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Program development and outcomes of a peer observation and evaluation process at a school of pharmacy

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Objectives

- Describe a faculty peer observation and evaluation (POE) program and its outcomes

- Provide a framework for programs to use as they are developing their own POE programs

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Why peer evaluation of teaching?

- Student evaluations are limited
- Triangulation of student evaluations, peer feedback, and self-reflection has the best impact on teaching practices

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Rationale for a peer observation and evaluation program at the local level

- The 2003 *School of Pharmacy's Mission Statement* includes the phrase, "dedicated to excellence in pharmacy education"
- *2003 Goals and Objectives of the Doctor of Pharmacy Program* at that time: "To incorporate *active learning* experiences which enhance *critical thinking*, *problem-solving skills*, and *self-reflection* to support self-directed *life-long learning*."

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Development of the POE system and Peer Observation and Evaluation Tool (POET)

- Task force representative of the department

- Education expert as consultant
  - Faculty development session about peer evaluation
  - Continued advice throughout planning process
  - Eventually facilitated training of all faculty

- Review of literature and web search for examples of successful peer evaluation systems
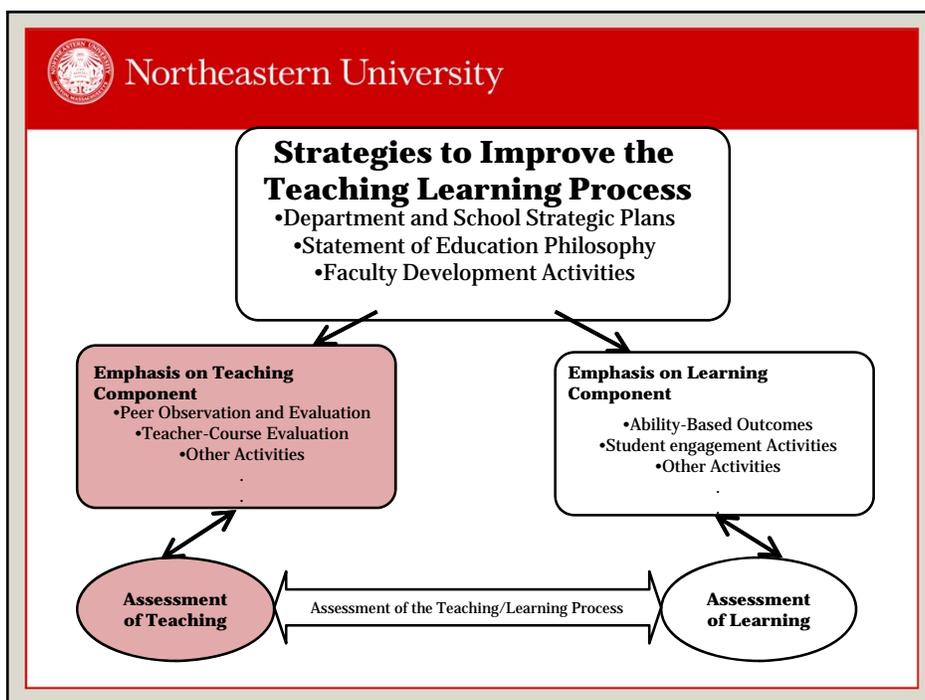

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First needed to operationalize a common teaching/learning philosophy

- Can't have a standardized peer assessment without explicitly identifying the elements of what should be included in assessment

- Development of an Educational Philosophy by the Department of Pharmacy Practice
  - Eventually the elements of the philosophy served as the blue print for POET

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Elements of 2006 Educational Philosophy

- Faculty serve as active facilitators to students of different backgrounds as they construct ways to achieve ability based outcomes necessary for a lifetime practice of pharmacy.

- Faculty create active, reflective, student-centered learning environments that encourage critical thinking, problem solving, and integration of practice and didactic experiences.

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Strategies to Improve the Teaching Learning Process
•Department and School Strategic Plans
•Statement of Education Philosophy
•Faculty Development Activities

Emphasis on Teaching Component
•Peer Observation and Evaluation
•Teacher-Course Evaluation
•Other Activities
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Emphasis on Learning Component
•Ability-Based Outcomes
•Student engagement Activities
•Other Activities
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Assessment of Teaching

Assessment of the Teaching/Learning Process

Assessment of Learning

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Initial steps

- Initial focus on the learning component
  - large classroom lecture

- Survey to evaluate faculty attitudes about peer evaluation and needs assessment

- Task force members participated in several faculty development sessions on peer assessment

