

An Online Focus Group to Examine Rural Employer Perspectives: Report & Methodology

February 18, 2016

REPORT

Early findings from our *Preliminary Report of New Professional Interviews* and *Secondary Curriculum Analysis Report* and emergent themes from our employer interviews (in progress) stress the importance of soft skills and experiential learning opportunities, which are seen as a means of gaining these skills, for IT students and new professionals. As such, the research team at the Information Institute planned to investigate these important findings by holding an online focus group with business and technology employers in the Northwest Florida region.

A methodology for the online focus group was developed, submitted to the Human Subjects Committee of the Institutional Review Board at FSU, and approved without any necessary revisions. The online focus group was scheduled for mid-February and recruitment took place in the weeks leading up to it. Ultimately, the research team was unable to recruit enough participants in order to justify hosting the online focus group. While the focus group did not include a financial incentive for their participation, the benefits of better understanding how to incorporate and facilitate experiential learning opportunities, such as internships and volunteering or mentoring programs, could potentially strengthen the workforce over the long term, benefiting both employers, students, and new professionals.

Despite this setback, the online focus group methodology still has value as a data collection technique and may still be utilized at a later point in this project or as part of a supplemental grant project in the future. As described in the methodology below, the focus group may also provide opportunities for professional development and networking for the participants involved. Given these benefits, the research team has reported the online focus group methodology so that it may be useful to others.

ONLINE FOCUS GROUP METHODOLOGY

Relevant Research Questions

RQ1: What perspectives do employers in rural communities have about the competencies of entry-level IT employees?

RQ2: Presented with findings from previous IT employer research, how do employers feel about the indicated desired competencies including 1) Self-management; 2) Entrepreneurial skills; and 3) IT certification credentials?

Collection Strategy: Online focus groups with IT/technology employers in Northwest Florida

A purposive sample of up to 71 Northwest Florida employers will be developed from the list of employers who previously participated in the FITC Career Fair on October 7th, 2014, past NSF ATE study interview participants, and additional rural Northwest Florida employers identified by the Co-PIs. This sample of Northwest Florida Employers allows the study team to expand and follow-up on trends that emerged from the preliminary findings from the previous employer interviews as well as an opportunity to include more nonmetro/rural employers as their perspectives are underrepresented. The employer participants will be asked to participate in an asynchronous online focus group conducted via email over a period of one week.

Collection Procedures

A contact list of 71 employers who participated in the FITC Career Fair on October 7th, 2014, participated in past interviews, and other nonmetro/rural employers not yet interviewed was obtained from the FITC team as well as one of the Co-PIs of the NSF ATE research team, Dr. Jim Froh. This contact list will be used to recruit and create a sample of employers using a web-based recruitment letter which will contain the informed consent information for their voluntary participation in the planned online focus group. Employers that read the study's details in the initial email and consent to participate by responding to the email will be sent instructions to participate in the virtual focus group.

In the recruitment and informed consent information email, employers will be asked to participate in an asynchronous online focus group hosted facilitated through secure email services and will include the following:

1. The employers in the contact list receive an email from the NSF ATE Research Team at the Information Institute which will include a description of the online focus group's purpose and related informed consent information (see below).
2. Once informed consent has been confirmed, the research team will collect basic demographic information from the employers and share an introductory email with the date information, expectations, and any other instructions for the online focus group.
3. The research coordinator(s) provided training for research team members who will moderate the online focus group to follow the FSU Human Subject Protocols and approved focus group guide (see below).
4. Over a period of one week, employers will be encouraged to respond to both the prompts and questions related to the study's research questions (see below) as well as the comments made by other participants in the online focus group via email. After one week, the focus group will end and the research team will archive and clean the emailed replies of the participants. The research team will contact the participants to thank them

for their time and insights as well as remind them of our contact information if any follow up is needed.

Based on the method as outlined by Turney and Pocknee (2008), qualitative data from the virtual focus group collected from the secure emails used will be archived following a one week period of asynchronous discussion(s) of the participants. The archived emails and replies will be cleaned and then analyzed through an iterative process using open and axial coding to develop a list of required technology knowledge, skill sets, and potential entrepreneurial opportunities for new entry-level employees based on the discussions and recommendations of the employers. The analysis results will identify the specific knowledge and skill sets desired by employers, how each education tier can develop effective academic programs that support students' technology career pathways, and identify potential entrepreneurial partnerships and experiential learning opportunities for students and early career professionals.

Conclusion

The online focus group will help validate other research approaches of the project, such as curriculum analysis of high schools and colleges/universities, certification analysis, and job posting analysis. The focus group will provide the research team a better understanding of the employers' needs and perspectives about employees' required knowledge and skills. Additionally, as Mardis and Hoffman (2007) state, virtual focus groups also provide an opportunity for professional development for participants as they share insights and discuss their experiences with peers in their field, which is why participants are asked to disclose as much information about themselves as they feel comfortable with and use their preferred email addresses for the virtual focus group. As a result, the research team will identify students' pathways to employment and will identify and recommend skill sets in existing and future curricula that could better prepare students for these pathways as well as potentially inspire rural IT employers to think about how experiential learning and entrepreneurial opportunities may benefit both their businesses and their future workforce.

