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Flipping the CPD Workshop: A Pilot

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Continuing Professional Development (UBC CPD)
 UBC Faculty of Medicine



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Disclosure


- No disclosures


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Flipping the CPD Workshop

1. CPD workshops
2. What is a flipped classroom?
3. Our approach
4. Outcomes
5. Ideas
6. Discussion & Questions





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CPD Workshops

- Small groups
- Interactive techniques
- Discussion based
- Responsive to participants



However...



- One-off sessions generally less effective
- Participants bring varied knowledge; can limit what is covered
- Delivering content reduces time for interactive learning and discussion


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The Flipped Classroom

Recorded presentations / online modules build foundational knowledge


 'Homework' (i.e. application/problem solving) done in class
 

Why?

- Self-paced knowledge acquisition
- Begin in-person session with same base knowledge
- Maximize time with experts and other learners

DeRosa, 2013; Hill, 2013; Prober & Khan, 2013; Talbert, 2014

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The Flipped Classroom

- Increasingly utilized in undergraduate and postgraduate education
- Is the flipped classroom effective?** Review of peer reviewed research indicates:
 - ✓ Increased openness to cooperative learning
 - ✓ Increased learner engagement and interest
 - ✓ Enhanced self-paced learning skills
 - ✓ Higher achievement

Herreid, C. F., & Schiller, 2013

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The Pilot: Flipping an Ovarian Cancer Workshop for Family Physicians

- Partnered with Ovarian Cancer Canada and local experts in gynecological oncology

- Webinar & Quiz**
 - Increase **awareness** and **knowledge**
- In-person Workshop**
 - Apply knowledge from webinar through case-based **problem solving** and **discussion**

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Ovarian Cancer Webinar

The screenshot shows a webinar interface with a video feed of a presenter on the left and a slide on the right. The slide is titled 'Investigations' and lists 'Pelvic or transvaginal U/S' with two corresponding ultrasound images. Logos for Ovarian Cancer Canada and UBC CPD are visible at the bottom of the slide.

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What did webinar participants think of the 'flipped classroom' approach? (n = 40)

The figure consists of three pie charts representing survey data from 40 participants. The first chart shows 20% of participants had heard of a flipped classroom. The second chart shows 8% of participants had actually participated in a flipped classroom. The third chart shows 75% of participants were interested in participating in a flipped classroom.

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Ovarian Cancer Flipped Workshops: Self-paced Learning

The diagram illustrates the self-paced learning process. It starts with 'Webinar Learn' (represented by a laptop icon) and 'Online Quiz Assess' (represented by a laptop icon). A double-headed arrow connects the two, indicating a feedback loop. Below the 'Webinar Learn' icon, the following statistics are listed: Live: 6, Archive: 16, Did not watch: 4. Below the 'Online Quiz Assess' icon, the following statistics are listed: Quiz: 25, Did not complete: 1.

4) What imaging test is recommended for the diagnostic work up of ovarian cancer?

Pelvic ultrasound

CAT scan

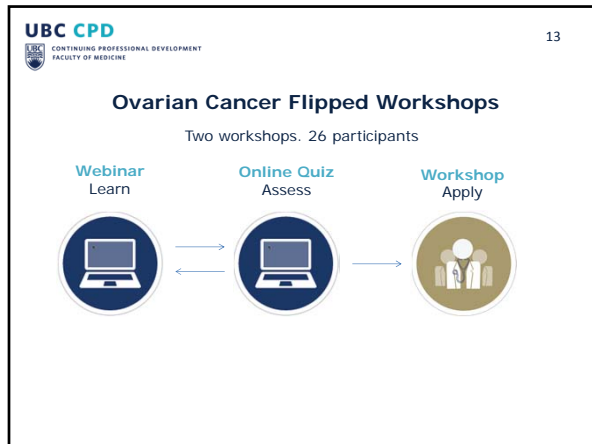
Answer: Pelvic ultrasound

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Flipped Workshop Participants' Self-Paced Quiz Scores (n = 25)

How participant learned base knowledge	Average % Score
Watched live webinar	93%
Watched archived webinar	87%
Did not watch webinar	67%



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Ovarian Cancer Flipped Workshops

Webinar

Investigations

• Pelvic or transvaginal U/S

Workshop

Michelle presents to family doctor with increasing urinary frequency... a pelvi-rectal exam reveals a cystic, 10cm tender mass between the rectum and uterus... **What investigations would you suggest?**

Quiz

4) What imaging test is recommended for the diagnostic work up of ovarian cancer?

Pelvic ultrasound

CAT scan

Answer: Pelvic ultrasound

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Participants' Self-reported Knowledge of Learning Objectives Before & After Flipped Workshop (n = 26)

Learning Objective	Response Average - Before	Response Average - After	Effect size (d)	p-value
1. Apply knowledge of different types of ovarian cancer, including symptoms, to support differential diagnosis of ovarian cancer	2.77	4.54	2.18	p<0.001
2. Order appropriate diagnostic tests for ovarian cancer based on awareness of strengths and limitations of the available options	3.16	4.76	1.65	p<0.001
3. Utilize available resources to make timely referrals to a specialist	3.54	4.77	1.61	p<0.001
4. Describe the role of a family physician in supporting patients with ovarian cancer, including identifying symptoms of recurrence and palliative care	3.65	4.62	1.20	p<0.001
5. Access available patient resources	2.82	4.57	1.84	p<0.001

**Descriptive and statistical analyses based on responses from a 5-Point Likert Scale (1 = strongly disagree, 5 = strongly agree)*

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Participants' Experiences & Perspectives of the Flipped Classroom (n = 26)

Statement	%*
As a result of watching the webinar, I felt more prepared to participate in the workshop.	70%
Watching the webinar before the workshop increased my interest in the topic.	79%
Participating in the workshop improved my comprehension of this topic through presenter and peer interaction	86%
The "flipped classroom" is more effective than traditional instructional style	95%

**Aggregates of rating scales 4 & 5 are reported (4 = Agree, 5 = Strongly Agree)*

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Participants' Experiences & Perspectives of the Flipped Classroom

Great to bring info from webinar to clinical application. It will be easier to remember too.

Excellent workshop! Very helpful, much more effective than didactic lectures

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- ### What did we learn?
- Family physicians are interested and willing to participate in flipped CPD workshops
 - Flipped workshop perceived as more effective than traditional formats
 - Webinar combined with formative quiz can be an effective 'flip'

What's Next? Ideas...

Application

- Expand to other programs
- Post workshop quiz
- Faculty development
- Build awareness among practicing physicians

Evaluation/Research

- Bigger cohort size, control group
- Examine approaches to self-paced learning
- Pre/post assessment data

Questions, Comments?



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