

# POD 2014

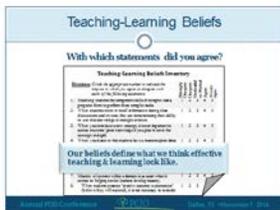
## Critical Transitions in Faculty Learning: *Helping Faculty Become Learning-Centered Teachers*

**BRING:** flash drive w/ PPTs, automatic advancer, travel alarm

**Handouts:** (1) Teaching-Learning Beliefs Inventory, (2) Teaching Academy flyer w/ Goals & Objective printed on the back, (3) Curriculum Alignment and (4) sign-in sheet

 <p>1</p>	<p><b>As participants arrive, ask them to fill in the Teaching-Learning Beliefs Inventory.</b> Ask someone to be in charge of the sign-in sheet. Session begins at 2:15 p.m. <b>(PRESS)</b></p>
 <p>2</p>	<p>“Welcome.” <b>(PRESS)</b></p>
 <p>3</p>	<p>Review the agenda. <b>(PRESS)</b></p>
 <p>4</p>	<p>In the 90s, Barr and Tagg identified two teaching paradigms which they called the Instructional Paradigm and the Learning Paradigm. In the Instructional Paradigm instructors delivered instruction by transferring their knowledge to students. In order to make this transfer, only one teaching style was needed—the ages old lecture method. In the Learning Paradigm, instructors taught so as to produce learning by helping students discover and construct their own knowledge, and hence, multiple learning styles were needed. In the Instructional Paradigm time was held constant, the Carnegie unit was defined as so many hours of instruction equaled so many credit hours. Within this ridged structure, learning varied—some students passed while others failed. In the Learning Paradigm, learning was held constant while the time varied. Mastery learning became popular with students being permitted to attempt learning tasks until</p>

they reached mastery. Of course, the Instructional Paradigm promoted recall of material presented by the instructor in lecture format. Faculty made learning competitive and individualistic, and often graded on a curve. In contrast, the Learning Paradigm promoted understanding over memorization, and faculty became designers of learning environments, employing cooperative and collaborative learning techniques. **(PRESS)** These opposing paradigms are still around today but are now more often referred to as teacher or teaching centered and learner or learning centered. Until recently the Instructional or Teaching-Centered Paradigm has been the traditional paradigm of higher education. The basic assumptions underlying this paradigm are that subject matter content is the primary focus of instruction, and the role of the instructor is to transfer knowledge to passive, note-taking students. Students are assumed to be empty vessels to be filled with knowledge and to learn like their instructors did years ago. Because these assumptions are held to be ‘common sense,’ they are accepted as truth without critical reflection by teaching-centered instructors and form a set of beliefs which underlie everything that happens in the classroom.” **(PRESS)**



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Of course in last 15 years, neurologist, psychologists, and educational researchers have been learning a lot about how learning works. This research-based knowledge is often in conflict with deeply held beliefs about the best way to teach. When you can in you were asked to complete a survey on your belief about teaching and learning. *How did you do? With which statements did you agree?* [Accept all responses. Get at the idea that most of the statements are either incorrect outright or represent incomplete knowledge and are therefore also incorrect.] For example, the first statement. Although mastery of component skills is important for being able to perform complex tasks, teaching just the component skills is not enough. Students also need to be able to connect the parts together and integrate them into a whole. Depending on the task, they may also need to know when to apply rules, and the rule to be applied may be context dependent. In these cases, having just the component skills will not enable students to perform complex tasks. That idea is closely relate to question 6, ‘If you teach concepts sequentially and effectively, there is no need to explicitly make connections between them.’ Yes, it helps to teach concepts sequentially and effectively, but that won’t help students master

