Innovative, Comprehensive Faculty Development for Large Group Teaching in a Medical School Affiliated with a Large Healthcare System

Elisabeth Schlegel, Doreen M. Olvet, Jeffrey Bird & Alice Fornari

Tuesday, September 24, 2019
• I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

• Je n’ai aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
Knowledge in Action: Valuing Learning over Teaching

- Integrated Case-based Curriculum
- Complementing Large Group Sessions
- Effective Active Pedagogy for Millennial Learners
Active Education in Large Group Sessions

• Flipped Classroom
  • Pre-work; Goals; LOs by Course Directors
• Peer-Instruction
• Socratic Questioning
• Audience Response Technology
• Worksheets
• Templates, ......
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The learning objectives and pre-work prepared me for the session.</td>
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<td>2. The faculty member fostered active learning (i.e., did not simply</td>
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<td>lecture, but asked questions and interacted with students).</td>
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<td>3. The session appropriately balanced individual facts and conceptual</td>
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<td>knowledge as related to the goals of the session.</td>
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<td>4. The instructor communicated material at a level that was appropriate</td>
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<td>for the learners.</td>
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<td>5. The instructor was well organized, delivering content in a logical</td>
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<td>progression (e.g. slides support appropriate pacing and transitions</td>
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<td>between subjects).</td>
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<td>6. The tone or atmosphere of the session enabled learners to comfortably</td>
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<td>identify and address their concerns and/or limitations.</td>
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<td>7. The session appropriately complemented/enhanced my learning relative</td>
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<td>to this week's theme.</td>
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*Describe the aspects of this session that worked well and what could be improved. Be constructive and specific.
30% of Large Group Sessions are Led by Clinical & Research Faculty

Person to Professional
Biologic Imperative
Fuel the Body
Homeostasis
Interacting with the Environment
Host Microbe Interaction
Human Condition
Clinical & Research Faculty: Northwell Health System
Faculty Development Procedure

1. Weeks prior: Review student evaluations and sessions
2. Prior to course: Contact all faculty and course directors
3. Visit faculty, set expectations & agree on educational strategy
4. Review & finalize prior to delivery
5. Session observation
6. Obtain student feedback
7. Post-observation meeting
8. Follow up with Course Directors
Faculty Development Coaching to Implement Active Pedagogy

• Facilitating learning and [performance] results is a core coaching competency
• One-to-one support can play a key part in the successful implementation of educational strategies
• Individualized coaching aims to unlock an educator’s potential to maximize their own performance and to try a new pedagogy
• Personal style and session content can be harmonized sensibly for optimal presentation
• Coaching as strategy of adult learning provides a save and flexible environment for faculty development
Mixed Methods Approach

• Faculty Survey: Usefulness of Faculty Development
  • Feedback
  • Orientation to the curriculum
  • Teaching Tips
  • Fostering active Learning

• Pre-Post Analysis of Students’ Session Evaluations, one year apart
  • Learning Objectives, progression of content
  • Fostering active Learning
Clinical & Research Faculty Feedback of Faculty Development Provided

The feedback I received about my Large Group Session was helpful to improve future sessions

- 20% Strongly Disagree
- 30% Disagree
- 50% Neither Agree nor Disagree
- 30% Agree
- 20% Strongly Agree

I was provided with an orientation to the school of medicine curriculum before my upcoming Large Group Session

- 20% Strongly Disagree
- 40% Disagree
- 40% Neither Agree nor Disagree
- 20% Agree
- 20% Strongly Agree

I was provided with foundational teaching skills and tips before my upcoming Large Group Session

- 30% Strongly Disagree
- 30% Disagree
- 40% Neither Agree nor Disagree
- 30% Agree
- 40% Strongly Agree
The learning objectives and prework prepared me for the session

- **Strongly Disagree**: 1%
- **Disagree**: 6%
- **Neither Agree nor Disagree**: 17%
- **Agree**: 48%
- **Strongly Agree**: 29%

The session appropriately balanced individual facts & conceptual knowledge as related to the session goals

- **Strongly Disagree**: 0%
- **Disagree**: 1%
- **Neither Agree nor Disagree**: 21%
- **Agree**: 35%
- **Strongly Agree**: 43%

