A Peer Training Model to Promote Digital Fluency Among University Faculty: Program Components & Initial Efficacy Data

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A Peer Training Model to Promote Digital Fluency Among University Faculty: Program Components & Initial Efficacy Data

Linda Samek, Robin Ashford, Gloria Doherty, Debby Espinor, & Anna Berardi
DFI Mission Statement
A faculty-led peer mentoring program integrating education technologies and complementary pedagogies to facilitate student engagement and learning outcomes.

DFI Desired Outcomes
For George Fox University faculty to be known as effective edtech informed educators in response to current and future student education needs.

Phase I: Within 4 years, develop an effective and self-sustaining faculty-peer mentoring program within each college evidenced through student learning and engagement.

Phase II: Extend DFI service to adjunct teaching staff; and create training and certification opportunities for educators interested in enrolling in GFU edtech workshops.
• Crazy Women of Technology (CWOT)
• Faculty development experiences
• ISTE and other national involvement, including EdTech Women
• Retreat on the mountain and proposal development
• The President goes to Cupertino!
Why a Peer-Assisted Model?

Listening to Faculty

• We have tried –
  - Full faculty presentations
  - Peer led breakout group workshops during faculty retreat
  - Invitations to brown bag lunch sessions
  - Various online training opportunities, etc.

  with mixed results.

• It became clear from conversations and faculty surveys that they really wanted one-to-one tutoring
Funding

A Four-Year Endeavor

• We started looking for grants and found most were for K-12 for faculty development
• Explored internal budget, but not considered essential need
• Innovation funding became available in spring 2015, so we used the proposal we had developed as a team - $85,000 for the pilot year with requirement to show results for continuation
Importance: Why this matters

“Faculty think they could be more effective instructors if they were better skilled at integrating various kinds of technology into their courses.” - Educause ECAR 2014

“Helping faculty incorporate strategic, pedagogically sound uses of technology into their teaching practice can facilitate a sense of student connectedness and engagement.” - Educause ECAR 2015
At institutions that provide support for faculty to use the technologies the faculty chooses to implement, students are more positive about their instructors’ integrated use of technology. - Educause ECAR 2015

Faculty and student impressions about technology integration are more positive at institutions that provide faculty with individual or group educational technology training. - Educause ECAR 2015
Figure 5. Institutional educational technology support associated with positive faculty attitudes about integrating technology into their classes.
“Now that a deeper understanding of the topic is emerging, higher education institutions have recognized that **in order to instill digital literacy in their students, they must better equip their faculty.**”

“In order for educators to better integrate digital literacy into curricula, they must receive ongoing training. It requires substantial leadership to create effective programs that enable busy educators to take time to learn new skills.”
Significant Challenges

Impeding Technology Adoption in Higher Ed

Improving Digital Literacy - Listed as “solvable challenge” again in 2016 Report

“A notable obstacle to improving digital literacy is developing a consensus of all of the elements it encompasses...It is becoming clear that however defined, digital literacy is not a checklist of specific technical skills, but rather the development of critical thinking and reflection in various social and cultural contexts.” - NMC Horizon Report 2016

“Through the creation of frameworks, higher education leaders are helping students and faculty learn skills for working in a digital society.” - NMC Horizon Report 2016
The top motivator for faculty to integrate more or better technology into their teaching practices or curriculum is evidence that doing so would benefit students. **Faculty want to see technology work, and they want evidence that it is making an impact on student learning.** - ECAR 2015
“Technology is neither inherently good nor bad. Advocating for more technology use in teaching and learning is ineffectual without the context of how it could result in better learning outcomes, why it could result in a less effortful teaching or learning experience, and/or if it would result in better communication with or engagement of students.” - Educause ECAR 2015
Faculty Survey Results

Figure 1 Digital Literacy Self-Assessment
This data comes from self reporting faculty scoring over 50 different technology applications, productivity software and FoxTALE use. This chart takes a look at this data by College. The high score and low scores give range of responses. The total score is all faculty within each college. It has not been broken down by department at this point but can be easily done.

Figure 2 Timing
Faculty were asked what would be the most convenient way to have professional development. Semester long, 4 day Workshop in the summer, 4 Day Workshop in the Spring and 4 day Workshop in May.

