



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

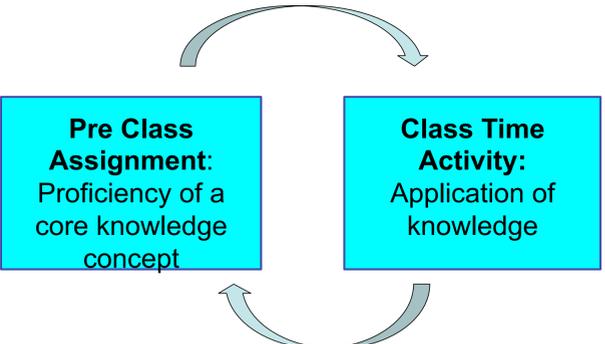


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## Introduction

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

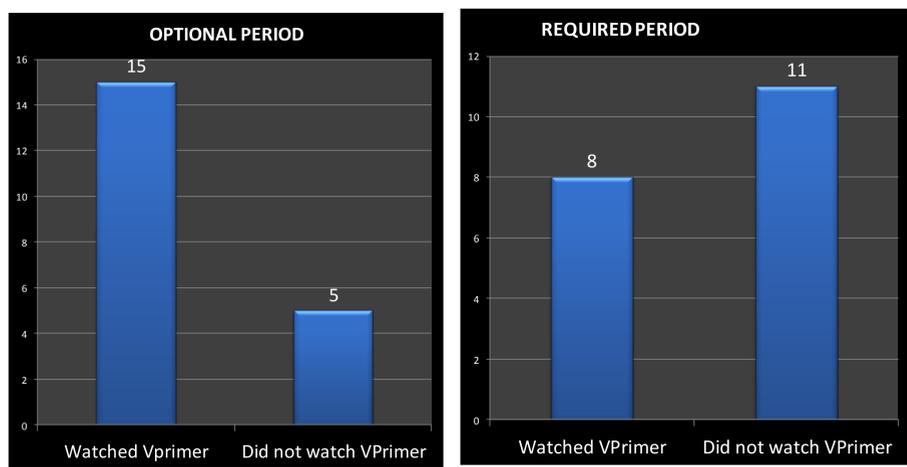
- Create high content Video Primers (VPrimers) for students to view prior to the Gynecologic Oncology didactic session
- Create engaging case-based active learning session (iGage) for the Gynecologic Oncology didactic session
- Determine if students who view the VPrimers perform better in the iGage session
- 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

## Methods

- 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

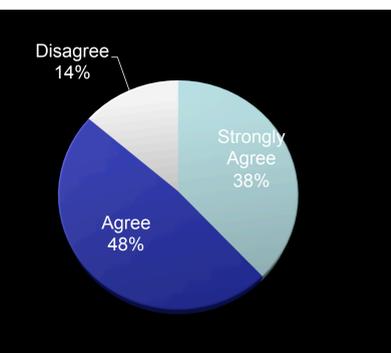
## Results

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

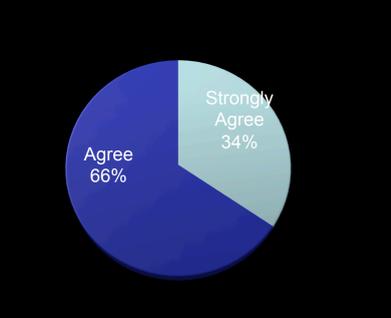


## Results

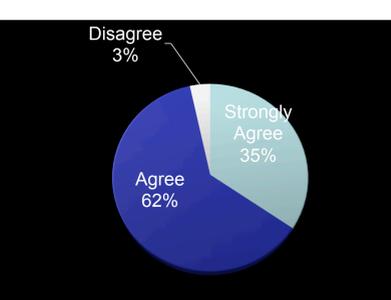
### The V Primers were preferable to traditional lecture format



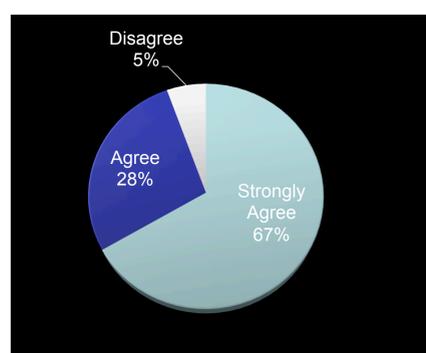
### I was satisfied with the V Primers



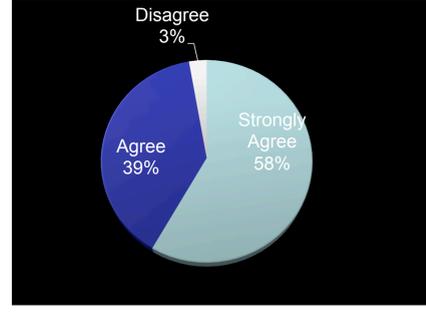
### I support expanding the use of V Primers



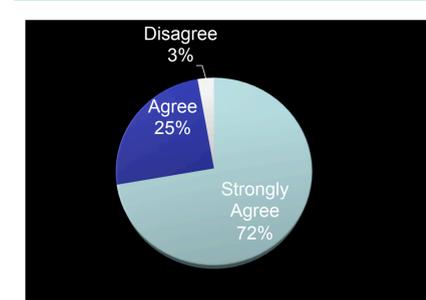
### The LAMS sessions were preferable to traditional lecture format



### I was satisfied with the LAMS session



### I support expanding the use of LAMS sessions



## Results

Table 2: Comparison of student performance measures

Characteristic	Watched VPrimer	Did Not Watch VPrimer	p value
PBL Score	77.2 +/- 11	77.2 ±13.5	0.98
Shelf Exam Score	75.8 +/-9.7	74.8 +/-8.3	0.73
Essay Score	86.4 +/- 7.9	86.4+/-4.5	0.98
Clinical Performance Grade	6.9 +/- 1.6	7.25 +/-0.7	0.44
Clerkship Grade	1.59 +/- 0.6	1.7+/-0.6	0.62

Data presented as Mean ± Standard Deviation

## 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

## References

1. Sparks, Sarah. Schools 'flip' for lesson model promoted by Khan Academy. Education Week; Sept 28 2011, Vol 31, issue 5, p1-14.
2. Prober, Charles, Heath, Chip. Lecture halls without lectures- a proposal for medical education. N Engl J Med. 2012; 366(18): 1657-9.