	<p>them until they understand the connections between the concepts. In learning, the whole is greater than the sum of the parts. <i>Are there other statements you'd like to discuss?</i> <b>(PRESS)</b> Remember that our beliefs define what we think effective teaching and learning look like.” <b>(PRESS)</b></p>
<p>Teaching Environments ○ What does teaching look like on your campus?</p> <p>6</p>	<p>“When you observe faculty, what does teaching look like on your campus? <b>(PRESS)</b> Does it look like classroom number 3 with the instructor in the front of the room talking at students, solving problems on the board without asking for student input? <b>(PRESS)</b> Or perhaps you see a lot of classes like the one in number 5, large lecture halls filled with 200 or more students, again with the professor in the front of the room either writing on the board or lecturing using PPT slide. When you're in those large lecture halls, <b>(PRESS)</b> do you ever see students entertaining themselves with electronic media <b>(PRESS)</b> or perhaps even sleeping?” [Pause] <b>(PRESS)</b></p>
<p>Teaching Environments ○ In which classrooms are students learning the most?</p> <p>7</p>	<p>“So in which classroom are students learning the most?” [Accept all response. Get at the idea that only students in classroom 2 and 4 are actively engaged and are therefore the most likely to learn.] <b>(PRESS)</b></p>
<p>Teaching-Learning Beliefs ○ Maladaptive Beliefs Lead to ...</p> <ul style="list-style-type: none"> <li>• “Privatization of teaching” never now</li> <li>• Over reliance on lecturing</li> </ul> <p>8</p>	<p>“Because the majority of faculty receive little or no pedagogical training, they often hold inaccurate beliefs about how to teach so students can learn. This leads to what Parker Palmer refers to as ‘privatization of teaching’ and to isolation, especially in departments where research is valued over teaching. Essentially, the only model of teaching they have seen is the lecture method. They reason, I learned this way so this must be a good way to teach my students, and the cycle of lecturing as effective teaching continues in their minds. However, research has demonstrated over and over again that the human mind cannot pay close attention for very long. This graph illustrates the impact of lecturing on students’ attention levels. Notice that after about 15 minutes max, students’ attention begins to wane and keeps declining until the end of class. Once students reach a point of cognitive overload, the brain takes a siesta in order to create room for more input into working memory.” <b>(PRESS)</b></p>

Faculty Developers Know

Conundrum

- Instruction can be ineffective & challenging for untrained, inexperienced instructors.
- Difficult for faculty to attend workshops.

Learning Principals Solutions

- Professional development that is longer & intensive is more likely to effect faculty beliefs and behaviors.
- Linkage between instruction and the "real world" using experiential learning methods is necessary for changes in beliefs and practices.



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“As faculty developers we know all this, which puts us between a rock and hard place and presents us with a difficult puzzle, a conundrum if you will. We understand that instruction can be ineffective and challenging for untrained and inexperienced instructors. You also know how difficult it is to get faculty to attend workshops of any kinds, let alone the in-depth training they need. This leads to a vicious cycle. Lack of training leads to ineffective teaching, yet the ineffective teaching continues because faculty don’t get training. **(PRESS)** However, as professionals we also understand basic learning principals and can call on them to help us find solutions. We know longer professional development with connected components is more likely to influence faculty beliefs and behaviors. We also understand the importance of the linkage between instruction and the “real world” and the use of experiential learning methods to bring about changes in beliefs and practices. Unless training is experientially-based, long term, and had has connected components, it is not effective in changing beliefs. And when beliefs are unchanged, behavior doesn’t change either.” **(PRESS)**

Faculty Development Model

Is this how you learned to teach?  
How effective was/is this model?



Slaker Berlin Model

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“This is how I learned to teach undergraduates. Is this how you learned also? [Accept all responses.] How effective was this model for you? [Accept all responses.] Think back to the conundrum I just mentioned. *Are you able to use learning principles to plan long-term, experiential, pedagogical training on your campus? Do faculty attend?*” **(PRESS)**

What Does Your Center Do?

Turn to a neighbor and explain . . .

- How instructors learn about effective pedagogical practices on your campus.
- What training is available to new instructors before they teach?
- Do you offer a workshop series—multiple sessions with a commitment to attend?
- Are faculty paid to attend?
- How do you evaluate training effectiveness?

- 2 minutes each -



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“I’d like you to turn to a neighbor and talk about what you do to help faculty get the training they need. I’ve posted some ideas of things to talk about on the screen. Use them to start a brief conversation, no more than 2 minutes per person please.” [While participants are talking, distribute the Teaching Academy flyer and Goals & Objective handout.] Call everyone back together at the end of four minutes and quickly debrief. “What do we do at Georgia Southern to provide faculty and TAs with long-term, experiential, pedagogical training? That’s what I’m here to share with you.” **(PRESS)**