Figure 3 Format
Faculty were asked what format works best for professional development. The results are mixed. PLC’s work good for specific sites and colleges but over 25% would like one-on-one coaching (mentoring) that is specific to their own content area.

Figure 4 Rewards
If Faculty were to be motivated to take the professional development training, what reward would they appreciate the most. You can see that a stipend and load release would be the desire of 91% of the faculty.
Vision by Year 3:
EdTech Director per College; Mentor per Program

Pilot Year - CAS
Pilot Year Life-Cycle

Balance...
- Not pushing but
- Inviting connection
- Being helpful but
- Not intrusive
- Encouraging accountability as
- Inspire goodwill
- Nurture DFI-interest as
- Showcase DFI'er skills

Spring
- New Faculty 1-day camp
- Spring DFI Self Assess
- Spring Celebration Luncheon
- Ipad Stipend

Fall
- Fall DFI Self Assess
- Fall & Spring
- Campus EdTech Workshops
- Fall DFI Self Assess
- 1-Wk Summer Boot Camp

ID Mentors
- Encourage Mentors
- Data Gather - Before & After
- Proposal Specifics
- Data Gather - Before & After
- Acceptance Criteria
- Application
- Data Gather - Before & After
Did your own degree include online or blended learning? (20 responses)

- Yes: 8 (40%)
- No: NA
- Other: 1 (5%)

Did your own degree include courses in digital pedagogy? (20 responses)

- Yes: 7 (35%)
- Other: 13 (65%)

Professional Development in Educational Technology *

I would like

- to learn with a mentor: 11 (55%)
- to learn as a small group Professional Learning Community: 14 (70%)
- to learn online: 5 (25%)
- to learn in a hybrid setting: 4 (20%)
- Other: 2 (10%)
Online/Hybrid Pedagogy

- I can teach a fully online course
- I can teach a hybrid course
- I use my own video to enhance my online/hybrid course
- I use other video (YouTube, TED, Kahn etc) to enhance my online/hybrid course
- I can grade papers online
- I develop strong discussion questions for forums

Social Media

- Facebook
- Twitter
- Instagram
- Pinterest

What devices do you use on a regular basis? (20 responses)

- PC Laptop: 6 (30%)
- PC Desktop: 3 (15%)
- Mac Desktop: 8 (40%)
- Macbook: 0 (0%)
- iPad: 0 (0%)
- Surface: 0 (0%)
- Other Tablet: 0 (0%)
- iPhone: 3 (15%)
- Android: 11 (55%)
- Other Smart: 0 (0%)

FoxTALE/Moodle/Blackboard

- Gradebook
- Discussion Forums
- Class Website
- Assignments
- Quizzes
What were your expectations coming into the day? (13 responses)

Honesty...I love teaching and enjoy attending these workshops. But today (yesterday) I woke up and thought, "Now what tech tricks will they possibly have to teach me that I'm not already familiar with?" Nearpod AND GOOGLE FORMS were AWESOME!

I expected to learn how to use FoxTale gradebook and some new apps.

I had no specific expectations because I know so little about many of these topics; I mainly wanted to become familiar with some of the options being presented.

I had three things that I wanted to learn about yesterday. 1)How to digitize my lecture notes, 2) take FoxTALE a step further and 3) add some interaction to my class presentations. In order not to be overwhelmed, I filtered out the things that didn't feed into those three goals. I left feeling like I had traction on all three of those. Plus the google forms which didn't exactly fall into any of those three but was easy to do!

Maximizing the use of iPad in teaching

Encountering excellent workshops on educational technology applied to the classroom setting along with meeting other faculty were my expectations and all were fulfilled!

That we would get to experience some resources we can use in our courses

That I was going to learn some new technology skills

Increase my knowledge for inclusion of digital media within my pedagogy.

I was thinking that the day would be more about "encouraging" or "promoting" technology; I was pleasantly surprised when I learned it was more hands-on and allowed us to focus on our interests (ex: I cannot foresee ever wanting to use Twitter, but I would LOVE to be more proficient in things like NearPod).

