Peer Review in the On-Line Learning Environment
Peer Review in the On-Line Learning Environment

Investigators:
* Mary Alice Momeyer, DNP, CAGNP
* Joni Tornwall, MEd, RN
  Carolyn Schubert, DNP, CNE, RN-BC

Project Objectives:
1. Describe student satisfaction with the peer review experience in the on-line environment using a digital application designed for peer review
2. Describe students’ perceptions of the impact of an on-line peer review exercise on their ability to perform peer review.

Disclosures: There is no conflict of interest or relevant financial interest by the faculty or planners of this activity.
There is no commercial support for this activity.

* Presenters for this session.
Peer Review: a Means to Professionalism and Quality Care

- “Peer Review is an organized effort to make judgments about the quality and appropriateness of care and services provided by someone of equal rank” (ANA, 1988).
- “…measured against pre-determined standards” and evidence based practice (McAllister & Osborne, 1997; Haag-Heitman & George, 2011).
- Strategy for shared governance, professional accountability (Omart, 2014).
- Practice Focused: concerned with patient outcomes, focused on quality and safety (QSEN).
- Contributes to culture of safety vs culture of blame (Ohmart, 2014)
Peer Review: Benefits and Outcomes

Professional and Personal Benefits

• Signals mature profession
• Promotes role development and socialization
• Develops confidence in speaking, critiquing and praising the performance of others
• Empowers nurses in self regulation
• Increases personal accountability

Educational Benefits

• Promotes engagement (active learning strategy)
• Challenges students to conduct other’s course work and apply standards using critical thinking, application and synthesis of content materials.
Concerns and Challenges in the Academic Environment

- Lack of knowledge of process, or “how-to”
- “Instructor’s job”
- On-line teaching environment limits face to face contact
- Concerns re: fairness, quality, accuracy of peer’s feedback
- Negative reviews perceived as personal attacks
- Students’ need to affiliate with classmates
- Feelings of insecurity (generational communication skills)
Project Goals and Procedure

**Goal:** To measure students' perceptions of the feasibility and usefulness of peer review in an online setting.

**Participants:** Masters and doctoral level nursing students in an online Quality Improvement course

**Procedures:**
1. Completion of an assigned individual learning activity.
2. Students invited to perform individual peer review of classmate’s work using on-line program (iPeer) and instructor-established rubric.
3. As willing participants, students completed a survey 10 days following assignment completion.
### iPee Interface

#### My Courses

**AU15 NURSING 7403 - Innov Ldrsp in ANP (29496)**

- **Instructors:** Daniel Weberg, David Hrabe

<table>
<thead>
<tr>
<th>Events</th>
<th>Completion Ratio</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AU15 NURSING 7403 - Innov Ldrsp in ANP (29500)**

- **Instructors:** David Hrabe

<table>
<thead>
<tr>
<th>Events</th>
<th>Completion Ratio</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final 1.2 iPee Final Assessment</td>
<td>0 of 27 Students</td>
<td>Sun, Dec 13, 2015 11:59 pm</td>
</tr>
<tr>
<td>13.2 iPee Practice Submission</td>
<td>0 of 27 Students</td>
<td>Sun, Nov 22, 2015 11:59 pm</td>
</tr>
</tbody>
</table>

**AU15 NURSING 7403 - Innov Ldrsp in ANP (29501)**

- **Instructors:** Lizzie Fitzgerald, David Hrabe

<table>
<thead>
<tr>
<th>Events</th>
<th>Completion Ratio</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
iPeer Interface

1. Students
   - Add Student
   - Import Students
   - List Students
   - Email to All Students

2. Groups
   - Create Groups (Manual)
   - Create Groups (Import)
   - List Groups
   - Export Groups

3. Evaluation Events
   - Add Event
   - List Evaluation Events
   - Export Evaluation Results
   - Move Students
   - Move Group of Students

4. Team Maker
   - Create Groups (Auto)
   - List Survey Group Sets
   - Export Survey Group Sets
# Simple Rubric

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
<th>Comments (required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended and Participated in Team Meetings</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1 mark(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Knowledgeable about the topic(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1 mark(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Asked/answered questions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1 mark(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Made suggestions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1 mark(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Took turns talking; encouraged all team members to participate</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1 mark(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Exposed differences of opinion</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1 mark(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Summarized information when needed</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td></td>
</tr>
</tbody>
</table>

- **Demo Student1** (click to expand)
- **Demo Student2** (click to expand)
- **Demo Student3** (click to expand)

Submit to Complete the Evaluation
More Complex Rubric

<table>
<thead>
<tr>
<th>Significant Details Lacking</th>
<th>Some details lacking</th>
<th>Work in defined areas is complete and accurate</th>
<th>Comments (required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concise Problem Identification</td>
<td>General issue identified as theme for the case study event.</td>
<td>Problem identified. Somewhat vague and/or general.</td>
<td>Problem specifically identified; may be a component issue that contributed to the main error/event.</td>
</tr>
<tr>
<td>1 mark(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brief Purpose Statement</td>
<td>Purpose Statement lacks clarity and specific direction.</td>
<td>Purpose Statement identified. Somewhat vague and/or general.</td>
<td>Purpose statement gives direction for problem solving and quality efforts.</td>
</tr>
<tr>
<td>1 mark(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart Goal</td>
<td>More than two specific elements of a Smart Goal missing.</td>
<td>Smart Goal: one or two elements missing; specific, measurable, achievable, relevant, time framed.</td>
<td>Smart Goal Defined including all elements: specific, measurable, achievable, relevant, time framed.</td>
</tr>
<tr>
<td>1 mark(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Flowchart graphically representing the problem</td>
<td>Significant inaccuracies or omissions in the process flow diagram.</td>
<td>One or two inaccuracies or omissions in the process flow diagram.</td>
<td>Process flowchart accurately outlines steps of the error using accurate flowchart shapes.</td>
</tr>
<tr>
<td>1 mark(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fishbone Problem Diagram</td>
<td>Diagram does not reflect comprehensive thought in defining potential contributors to the problem; priorities not indicated.</td>
<td>Some pertinent details lacking in identification of contributors; OR priorities not identified.</td>
<td>Diagram clearly states problem. Identifies key contributors to the problem occurrence. Priorities indicated.</td>
</tr>
<tr>
<td>1 mark(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fishbone Solution Diagram</td>
<td>Diagram does not reflect comprehensive thought in defining potential contributors to the problem; and IOM dimensions not included.</td>
<td>Some pertinent details lacking in identification of contributors; OR IOM dimensions not identified.</td>
<td>Diagram clearly states solution. Identifies key components to the solution according to IOM dimensions.</td>
</tr>
<tr>
<td>1 mark(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is a preview. All submissions are disabled. Please complete the questions for all group members, pressing 'Save This Section' button for each one.
Digital Feedback Tools

- iPeer
- Peer review embedded in LMS
- Survey systems
- PeerMark (part of TurnItIn)
- Some textbook publishers provide tools
- Google “peer review online tool”
So far we have learned:

- Peer Review “fits” in Quality and Safety coursework
- Attitudinal barriers exist
- Students’ perceptions:
  - Positive regarding ease and efficiency of on-line methodology
  - Need for formal knowledge and skills on “how to” provide feedback
  - Anonymity is an issue: needs further consideration
Where Do We go From Here?

Recommendations:

• Design/implement learning module to introduce the concept of peer review and on-line methods

• Consider simulation training exercise?

• Further explore students’ learning in the role of reviewer and receiver of peer feedback

• Consider measurement of attitudinal change after learning activity is complete
References