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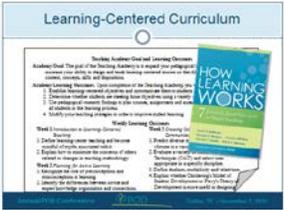
“I’ll be the first to tell you that it hasn’t been easy. We’ve had to sell the idea to faculty and learn how to grow participation. How did we go about selling the idea to faculty? Probably the way you do on your campus—with a catch flyer. Because faculty complain about the lack of time, we focused on the benefit of training as a time saver. The message was: ‘Spend a little time learning about teaching and earn time-saving dividends so you’ll have time for research and writing.’ In the summer of 2010, I worked with our college of math and science’s seven new hires and seven non-tenured STEM faculty. Five nursing faculty also joined us. They attended seven three-hour sessions. The new STEM faculty were paid by their college to attend but none of the others received funding. In fact, the STEM training went so well that I began to think of a way to offer long-term training to other faculty and campus wide. Because I was already busy during the summer, I had to look for another time to offer the training, and **(PRESS)**

. . . in the spring of 2012 I offered a pilot version of the Teaching Academy. There was no money to pay anyone, but I went ahead anyway, recruiting newer faculty and TAs with whom I had developed close working relations. I picked a day and time and offered two-hour sessions during the first eight-weeks I was able to attract 17 faculty and TA, but six dropped out after the first few sessions. **(PRESS)**

Two things helped grow participation. The first was a conscious effort to get to know new faculty—by organizing the New Faculty Orientation and by making personal visits to their offices during the first few weeks of the fall semester, and second, by allowing potential participants to select the day and time of the sessions. I also reorganized the sessions, using a book to connect them. There were again eight two-hour session and in order to accommodate teaching schedules I offered two sections—one on Monday and the other on Thursday. Once again there was no money incentive but a total of 25 instructors attended. **(PRESS)**

For the Spring 2014 series and the coming Spring 2015 one, I again had potential participants set the day and time. and did not offer any remuneration. However, I did add a new recruiting tool. I send an e-mail to past Academy graduates and asked them to recommend it to their friends if they felt it was worth their time. This time 51 potential participants, some of them tenured faculty, completed the online poll and I was able to select days and times that could

accommodate 32 of them. This spring I hope to attract 40 participants, including more senior faculty, and may have to add a third session. Yes, you can get faculty to attend without pay if you make it worth their time and use effective recruiting strategies. Building a ‘fan club’ is essential.” **(PRESS)**



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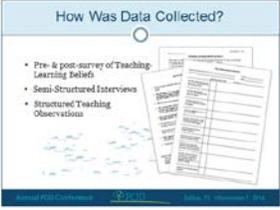
“Perhaps the most effective recruiting strategy, besides the fan club, has been the *Teaching Academy’s* learning-centered curriculum, something which evolved over time. The original STEM faculty and those who participated in the Spring 2012 pilot steered me towards topics of high interest to faculty and away from others. Take a moment to look at the *Teaching Academy* goal, learning outcomes, and weekly SLOs. [Pause. Respond to comments and questions.] **(PRESS)** I also added a book to connect topics, one that appealed to a wide range of faculty—Ambrose et al’s *How Learning Works*. If you haven’t read it yet, you should make it a top priority. One of the authors, Michele DiPietro, also presented in January 2013, which was a tremendous help in getting faculty interested in attending the series.” **(PRESS)**



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“What did participants do each week for two hours? How did they invest their 16 hours? First they read the book and came prepared to discuss it. In order to focus their attention on what’s important in each of the chapters, I prepared reading guides which are available in the series LMS. The second investment participants made was their commitment to working on a target course. During the series attendees created or revised the target course syllabus, used and reported on a CAT, investigated disciplinary misconceptions, and created a lesson plan. **(PRESS)**

They were also involved in 16 hours of active ‘seat’ time, but they weren’t always sitting as you can see from the picture. We read case studies and discussed them and they participate in simulations. One such example is the simulation were teams serve as members of a campus-wide committee to report on various CoLTs to the provost. When we talk about grading issues, participant graded an exam essay question in small groups, simulating how they can ensure inter-rater reliability for departmental tests items and assignments. They also learn about appropriate feedback by practicing peer feedback. One of the most popular actives was chapter reading reviews, each in a different style. By generating discussions using strategies like jigsaws, concept maps, pictorial summaries, a