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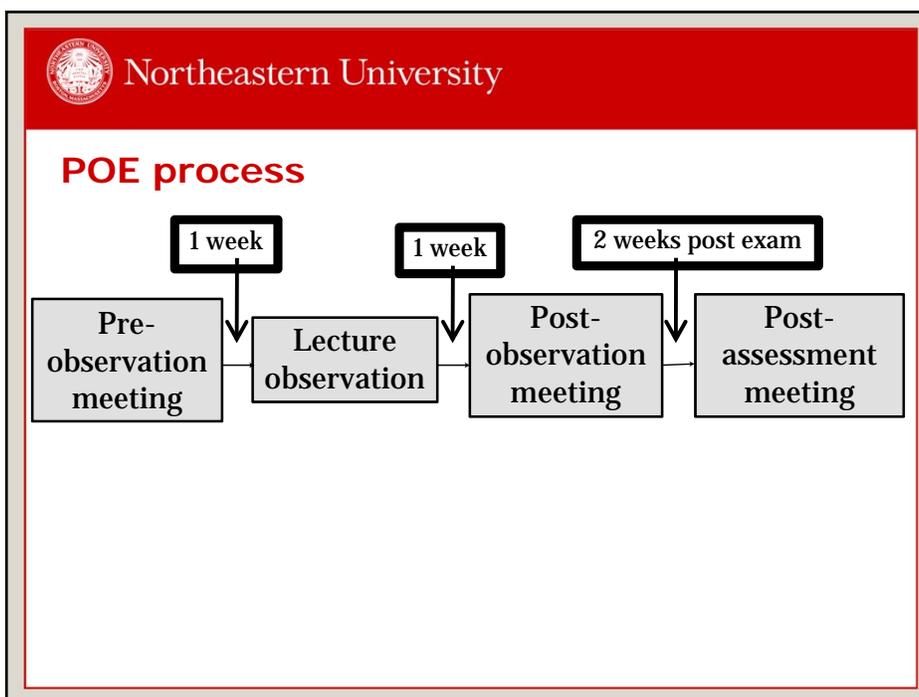
POE process discussions

- Webb and McEnerney's stepwise approach
  - Clear vision
  - Formative vs summative
  - Leadership in the process
  - Identification of participants and peer observers
  - Establishing POE process
  - Identifying instrument
  - Training
  - Logistics, incentives and consequences, and record keeping

Webb J, McEnerney K. Implementing Peer Review Programs: A Twelve-Step Model. In: To Improve the Academy, vol. 16. San-Francisco, CA: Jossey-Bass Publishers;1997.

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12. If a colleague observed your classroom teaching, which of the following areas you like to receive feedback on? Please rank on the scale of 1 (do not need feedback) to 4 (need the most feedback)

	Do not need feedback			Need the most feedback	Rating Average	Response Count
Use of active learning	15.8% (3)	21.1% (4)	47.4% (9)	15.8% (3)	2.63	19
Assessment of learning	0.0% (0)	26.3% (5)	63.2% (12)	10.5% (2)	2.84	19
Lecture content	0.0% (0)	42.1% (8)	52.6% (10)	5.3% (1)	2.63	19
Presentation style/skills	5.3% (1)	36.8% (7)	47.4% (9)	10.5% (2)	2.63	19
Classroom climate / learning atmosphere	5.3% (1)	31.6% (6)	57.9% (11)	5.3% (1)	2.63	19

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POE process

1 week		1 week		2 weeks post exam	
Pre-observation meeting	→	Lecture observation	→	Post-observation meeting	→	Post-assessment meeting

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POET

- Pre-observation visit
  - 8 items and pre-scripted interview questions

- Classroom observation
  - 5 items – content; 17 items - teaching strategies and presentation skills; 5 items – classroom climate

- Post-observation meeting
  - No ranked items, contains a guiding questions for reflection

- Post-assessment meeting
  - 4 items

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Pilot study to establish inter-rater reliability

- Methods:
  - Viewed pre-recorded lecture as a team – added clarifying descriptors to items
  - Teams of 2-3 observed 8 lectures and independently filled out POET
  - Intraclass correlation coefficients were calculated for classroom observation items
  - ICCs ranged from 0.66 to 0.97 indicating good intra-rater reliability

Trujillo JM , DiVall MV, Barr J, et al. Am J Pharmac Educ 2008;72:article 147

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Implementation steps

- Department policy and procedure
  - Formative
  - Mandatory once a year participation
  - Central person to match observer and instructor
    - *Observers must be trained*
    - *Instructor suggests 3 possible observers and have one right of refusal if they do not like match*

- Training for all faculty

- Implemented with 2008 calendar-year based merit cycle

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Program evaluation

- 2 years post implementation faculty surveyed
  - Frequency of participation in POE both as observers and instructors
  - Adherence to POE policies and procedures
  - Types and perceived value of POE feedback received
  - Impact of POE on teaching
  - Perceptions/ attitude questions similar to pre-implementation survey

DiVall MV, Barr J, Gonyeau M, et al. Am J Pharmac Educ 2012; 76 (4): Article 61.