Only that I would be learn about technology.

That I would learn helpful technology tools that would enhance my teaching.

I was honestly skeptical, because I tend to be pretty tech-savvy. However, the sessions proved to be awesome.

DFI New Faculty Training Evaluation

I would love to learn more about...... (13 responses)

best practices for online courses

Google Docs

For now I just want to focus on those three things. But I do want to be in communication with others using technology in creative ways to teach. In and out of the classroom.

Advanced applications of FoxTale gradebook.

foxtale and one classroom tool

Prezi

I really enjoyed google forms (survey function). I would like to get a 2.5 hr tutorial on all those icons in the google apps tab (what they do/how I can use them)

Nearpod, maximize the use of moodle for effective teaching

Increase use of digital media that can ensure the privacy of the sensitive information (client info).

FoxTALE, Google Docs, Nearpod, this list is not exhaustive. I'd love to learn more about any and everything!

Nearpod

Prezi, Youtube, iBooks for publishing (students and faculty-focused)

Continued learning on Foxtale, Google Docs, and other music-specific apps.
DFI New Faculty Training Evaluation

What suggestions do you have for the DFI leaders to support new faculty in the future?

(15 responses)

Overall, I felt the training was well organized and presented. I really enjoyed being part of this experience. I think it would be helpful to have access to a list with names and what they specialize or would be open to answering questions. For example, Robin and Paul can respond to social media questions. I think all the information was rich and having a list would allow us to reconnect with people if we were not able to attend the session.

Provide online screencasting models of how to implement each of the great educational technology applications which would be available as a faculty course accessible through FoxTale. Instructional sessions could be done through YouTube. Faculty should be required to adapt all of these to their courses and submit them as proof of their mastery of these tools. Then GFU could provide a certificate of ed tech mastery which comes with a conference presentation travel and accommodation voucher worth $1000 for any faculty members acceptance of a research presentation. This would be a great incentive which would promote action research among faculty and help to publicize the great work GFU is doing in this field of education across the curriculum in terms of innovative online course design and ed tech course applications.

Continue providing this training to new faculty, it is very valuable! In addition, this training would likely be beneficial for all faculty! This training not only provided great tools, but also an understanding of how the use of technology is changing. This, in turn, shapes our mindset and ignites our creativity on how we can use technology to enhance our teaching.

Integrate the contents in new faculty class.

Always have Projector set up to show (most but not all did). Have gradebook scenario to set up (pairs work together to create class) and work through.

The only thing I can think of is figuring out how to have following the training, maybe the next day? I know it might feel like baby-sitting to the trainers but I cannot emphasize how helpful it is to have one on one help right there. We did some of that in class but there really isn’t time. I know there was a foxtale open lab earlier in the week but I didn’t even know what questions to ask until after the training. Now, I have every assignment for every class entered in for the entire semester! So, that makes me want to look for new expanded ways to use foxtale and/or pick other piece of technology to use. I would love to have open lab time with all of the presenters so we can ask for help while we work on our own things. The day was great and we did get to play around (very hands on) during the day which was lovely. Thank you.

I loved the idea of forming groups of people wanting to use the same resources.

I loved the idea of having those sessions available for one-on-one so, even younger faculty and how they may in the workshops... it all, but here goes: I hear do I learn new it is yesterday plowed a time, you could offer the past semester. I think they’re use of more of a show and when we work in but with longer prep i designed. Your tea fits: They mean differs did. Again, I know after several years i e teach are about the out: that we had to a laptop for the trip Nearpod and Foxtale be a longer Foxta a guest! Thank you for stay around with stuff

Much of what was presented did not seem applicable to my area of interest, but maybe this is still too new to me and I am not understanding all the possibilities. I’m not sure how that could be addressed.

1) Ask what faculty new or not new want to focus on in an open ended way. That is let problem or scenario that technology can address or enhance, and then DFI leaders/mentors help brainstorm about which combination of apps can best be applied to those. I envision a group of DFI focused faculty/staff who each go deep into a range of apps. The collective group becomes a “bank” or “warehouse” of solutions from which the best fit is provided. It is a pull model rather than a push model, a model of “coming alongside” a faculty to enhance their teaching.