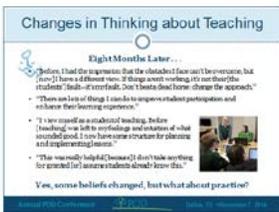
	<p>readiness assessment test (RAT), quiz question analysis, working definitions, and even a YouTube video, participants were able to experience other ways of covering materials without lecturing. In fact, participants invested a lot of time reading and preparing assignments while they were teaching their own classes and some offered this observation in their Learning Journal. I took this as an opportunity to point out that this is what their students were experiencing. This was eye opening for many participants, especially those who had not been students for many years. <b>(PRESS)</b></p> <p>And last but not least, participants also supplied food by taking turns bringing something for the whole class. In Georgia, by state law, we are not allowed to spend center money on food or beverages. When you think about it, that’s a lot to invest and you may be asking yourself, ‘What did they receive as a return on their investment?’ What did they get beside extra work? <b>(PRESS)</b></p>
 <p>Investments &amp; Return</p> <p>15</p>	<p>“They got to keep their <i>How Learning Works</i> books and they received this certificate. That’s it. There was no money to pay them, and none for food either. I’d like to think the <i>Academy</i> had intrinsic value for the participants, but I was also investing a great deal of time and effort into planning and presenting each of the session. When the pilot was over in Spring 2012, I was drained and discouraged. Of the 17 faculty and TAs I had personally recruited, 6 had dropped out and the absence rate wasn’t always good. <b>(PRESS)</b> I said to myself, ‘This is too much work. How do I know I’m getting through to folks? What is my reward?’ But I decided things weren’t so gloomy after I ran the stats on the pre- and post-beliefs inventories. In addition to enjoying the series, participants did in fact change some of their beliefs. I decided to offer the <i>Academy</i> the following year and to begin studying its impact on beliefs AND practices.” <b>(PRESS)</b></p>
 <p>How Was Data Collected?</p> <ul style="list-style-type: none"> <li>• Pre- &amp; post-survey of Teaching Learning Beliefs</li> <li>• Semi-Structured Interviews</li> <li>• Structured Teaching Observations</li> </ul> <p>16</p>	<p>“That summer I designed a study and submitted an IRB request. In addition to the pre- and post-surveys of <i>Teaching-Learning Beliefs</i> I had been using, similar to the one you took at when you walked in, <b>(PRESS)</b> I developed a semi-structured interview protocol and found another faculty member who was willing to do the interviewing. <b>(PRESS)</b> I also located a structured teaching observations instrument that aligned well with the <i>Academy</i> curriculum and outcomes—one from the University of Texas at El Paso, if you’re interested. The interviews were conducted in the fall</p>

of 2013; they were recorded and transcribed. All the interviewees were volunteers, as were the faculty whose classrooms I observed, also in the fall of 2013.” (PRESS)



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“What beliefs changed at the end on the eight weeks? You see here the means and standard deviations both at the beginning of the Academy and during the last session. These items are similar to the ones on the survey you took as you walked in. For example the first item is about questions and whether or not to ask open-ended ones, and the last one is asks whether a hard course can also be fun. Let me pause for a moment while you look at the results. ” [Pause for 20 seconds.] *Are there questions about the statistics?* [Respond as needed.] I was thrilled with the results, (PRESS) but would participants maintain the changes in their beliefs long term? Yes, I reasoned, when the *Academy* was fresh in their minds they could recall what they learned and made informed decisions about what effective teaching and learning looked like. But what about in a month? Two months? Four months? I could start to answer this question when my colleague, Hsiu-Lien Lu, would begin the interviews. What did she find?” (PRESS)



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“Eight months later, participants describe their changes in beliefs and even practices as a result of attending the Academy. Those interviewed were changing from teaching-centered thinking to learning-centered think. Here what four of them had to say . . .

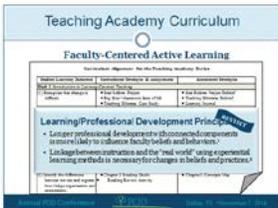
- Before, I had the impression that the obstacles I face can't be overcome, but [now] I have a different view. If things aren't working, it's not their [the students'] fault—it's my fault. Don't beat a dead horse; change the approach. (PRESS)
- There are lots of things I can do to improve student participation and enhance their learning experience. (PRESS)
- I view myself as a student of teaching. Before [teaching] was left to my feelings and intuition of what sounded good. I now have some structure for planning and implementing lessons. (PRESS)
- This was really helpful [because] I don't take anything for granted [or] assume students already know this.”

