The Flipped Classroom in the Obstetrics and Gynecology Clerkship: Implementation and Evaluation of a New Curriculum: Pilot Data

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Introduction

The Flipped Classroom is an exciting educational innovation that we wanted to implement in the Gynecologic Oncology portion of the Obstetrics and Gynecology Third Year Medical School Clerkship.

Objectives

• Four VPrimers were created on the topics of Cervical Dysplasia, Endometrial Hyperplasia, Adnexal Masses, and Work up of an Adnexal Mass
• LAMS (Learning Activity Management System) was utilized to create the iGage session
• Implementation of the Flipped Classroom began in October 2012
• The first period of 20 students were encouraged to watch the VPrimers prior to the iGage session
• The second period of 19 students were required to watch the VPrimers prior to the iGage session
• Pilot data analysis was performed for the first two periods of students (n=39)
• 35 students participated in the iGage sessions during those two periods
• A validated student satisfaction survey was administered after the iGage sessions

Methods

• Create high content Video Primers (VPrimers) for students to view prior to the Gynecologic Oncology didactic session
• Create engaging case-based active learning session (iGage) for the Gynecologic Oncology didactic session
• Determine if students who view the VPrimers perform better in the iGage session
• Determine if there is a relationship between shelf exam scores and VPrimer viewing, iGage performance or implementation of the Flipped Classroom
• Examine student satisfaction with the Flipped Classroom model

Results

Discussion

• Third year medical students strongly prefer the flipped classroom curriculum to traditional lecture format
• Students were very excited about expanding the flipped classroom curriculum
• Our pilot data suggests that students’ clinical and academic performance was not changed by the implementation of this new curriculum
• Future data collection will allow us to examine whether there is a difference in acquisition of clinical knowledge from the implementation of the flipped classroom

Table 1: Number of Students Who Viewed VPrimers Prior to iGage Sessions

<table>
<thead>
<tr>
<th>Watching VPrimer</th>
<th>Did not watch VPrimer</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED PERIOD</td>
<td>17</td>
</tr>
<tr>
<td>OPTIONAL PERIOD</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2: Comparison of student performance measures

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Watched VPrimer</th>
<th>Did Not Watch VPrimer</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBL Score</td>
<td>77.2 +/- 11</td>
<td>77.2 +/- 13.6</td>
<td>0.98</td>
</tr>
<tr>
<td>Shelf Exam Score</td>
<td>75.8 +/- 9.7</td>
<td>74.8 +/- 8.3</td>
<td>0.73</td>
</tr>
<tr>
<td>Essay Score</td>
<td>86.4 +/- 7.5</td>
<td>86.4 +/- 4.5</td>
<td>0.98</td>
</tr>
<tr>
<td>Clinical Performance Grade</td>
<td>6.9 +/- 1.6</td>
<td>7.25 +/- 0.7</td>
<td>0.44</td>
</tr>
<tr>
<td>Clerkship Grade</td>
<td>1.08 +/- 0.8</td>
<td>1.71 +/- 0.6</td>
<td>0.52</td>
</tr>
</tbody>
</table>

References