2) For brand new faculty, I think that FoxTALE training should be a part of the orientation. Maybe it already is. I don’t know. My experience is not typical. But I have heard from others that this would be helpful.

3) Sense that there is already a wealth of knowledge and wisdom about technology within the institution. Getting it “out there” is a challenge perhaps but I really appreciate the efforts that made the training yesterday possible. Thank you!

The FoxTale training was extremely helpful; I would continue to make those sessions available for one-on-one mentoring for anyone not familiar with Moodle. Also, younger faculty may not be familiar with terms like “QR Codes” or “Wikis”, so just explaining what those are and how they may be used in the classroom is helpful. Thank you for all the time and energy everyone invested in the workshops... and also for the excellent lunch!

I imagine most faculty would not agree with this at all, but here goes. I like the accountability of having to prep and show my work... and in turn getting to see what others do (learn new ideas). During the New Faculty Orientation that we did back in August, I would have loved to have yesterday plugged in to that week somehow. Then, instead of yesterday being about learning these for the first time, you could offer repeat sessions where we come and demonstrate HOW we’ve used what we’ve used in the past semester. In the morning sessions, 5-8 volunteers would be allotted a 20 min. window (each) where they demo how they’ve used the tool and be able to get feedback on actual course implementation. I.e., I envision it as more of a show-and-tell conference. In the afternoon (or even during the August tech day), you could have sessions where we work in groups to complete a task. This would be much like you did in the mini workshop yesterday, but with longer prep time and the tasks would be distributed randomly as well as be “new” tasks that your team designed. Your team would then walk around to give us interactive feedback as we create our “Frankenstein’s”. The main difference would be that these sessions would end with us actually having to demo what we learnt and did. Again, I know most faculty won’t like this kind of accountability placed on them at an even like this; after several years in higher ed, I get the feeling that faculty are just as insecure about our work as the students we teach are about theirs. But for what it’s worth, I would get a kick out of a framework like this.
# PLANNING TEAM - October Progress Summaries

Planning Team Outcomes: 0 (No Progress); 1 (Emerging); 2 (On Target); 3 (Distinguished)

<table>
<thead>
<tr>
<th>Desired Outcome</th>
<th>Assess Method</th>
<th>Progress</th>
<th>p. #</th>
</tr>
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<tbody>
<tr>
<td><strong>Budget:</strong> Monitor expenses and identify needed adjustments</td>
<td>Budget; Planning Team Consult</td>
<td>2 - On Target Within budget; minor changes</td>
<td>pp. 8 - 10</td>
</tr>
<tr>
<td><strong>College-Targetted Plan:</strong> Advertise, evaluate and select applicants, w Pilot Year emphasis on developing CAS faculty resources</td>
<td>Applicant Pool: We had more applicants than we could accept into the Pilot program</td>
<td>3 - Distinguished All 15 faculty engaged; most are within CAS</td>
<td>p. 6</td>
</tr>
<tr>
<td><strong>Faculty Learn &amp; Engage:</strong> Develop a Summer Camp to orient to role of pedagogy, eotechnology, and introduce various tools</td>
<td>Daily Summer Camp surveys assessing faculty learning &amp; engagement</td>
<td>2.5 - On Target + Feedback reveals engaged &amp; received rich &amp; vast amount of info</td>
<td></td>
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<tr>
<td><strong>Faculty Learn &amp; Engage:</strong> Guide faculty in developing doable, reasonable, relevant DFI outcomes</td>
<td>DFI Progress Rubric via mentor and faculty evaluation</td>
<td>2.5 - On Target + October check-in reveals faculty further along than anticipated</td>
<td>pp. 13 - 18</td>
</tr>
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<td><strong>Mentor Development:</strong> Identify, orient, and assign faculty to mentors</td>
<td>Provided instructions, Summer Camp daily mentor-mentee meetings, Monthly checks ins;</td>
<td>2 - On Target We are developing Mentor manual this year</td>
<td>p. 5</td>
</tr>
<tr>
<td><strong>Mentor Development:</strong> Offer ongoing support to mentors</td>
<td>Monthly check ins w Planning Team; DFI Progress Rubric</td>
<td>2 - On Target Support is needed to stay focused</td>
<td>p. 19</td>
</tr>
<tr>
<td><strong>Student Learn &amp; Engage:</strong> Through mentors, develop methods of assessing student learning &amp; engagement</td>
<td>Mentor Feedback; DFI Progress Rubric; Data to be gathered by faculty</td>
<td>2 - On Target Spring term will see primary data gathered</td>
<td></td>
</tr>
<tr>
<td><strong>Planning Team Support &amp; Eval:</strong> Meet regularly to discuss mentor &amp; faculty feedback, share observations, support mutual learning, evaluate program efficacy w needed adjustments, evaluate &amp; design assessment methods</td>
<td>Team check ins; DFI Progress Rubric evals by mentors; Faculty feedback surveys</td>
<td>2 - On Target Our meetings are instructive, instrumental in evaluation &amp; adjustments. We are trying to change faculty culture requiring us to be in constant contact with each other &amp; DFI members</td>
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## DFI Progress Rubric