Of course these are only a few of the comments made by participants. I would be glad to share additional ones if you e-mail me. [Pause] The interview results showed that some beliefs had changed and were holding, but what about practice? Were changes in beliefs resulting in changes in teaching practices?” (PRESS)



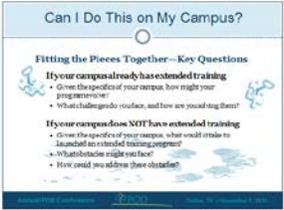
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“Last fall, in addition to the interviews conduct my colleague, Hsiu-Lien Lu, I observed seven participants teach. This chart shows the results of what I saw. I’ll pause for a moment to let you to look at it before I explain what I found. [Pause 10 seconds.] The results demonstrate that the majority of those observed exhibited the effective teaching behaviors they learned, with some performing extraordinarily well on some behaviors. As you can see, **(PRESS)** all participants used concrete examples to clarify material, **(PRESS)** every instructor observed used in-class activities to determine whether students understood materials, **(PRESS)** and everyone required student to be actively engaged in some way. Surprisingly, some of those observed **(PRESS)** received pluses indicating they used concrete examples, challenged students to think analytically, etc., multiple times. These behaviors were emphasized and demonstrated repeatedly throughout the *Academy*. **(PRESS)** Additionally, three of the seven instructors observed did not exhibit one of the ten behaviors I was hoping to see, but no one failed to exhibit more than one behavior. And some of the behaviors not observed where appropriate for the lesson being taught. **(PRESS)** *Are there comments or questions about any of the results before I ask you to think about your own campuses?* [Respond as needed.] I’m currently collecting additional data this fall from last spring’s participants.” **(PRESS)**



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[Pass out handout while talking.] “In just a moment you’ll be asked to consider long-term faculty development on your campus. But before I do that, I’d like to share my curriculum alignment map for the *Teaching Academy*. Hopefully it will give you an idea of the faculty-centered, active-learning strategies used throughout the *Academy* and the many ways in which the weekly sessions were connected. **(PRESS)** You may recall that connected components and linkages between instruction and ‘real world ‘experiences, in this case university classrooms and tasks faculty perform regularly, are critical factors in promoting changes in beliefs and practices. Without these factors, faculty development series, short or long, are doomed to failure, because learning principals tell us that events like the *Teaching Academy* require meticulous and careful planning.” **(PRESS)**

 <p style="text-align: center;"><b>21</b></p>	<p>“I’m hoping by this point you are asking yourself, ‘Can I do this on my campus.’ I believe you can you fit the pieces of the puzzle together if you ask yourself some key questions. <i>Would you like to work with those around you or separate into two groups—those who already have some form of extended training on their campuses and those who don’t?</i> [Follow participants’ suggestions.] I’ve put some questions on the screen to help you begin the conversation.” [Allow participants to talk together until five minutes before the session ends.] <b>(PRESS)</b></p>
 <p style="text-align: center;"><b>22</b></p>	<p>“Before I end, I’d like to share a few final thoughts. I hope I’ve convinced you that faculty will . . .</p> <ul style="list-style-type: none"> <li>▪ Come to multiple session series IF you first build a ‘fan base’ — even without pay.</li> <li>▪ Do ‘homework’ IF it’s meaningful and related to their courses.</li> <li>▪ Change IF you demonstrate best practices. <b>(PRESS)</b></li> </ul> <p>I hope you leave with the idea that faculty can change if we change what we’re doing. Just as we ask faculty to rethink what they do to make their teaching more learning-centered, we need to rethink what we do and be sure to use faculty-centered learning—it’s the key to promoting faculty changes in beliefs AND practices.” <b>(PRESS)</b></p>
 <p style="text-align: center;"><b>23</b></p>	<p>“Thank you for coming. It’s been delightful learning with you. Let me leave you with some words of wisdom from Patricia Cross who said, ‘Teaching without learning in just talking.’ This is true for faculty AND for faculty developers teaching faculty. Also, good luck answering key-question puzzle pieces as you expand your faculty’s teaching-learning world! If you haven’t yet done so, be sure to sign the list if you want copies of the PPTs or plan to access them on WikiPODiA. And don’t forget, if you have questions about the <i>Teaching Academy</i>, let me know. I will be glad to talk to you, share materials and offer suggestions. My contact information is on the screen.” <b>(PRESS)</b></p>