The instructor was well organized, delivering content in a logical progression

- **Strongly Disagree**: 1%
- **Disagree**: 0%
- **Neither Agree nor Disagree**: 1%
- **Agree**: 49%
- **Strongly Agree**: 51%

The session appropriately complemented/enhanced my learning relative to this week's theme

- **Strongly Disagree**: 0%
- **Disagree**: 0%
- **Neither Agree nor Disagree**: 0%
- **Agree**: 81%
- **Strongly Agree**: 84%
Session Evaluation: Pre-/Post Intervention Impact

The learning objectives and prework prepared me for the session

<table>
<thead>
<tr>
<th></th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
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</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
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<tr>
<td>Disagree</td>
<td>6%</td>
<td>2%</td>
<td>21%</td>
<td>6%</td>
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<tr>
<td>Neither Agree nor Disagree</td>
<td>17%</td>
<td>35%</td>
<td>35%</td>
<td>38%</td>
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<tr>
<td>Agree</td>
<td>48%</td>
<td>49%</td>
<td>49%</td>
<td>46%</td>
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<tr>
<td>Strongly Agree</td>
<td>29%</td>
<td>34%</td>
<td>43%</td>
<td>46%</td>
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</tbody>
</table>

The session appropriately balanced individual facts & conceptual knowledge as related to the session goals

<table>
<thead>
<tr>
<th></th>
<th>Post</th>
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<th>Pre</th>
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</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
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<tr>
<td>Disagree</td>
<td>6%</td>
<td>2%</td>
<td>10%</td>
<td>6%</td>
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<tr>
<td>Neither Agree nor Disagree</td>
<td>17%</td>
<td>49%</td>
<td>49%</td>
<td>38%</td>
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<tr>
<td>Agree</td>
<td>49%</td>
<td>34%</td>
<td>46%</td>
<td>46%</td>
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<tr>
<td>Strongly Agree</td>
<td>29%</td>
<td>34%</td>
<td>43%</td>
<td>46%</td>
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</tbody>
</table>
The learning objectives and prework prepared me for the session

- Pre: 1% Strongly Disagree, 6% Disagree, 17% Neither Agree nor Disagree, 48% Agree, 29% Strongly Agree
- Post: 1% Strongly Disagree, 0% Disagree, 21% Neither Agree nor Disagree, 35% Agree, 43% Strongly Agree

The session appropriately balanced individual facts & conceptual knowledge as related to the session goals

- Pre: 1% Strongly Disagree, 6% Disagree, 10% Neither Agree nor Disagree, 49% Agree, 34% Strongly Agree
- Post: 2% Strongly Disagree, 4% Disagree, 9% Neither Agree nor Disagree, 38% Agree, 46% Strongly Agree

The instructor was well organized, delivering content in a logical progression

- Pre: 2% Strongly Disagree, 7% Disagree, 13% Neither Agree nor Disagree, 44% Agree, 34% Strongly Agree
- Post: 1% Strongly Disagree, 4% Disagree, 11% Neither Agree nor Disagree, 35% Agree, 49% Strongly Agree
Session Evaluation: Pre-/Post Intervention Impact

The learning objectives and prework prepared me for the session
- Post: 77%
- Pre: 48%

The session appropriately balanced individual facts & conceptual knowledge as related to the session goals
- Post: 83%
- Pre: 49%

The instructor was well organized, delivering content in a logical progression
- Post: 78%
- Pre: 44%

The session appropriately complemented/enhanced my learning relative to this week's theme
- Post: 79%
- Pre: 44%
The faculty member fostered active learning

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
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</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>9%</td>
<td>11%</td>
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<tr>
<td>Disagree</td>
<td>15%</td>
<td>34%</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>41%</td>
<td>52%</td>
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<tr>
<td>Agree</td>
<td>34%</td>
<td>2%</td>
</tr>
<tr>
<td>Strongly Agree</td>
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<td>75%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>75%</strong></td>
<td><strong>86%</strong></td>
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After meeting with the SOM faculty development expert I was prepared to foster active learning