**Collaborative, Instructive, Over Time**

18 questions; 3 Sections; 2 parts per section; 3 questions per part

### I. Faculty Outcomes

0=Not Evident; 1=Emerging; 2=On Target; 3=Distinguished

<table>
<thead>
<tr>
<th>A. Faculty DFI Outcomes  (3 questions/outcomes)</th>
<th>Outcomes related to incorporating use of digital tech to facilitate student learning outcomes</th>
</tr>
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<tbody>
<tr>
<td>Average per Person Total: 27</td>
<td></td>
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<tr>
<th>B. Pedagogy  (3 questions)</th>
<th>Evidence of targeting a course; course structure; faculty interest in higher ed pedagogy</th>
</tr>
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### II. Student Outcomes

Still being effective even though shifting methods

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<tr>
<th>A. Student Learning  (3 questions)</th>
<th>Assessment linked to outcomes</th>
</tr>
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<tbody>
<tr>
<td>B. Student Engagement  (3 questions)</td>
<td>Active participants</td>
</tr>
</tbody>
</table>

### III. DFI Methods & Structure

Evaluator of DFI

<table>
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<tr>
<th>A. Mentor Structure  (3 questions)</th>
<th>Mentor = colleague, met, tracked</th>
</tr>
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<tbody>
<tr>
<td>B. Planning Team  (3 questions)</td>
<td>Mentor direction, available, promotes peer support</td>
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### Fall Progress Update

I.A Only; 13 of 15 Participants

### Spring Progress

II; ___ of 15 Participants
My Mentee made his first screencast and discovered how grateful his students are to be able to revisit a concept taught in class that requires a revisit to be reinforced.

My Mentee reports that his new standard of practice is to do a syllabus review screencast for each of his courses. Students are required to review these videos prior to the first day of class, changing student readiness and engagement starting that very 1st day.
This Mentee's use of digital technologies was practically non-existent and is precisely the faculty we wish to engage. Upon hearing his wishes, needs, and constraints, he was encouraged that solutions might exist: He could tailor his use of online tools to suit his students' learning objectives and in consideration of his constraints. He has exceeded his Fall outcome goals and is excited to continue his momentum especially as he has observed increased student learning and engagement.
Faculty led peer mentoring is already expanding

- Informal Professional Development groups
- Led by DFI mentors and mentees
- Multiple formats to engage learning styles
- Peer-to-peer collaboration
Motivating Faculty
Mentor Development

Mentor Professional Development

• Informal Peer Mentoring
• Writing case studies
• Presenting at conferences
Thank You

Linda Samek, Robin Ashford, Gloria Doherty, Debby Espinor, & Anna Berardi
Proposed Schedule
Linda - Slides #1 - 5
Robin - Slides #6 - 12
Anna - Slides #13 - 23
Gloria - Slides #21 - 24

Method
* Keep it interactive (Gloria is running Poll Everywhere so perhaps each of us should think of a question?
* Move thru our slides rather quick as we don't have much time (50 minutes)
* While there is a recommended lead for each slide, any of us can chime in as this is a dialog