References

- Mardis, M. A., & Hoffman, E. S. (2007). Getting past "sshhh": Online focus groups as empowering professional development for teacher librarians. In Joyce Chen (Ed.), *Proceedings of the International Association of School Librarianship 36th Annual Conference, Taipei, Taiwan*. Erie, PA: International Association of School Librarianship.
- Turney, L., & Pocknee, C. (2008). Virtual focus groups: New frontiers in research. *International Journal of Qualitative Methods*, 4(2), 32-43.

INFORMED CONSENT INFORMATION

To be communicated via email by the FSU Information Institute Researcher to:

Employers who are participating in an online focus group.

Online Focus Group Recruitment and Informed Consent Information Email

Hi, my name is _____ (name of researcher),

We are members of the Information Institute working on an NSF Advanced Technological Education grant project. We would like to ask you if you will participate in the an online focus group with other Northwest Florida employers in order to identify the skills required of new technology professionals by employers as well as discuss potential entrepreneurial and experiential learning opportunities for early career professionals and students. The online focus group will be held over a one week period to allow group members to participate when and as much as they can. The online focus group will be conducted using the participants' preferred email address and emailing service of their choice. During this week, participants will simply be asked to reply to and share their opinions in response to topics and questions posed in emails shared by both the research team as well as the responses of other employers participating in the online focus group. It is important that our research includes your input as you represent the businesses and technology employers within the Northwest Florida areas.

There are no foreseeable risks or discomforts if you agree to participate in this study, and you are free to decline to answer any questions or stop participating in the online focus group at any time. Although there may be no direct compensation to you, your participation in the project findings will increase knowledge about educational and skill needs of technology employers/ students.

To participate in this online focus group you must be 18 years of age or older. Although the online focus group will be digitally recorded through a secure email service, your comments will be kept confidential. Given the asynchronous nature of the online focus group, the time you spend reading and responding to emails from the research team's prompts and/or the comments of other focus group members may range from thirty minutes to a few hours depending on how often you check the your email and reply to the emails. Of course, you can discontinue your participation at any time.

If you would like to participate in this virtual focus group, please let us know! If you do, please review the above information thoroughly and reply to this message to confirm your informed consent using your preferred email address. Once we hear from you, we will contact you to collect a small amount of background information and share the instructions for online focus group.

If you are not eligible for or not interested in participating, please disregard this email. We thank you for your time either way!

If you have any questions concerning this research study, please contact Marcia A. Mardis at (850) 644-3392 or by email at marcia.mardis@cci.fsu.edu. You may also contact the study's Principal Investigator, Charles McClure of the Information Institute at: (850) 644-8109 or by email at cmclure@lis.fsu.edu if you should have any questions.

Thank you for your continued help and support!

FSU Information Institute Researcher (name)

ONLINE FOCUS GROUP GUIDE FOR EMPLOYERS

Part 1: Informed Consent Confirmation and Background Information Email

Dear [participant's name],

Thank you for agreeing to participate in our virtual focus group! Before we get started, could you please provide the following information?

1. Basic demographics: age, sex or gender identity, race and/or ethnicity
2. Your position title and primary industry:
3. Are you currently or have you been involved in the hiring process for IT positions? If yes, for how long?
4. What is the zip code of your primary business location?
5. Your preferred email address for the online focus group?

Once we have this information we will send you the information and instructions for the online focus group to your preferred email address (please check your spam or junk folders in case something seems missing)! Please do not hesitate to contact us at [researcher's phone number] by phone or via email at [researcher's email address].

Thank you for your continued help and support!

FSU Information Institute Researcher (name)

Part 2: Online Focus Group Instructions Email

Dear [participant's name],

Thank you for that information and continued help with this study!

To participate in the online focus group, please be sure to securely log into your preferred emailing service and use the preferred email address you shared with us to respond to the group. It is important that with each reply that you send to use the “Reply All” feature—this will make sure everyone’s comments are seen by each member, giving everyone an equal opportunity to respond. If you think you are missing some of the emails or responses, be sure to check your spam or junk folders in case some of the emails end up there. You may need to mark emails from us or the other focus group members as not being spam or junk so they arrive in your inbox. Similarly, depending on the activity of the group, you may receive many emails a day. As such, we’d recommend that you set up a folder or filter in your inbox to help keep organized.

The online focus group will begin on [time/date] and remain open for one week until [date/time]. We will send out a reminder email before we get started. We also encourage you to check your email regularly during the focus group week and to reply as much or as little as you want. Of course, please only share information you are comfortable with sharing—you may stop participating in the focus group at any time. Please do not hesitate to contact us at [researcher’s phone number] by phone or via email at [researcher’s email address].

Thank you for your continued help and support!

