed in your courses?
10. What else could we do to help you to transfer or continue moving towards your career as an engineer?
11. Why have you been drawn to this field?

Objective C: Document which pedagogies / activities are being used / help them the most

12. Think about a time when a lightbulb went off and you understood something or mastered a skill that was new for you related to Engineering. What happened and why?

13. What would you tell a new faculty member he or she should <u>know</u> [be aware of] in order to help students [women] succeed in STEM classes?

14. What would you tell a new faculty member he or she should <u>do</u> [in the classroom] to help students [women] succeed in STEM classes?

15. How about outside of the classroom?

16. Where would you go in order to find a tutor or other learning support services? Do you use these services related to your engineering / STEM courses – why or why not?

17. If we were writing a guide for new advisors to help [women] in STEM at Valencia, what are some of the ideas or strategies we should include?

Ask your note taker / observer what they would like to add / ask / if anything was missed?

Do you have anything else to add?

Wrap Up

Any overall themes and conclusions? Suggestions if we use these questions again?

- If you are a note taker please share questions that were not answered, questions or ideas that emerged that should be asked, ask for clarifications on the notes.

- Distribute the "Participant Details Handout" (with pens)

- Let them know they can leave after completing it and thank them for their time.

  - ☐ Materials gathered up
  - ☐ Room locked?
  - ☐ Send back recorder, handouts, markers etc.
  - ☐ Review notes, finish transcription
  - ☐ Summarize, note themes, review questions and answers
  - ☐ Other?

Afterwards: If time permits discuss / debrief after the session – both facilitator and note taker. Capture any additional notes from the session and send all notes to Nancy Aziz by email – participate@valenciacollege.edu.

_____[title here] Focus Groups - Participant Details Handout v. 3

1. Please take a few minutes to share a few details about yourself.

2. What is your first name? (optional)

3. How long have you been at Valencia and in which roles?

   Note length in each role. (i.e. 3 years student, 1 year work study, 2 years career staff)

Tell us more about your experiences at Valencia as a student in the STEM fields (Science, Technology, Engineering, and Math)

Please mark the boxes, letting us know which you have experienced and also how important each is to you and let us know if you think we should provide more experiences like this.

Since enrolling in STEM at least one educator or advisor has:	Yes	No		This is very important to me	I wish we had / did more of this
1. Gave me information about work in specific STEM fields					
2. Encouraged me to stick to my major					
3. Introduced me to people working in the STEM fields					
4. Gave advice about academic options					
5. Gave advice about career options					
6. Advised or gave me information about the STEM program I am in					
7. Talked about his or her own work in STEM					
8. Helped me with the content in my STEM courses					
9. Helped me with internships, research, jobs, scholarships, etc.					
10. Gave me specific advice when I faced an academic obstacle					
11. Written letters of recommendation					
12. Alerted me to job or transfer opportunities					
13. Recommended courses I should take					
14. Helped with a specific assignment (homework, project) related to STEM					
15. Assisted me in finding financial support					
Tell us more about the STEM classroom activities that you have experienced:	**Yes**	**No**		**This is very important to me**	**I wish we had / did more of this**
1. Feedback has been provided through a variety of approaches (beyond exams)					
2. I feel comfortable using the tools needed for my studies					
3. I have access to the tools needed for my studies					
4. I have learned steps necessary for safety in the class or in labs					
5. I have worked hands-on using equipment / technology related to STEM					
6. Information about women (and their work) in STEM have been shared					
7. Activities have encouraged "risk-taking" or have asked me to be creative					
8. Staff / faculty members are making connections between our course content and the real word (such as the community or the workplace)					
9. We discussed / shared information related to the social consequences of STEM					
10. We have developed lists of ideas / solutions working as a team (round-robin)					

Tell us more about your experiences at Valencia as a student in the STEM fields (Science, Technology, Engineering, and Math) Please mark the boxes, letting us know which you have experienced and also how important each is to you and let us know if you think we should provide more experiences like this.					
Since enrolling in STEM at least one educator or advisor has:	Yes	No		This is very important to me	I wish we had / did more of this
11. We have discussed case studies in order to understand ideas or events					
12. We have reflected on a problem or topic and then worked with a partner, before having a whole classroom discussion (think–pair–share)					
13. We have time to network and make connections with each other					
14. I have a peer mentor or some other student who I meet with regularly to discuss my plans and get feedback / support					
15. We have worked in pairs or small groups to discuss information / ideas					
16. Workshops or other activities teach strategies and provide resources to strengthen my skills specific to STEM					
17. I have learned ways that I can make a difference through a career in STEM					

4. What is your program of study and desired major?

5. What are your career/academic goals?

6. Please check here if you are willing to have us contact you in the future: ____

7. If so, please include your full name the best e-mail account to reach you through: 

8. Please include any other comments that you wish to share here or on the other side… turn over

Thank you for your time today.