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<thead>
<tr>
<th></th>
<th>Faculty</th>
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<tbody>
<tr>
<td>Strongly Disagree</td>
<td>60%</td>
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<tr>
<td>Disagree</td>
<td>40%</td>
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<tr>
<td>Neither Agree nor Disagree</td>
<td></td>
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<tr>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>100%</td>
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</table>

**Total**  **100%**
Active Learning Method Used Most

- 64% Tried a new Pedagogical Technique
- “Polling of audience”
- “Slide reduction for more interaction”
- “I asked the students to discuss in small group [...] the answer to the question [...] posed for them” (Think-Pair-Share)
• 90%: Coaching is helpful
• 90%: Overall satisfied
• “Give faculty more immediate feedback”
• “Continue working with faculty and helping improve the technologies used”
• “Continue to support”
• “More contact”
• “It is excellent as it is”

“What Can We Do Better?”
6-Fold Faculty Development Program

- Foundational Skill Building
- Personal Coaching: Alignment of Personal Style and Content
- QA/QI: Incorporating Feedback/Evaluations
- Continuous Teaching Innovations
- Educational Onboarding
- Establishing a Community of Practice
Summary, Lessons Learned & Advancements

• Our 6-fold faculty development program established a cadre of health care professionals applying active education in large group sessions

• Personal coaching is a successful strategy for faculty development within a large healthcare system

• Close collaboration with the course directors is needed to close communication loops

• Immediate feedback is vital for teaching excellence

• Communication of innovations will be improved through newsletters and other channels
Thank you very much!

**Workshop:** How We made it Work:
Weds 9/25; 102/Shaw Centre 1:30pm-3:00pm
Help us improve. Your input matters.

- Download the ICRE App, or
- Go to: www.royalcollege.ca/icre-evaluations to complete the session evaluation.

Aidez-nous à nous améliorer. Votre opinion compte!

- Téléchargez l’application de la CIFR
- Visitez le www.collegeroyal.ca/evaluationscifr afin de remplir une évaluation de la séance.
APPENDIX
Overall Feedback of Faculty Development Provided

Overall, the personal coaching I received about my Large Group Session was helpful

- 10% Strongly Disagree
- 50% Neither Agree nor Disagree
- 40% Strongly Agree

Overall, I am satisfied with the Zucker School of Medicine Faculty Development outreach

- 10% Strongly Disagree
- 60% Neither Agree nor Disagree
- 30% Strongly Agree
## Curriculum Overview:
The First 100 Weeks

<table>
<thead>
<tr>
<th>Curricular Components</th>
<th>The Biologic Imperative (BI)</th>
<th>Continuity and Change: Fueling the Body (FTB)</th>
<th>Continuity and Change: Homeostasis (HOM)</th>
<th>Interacting with the Environment (IE)</th>
<th>Host Microbe Interactions (HMI)</th>
<th>The Human Condition (HC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form and Function in Health and Disease</td>
<td>Cell, Molecular, and Developmental Biology, Genetics, Reproductive and Endocrine Systems, Cells of Hematologic System</td>
<td>Metabolism, Gastrointestinal System</td>
<td>Cardiac, Pulmonary, Renal Systems</td>
<td>Immunology, Rheumatology, Musculoskeletal System</td>
<td>Microbiology, Microbiome, Infectious Disease</td>
<td>Nervous System, Brain and Behavior</td>
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<tr>
<td>Reflection, Integration, and Assessment (RIA)</td>
<td>Reflection, Integration, and Assessment (RIA)</td>
<td>Reflection, Integration, and Assessment (RIA)</td>
<td>Reflection, Integration, and Assessment (RIA)</td>
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<thead>
<tr>
<th>Patient, Physician, and Society (PPS) Curricular Themes and Drivers</th>
<th>Required Clinical Experiences</th>
<th>EMT Training and Certification</th>
<th>Initial Clinical Experience (ICE) I</th>
<th>Initial Clinical Experience (ICE) II</th>
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<tbody>
<tr>
<td>Medicine, Obstetrics and Gynecology, Surgery</td>
<td>Pediatrics, Psychiatry</td>
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