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Results
Participation and adherence to POE P&P

- 22 faculty (76%) responded to program evaluation survey
  - 16 were pre-2008 hires and participated in initial training

- 39 distinct peer observations over 2 years
  - 12 had 2 POE visit
  - 5 had 1 POE visit
  - 3 had 3 or more POE visits
  - 14 served as peer observer at least once (mean visits=2.8)

POE steps (N=32 observations)	%
1.Pre-observation meeting	100
2.Lecture attended	100
3.Post-observation meeting	94
Instructor completed self-reflection using POET	84
4.Post-student assessment meeting	47

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Results
Types of feedback and impact on teaching

- 100% reported receiving balance of positive and constructive feedback

- 100% agreed with assessment of strength and 94% agreed with assessment of areas for improvement

- 72% agreed POE made them more aware of strength

- 72% agreed POE identified areas for improvement

- 78% agreed POE gave concrete suggestions for improvement

- 71% incorporated reflection on POE into annual performance review

- 89% agreed that overall the benefits of POE outweigh the effort of participation

Agreement defined as combined response to SA and A

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Results
Types of feedback and changes made

N=30 observations	Type of feedback (%)	Changes made* (%)
Content/lecture organization	13	33
Presentation style	20	17
Teaching methods	10	33
Student interaction	3	17
Lecture assessment	3	23
Balance of the above	43	23
Did not make changes	N/A	13

Multiple responses were possible

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Results
Experience of Peer Observers

- 64% reported adhering to all 4 steps

- 71% adhered to all timelines

- Most frequently missed step – post-assessment discussion
  – Workload/ time issue most common barrier

- Average time spent on POE cycle was 4.3h

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Results
Faculty experiences with POE

- **Pre-implementation survey (n=19, 76%) 2007**
  - 63% reported at least one lecture peer evaluated in previous 5 yrs
  - Only 1 person received training

- **Program evaluation survey (n=22, 76%) 2010**
  - 91% reported at least one lecture peer evaluated in past 2 years
  - 100% of those hired prior to 2008 (n=16) had at least one lecture peer evaluated
  - 82% were trained

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Results: *attitudes*

SA=strongly agree; A=agree; SD=strongly disagree; D=disagree; UC=unable to comment		SA + A	SD + D	UC
Peer assessment positively impacts teaching	pre	90	10	0
	post	94	6	0
Peer assessment positively impacts student learning	pre	61	6	33
	post	100	0	0
Peer assessment will improve my ability to get promoted	pre	53	29	18
	post	66	17	17
I am willing to modify or have modified my classroom teaching based on student feedback	pre	100	0	0
	post	100	0	0
Peer assessment is a better measurement of teaching effectiveness then student evaluations	pre	63	26	11
	post	83	11	6
Peer assessment should be conducted by a colleague who has been trained appropriately	pre	90	5	5
	post	95	0	5
Peer assessment should be conducted by a colleague with some content knowledge/ expertise	pre	47	37	16
	post	23	72	5

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Peer assessment should be conducted by a colleague who has been trained appropriately	pre	90	5	5
	post	95	0	5
Peer assessment should be conducted by a colleague with some content knowledge/ expertise	pre	47	37	16
	post	23	72	5

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Conclusions from program evaluation survey

- Faculty participation and adherence to process was high in the first 2 years
  - With the exception of the post-assessment step

- Faculty felt they received balanced and valuable feedback and benefits of POE outweighed the efforts of participation

- POE process is not time consuming once learned

- Faculty indicated desire for additional training

- Faculty did not have evidence of impact of POE on student learning outcomes

- New hires did not consistently get oriented and trained on POE

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Continual program improvements

- Continual faculty development!!
  - KEY to its success

- Areas for continued development:
  - Create a POE Training Manual
  - Summative vs. formative
  - Revision of the current POE policy & procedures as well as modifications made to the POET
  - Explore strategies to document impact of POE on student learning outcomes

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Continual program improvements

- Future faculty development sessions (expert led):
  - Peer observation training for new faculty
  - Summative evaluation training (the "how to's")

- Exploring the implementation to a school-wide process as well as to the Bouvé College of Health Sciences

- Continue to elicit faculty feedback

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- DiVall MV, Barr JT, Gonyeau M, Matthews SJ, Van Amburgh J, Qualters D, Trujillo J. Faculty attitudes, experiences, and outcomes with a formalized peer observation and evaluation program. American Journal of Pharmaceutical Education. 2012; 76 (4). Article 61

- **If you would like to review or use POET instrument described in this presentation and the studies, please send me an email at m.divall@neu.edu**