FSU Information Institute Researcher (name)

Part 3: Online/Virtual Focus Group Topic Emails & Follow-up Prompts

The online focus group will be conducted in a semi-structured nature, so the prompts and questions listed below may vary do the flow and timing of the discussions and emails within the focus group throughout the week. However, the topics will generally follow these guidelines:

1. Email Topic #1: Hiring Processes

Please describe the recruiting, selection, and hiring processes of your organization.

Please consider the following questions or prompts:

- a. Where and how do you successfully recruit new talent?
- b. What is the most valuable skill a new employee can have? How can they demonstrate this?
- c. Are certain degrees preferable over others? What about certifications?
- d. What salary range should entry level or early career IT workers expect?

2. Email Topic #2: Relationship with Local Educators

The questions in this section relate to interactions between the organization and the local educational institutions. Please consider the following questions or prompts:

- a. When you think of technology education in schools (high schools, 2 or-4 year colleges, colleges/universities), in general, what are your impressions?
 - i. What suggestions, if any, do you have to improve the education and training that your local schools provide to your community?
 - ii. What are the best ways for schools to stay on top of IT trends?
- b. What are the core courses that you suggest for a CS/IT/CE/IS student that might help them in your organization?
 - i. Do you recommend any classes in non-IT areas?
- c. How would you describe the interaction that the local colleges have with your organization? Your community? (such as mentoring or recruiting efforts or your own on campus visits)
- d. What have been your interactions with local schools (high schools, community colleges or universities), if any? For example, posting jobs/recruiting students, internship programs, apprenticeship programs, volunteering, advisory board, mentoring students, connections with faculty or administrators or career center, or other personal experiences.
 - i. How would you describe your experiences? Positive, negative, or somewhere in the middle?

3. Email Topic #3: Perceptions of Job Readiness

Describe your view of the available pool of job applicants. Please consider the following questions or prompts:

- a. What does an entry level IT position in your organization entail?
- b. In terms of education, certification, and experience, how well are your schools preparing new IT workers for entry level positions in your organization?

- c. Do you expect a college/university graduate to be proficient in all latest technologies (such as new programming languages, the latest social media, the cloud, and big data)?
 - i. How do you gauge that a new hire has the technology currency you are looking for?
 - ii. How do you update your list of desired technical competencies?
- d. What technical skills makes you feel that a college/university graduate is over qualified for the job position?
- e. What soft skills (communication, project management, etc.) are you looking for?
 - i. How can applicants demonstrate these skills?
- f. When a student says that they have X degree and Y certification, what does this mean to you?
- g. How much do different degrees (2-year versus 4-year) and certifications (none or some) impact the level and types of responsibilities a new hire is given?

4. Email Topic #4: Experiential Learning and Entrepreneurial Opportunities for Rural IT employees and employers

An emergent, recurring theme from both early career and employer interviews was the importance of hands-on learning experience, such as internships, work studies, and experience, as well as entrepreneurial opportunities that allow early career IT employees to create their own work and jobs in rural communities. Please consider the following prompts or questions:

- a. What are the challenges they face with internships?
- b. Do they have employees from internships in the past?
 - i. What is a successful internship to you and your company?
 - ii. Do they only want to provide internships to those who have a likely chance of employment with them?
- c. In what ways can internship activities be implemented into existing employment environments?
 - i. What ways do these programs need to be structured to succeed?
- d. What support do rural employers need to sustain and implement internship programs?
- e. How can internship activities be more closely tracked and aligned with specific employment outcomes?
- f. In what ways can internships lead to entrepreneurial experiences or mentoring for IT students?
- g. What sorts of entrepreneurial projects do you think the rural community would support?

Part 4: Participation Encouragement and Thank You Email Samples

1. Reminder Email

Thank you for taking the time to share your insights with us and your peers! The online focus group emails **will be active for one week, from (Start Date/Time) to (End Date/Time)**, so please be sure to check your email regularly for new messages, comments or prompts. Remember, you only need to share information that you are comfortable with sharing and you may stop participating at any time!

If you have any questions about the study or encounter any issues with the forums, please contact the research team by phone at [researcher's phone number], via email at [researcher's email], or by posting a message in reply to this thread.

Thanks again!

FSU Information Institute Researcher (name)

2. Encouragement Sample Email

Dear online focus group members,

Day 1 of our week long online focus group is off to a great start! Today [forum topic and link] was the hot topic, so be sure to check your email and contribute your thoughts to the discussion! **Remember, please remember to check your email regularly and respond to the whole online focus group using "Reply All" when you've got something to add.**

Please do not hesitate to contact us at [researcher's phone number] by phone or via email at [researcher's email address].

Thank you for your continued help and support!

FSU Information Institute Researcher (name)

3. Thank You Email Sample #2

Dear online focus group members,

Wow, this week has blown by! Thank you all so much for your dedicated efforts and thoughtful comments throughout the week! Your insights will help us identify IT career pathways as well as support and facilitate opportunities for hands-on learning and entrepreneurial experiences for IT students and early career professionals.

Please do not hesitate to contact us at [researcher's phone number] by phone or via email at [researcher's email address] if you have any questions or comments about the study. We will let you know when we publish our results!

Thank you for your continued help and support!

FSU Information Institute Researcher (name)