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

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Director of Assessment

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
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

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.”
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

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 blueprint for POET
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.

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

Emphasis on Learning Component
- Ability-Based Outcomes
- Student Engagement Activities
- Other Activities

Assessment of Teaching

Assessment of the Teaching/Learning Process

Assessment of Learning
**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

**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

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)

<table>
<thead>
<tr>
<th>Area</th>
<th>Do not need feedback</th>
<th>Need the most feedback</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of active learning</td>
<td>15.8% (3)</td>
<td>21.1% (4)</td>
<td>47.4% (9)</td>
<td>15.8% (3)</td>
</tr>
<tr>
<td>Assessment of learning</td>
<td>0.0% (0)</td>
<td>26.3% (5)</td>
<td>63.2% (12)</td>
<td>10.5% (2)</td>
</tr>
<tr>
<td>Lecture content</td>
<td>0.0% (0)</td>
<td>42.1% (8)</td>
<td>52.8% (16)</td>
<td>5.3% (1)</td>
</tr>
<tr>
<td>Presentation style/skills</td>
<td>5.3% (1)</td>
<td>36.8% (7)</td>
<td>47.4% (9)</td>
<td>10.5% (2)</td>
</tr>
<tr>
<td>Classroom climate / learning</td>
<td>5.3% (1)</td>
<td>31.6% (6)</td>
<td>57.9% (11)</td>
<td>5.3% (1)</td>
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POE process

- Pre-observation meeting
- Lecture observation
- Post-observation meeting
- Post-assessment meeting
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

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

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

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

Northeastern University

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)

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<thead>
<tr>
<th>POE steps (N=32 observations)</th>
<th>%</th>
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<tbody>
<tr>
<td>1. Pre-observation meeting</td>
<td>100</td>
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<td>2. Lecture attended</td>
<td>100</td>
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<tr>
<td>3. Post-observation meeting</td>
<td>94</td>
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<td>Instructor completed self-reflection using POET</td>
<td>84</td>
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<tr>
<td>4. Post-student assessment meeting</td>
<td>47</td>
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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
Results

Types of feedback and changes made

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

Results: attitudes
SA=strongly agree; A=agree; SD=strongly disagree; D=disagree; UC=unable to comment

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<th></th>
<th>SA +</th>
<th>SD +</th>
<th>UC</th>
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<td>Peer assessment positively impacts teaching</td>
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<td>pre</td>
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<td>I am willing to modify or have modified my classroom teaching</td>
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<td>Peer assessment is a better measurement of teaching effectiveness</td>
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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
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

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
Acknowledgments

• Judy Barr, S. James Matthews, Michael Gonyeau, Jenny Van Amburgh for their work on POE process
• Jennifer Trujillo and Dan Robinson who initiated the project and saw it through to implementation
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• Donna Qualters for being our educational expert through this entire process
• Dean Jack Reynolds and our Department Chair David Zgarrick for their support

References


• 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