


# Blended learning: Is there an optimal mix of online and face-to-face instruction?

AACE World Conference on  
Conference on E-Learning  
October 20, 2017

Ron Owston, PhD  
Faculty of Education

| Proportion of Content Delivered Online   | Type of Course  | Typical Description   |
|--|-----------------|---|
| 0%   | Traditional     | Course with no online technology used — content is delivered in writing or orally.  |
| 1 to 29%   | Web Facilitated | Course which uses web-based technology to facilitate what is essentially a face-to-face course. Uses a course management system (CMS) or web pages to post the syllabus and assignments, for example. |
|  30 to 79% | Blended/Hybrid  | Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings.      |
| 80+%   | Online          | A course where most or all of the content is delivered online. Typically have no face-to-face meetings.   |

# Todaysmeet.com/Blend

TodaysMeet

Blend

Listen

Welcome and post your comments/questions here.

7 minutes ago by Ron

Talk

Nickname:

Join

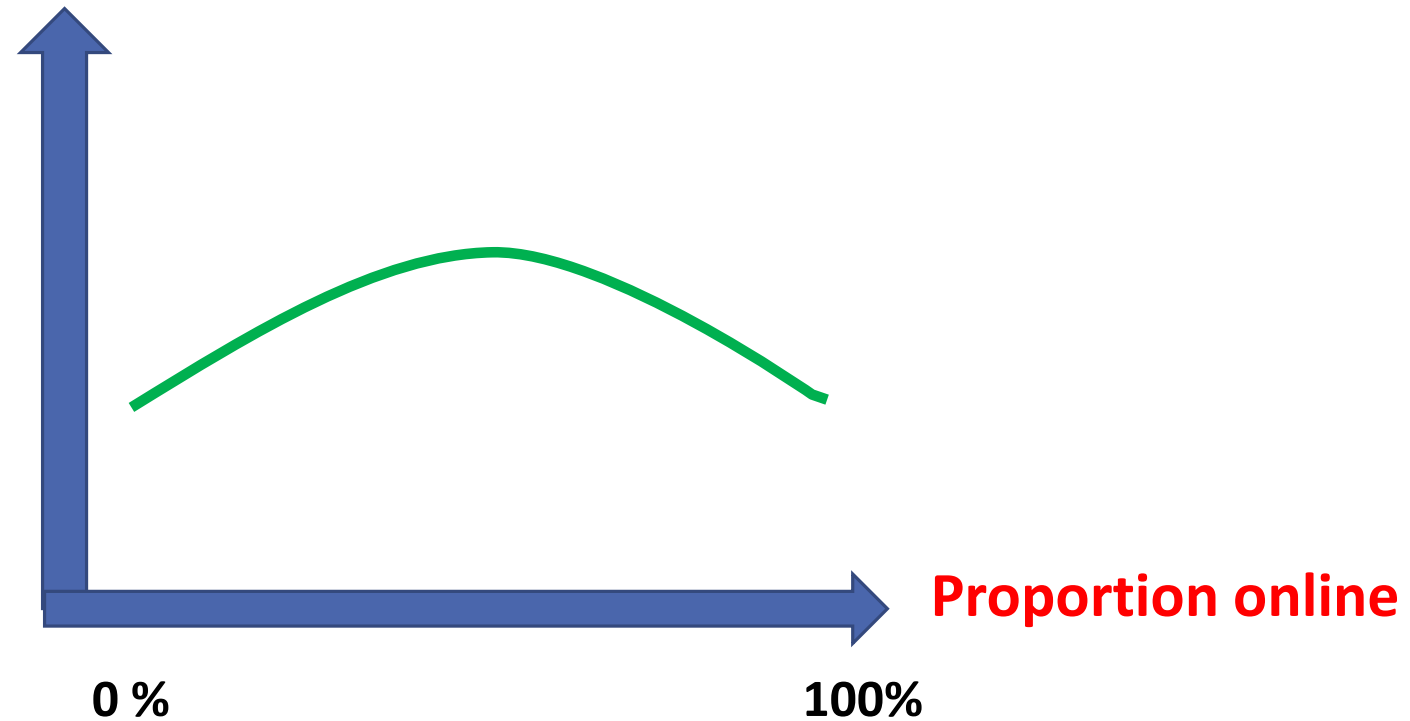




# Quality of experience in my course

---

**Student satisfaction**



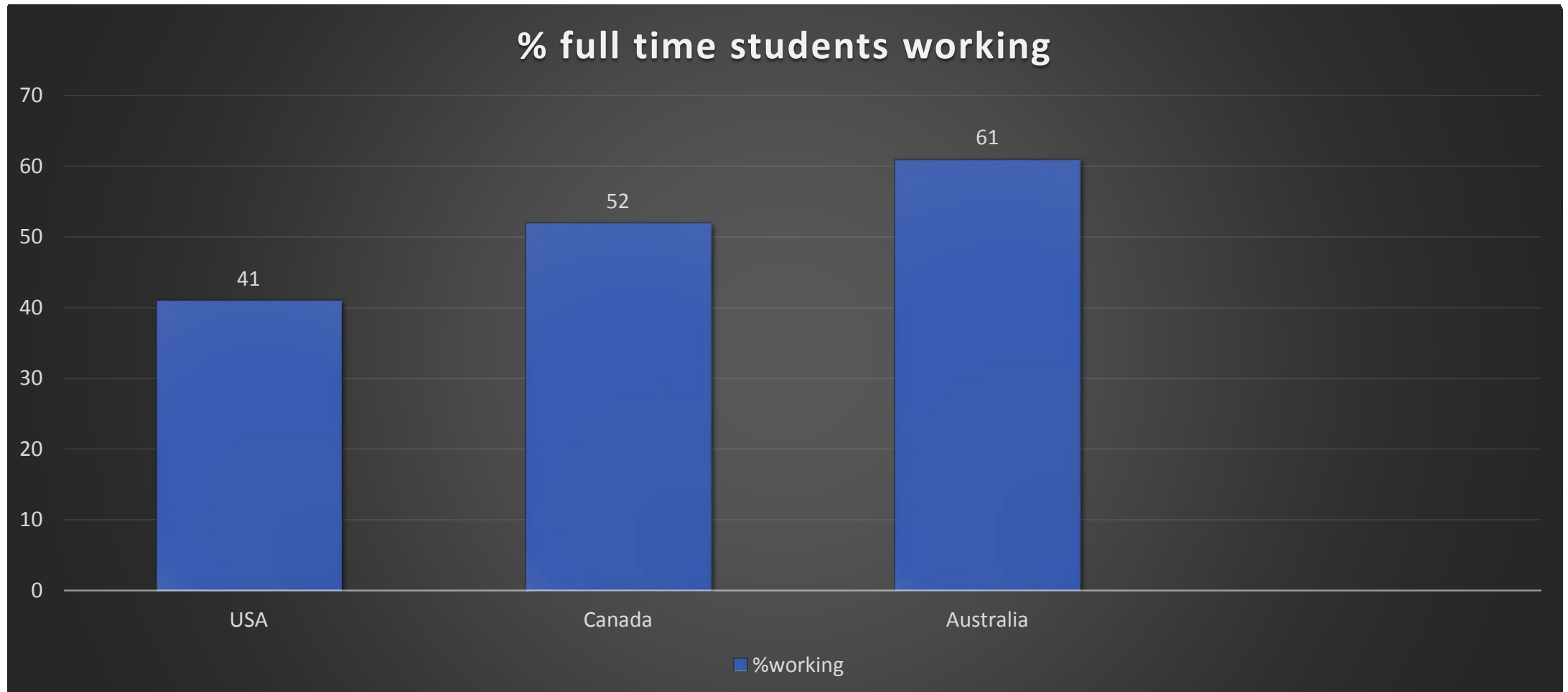
# Blended learning clearly provides students with choice

---

Allows for flexibility in students' study, work, and life balance

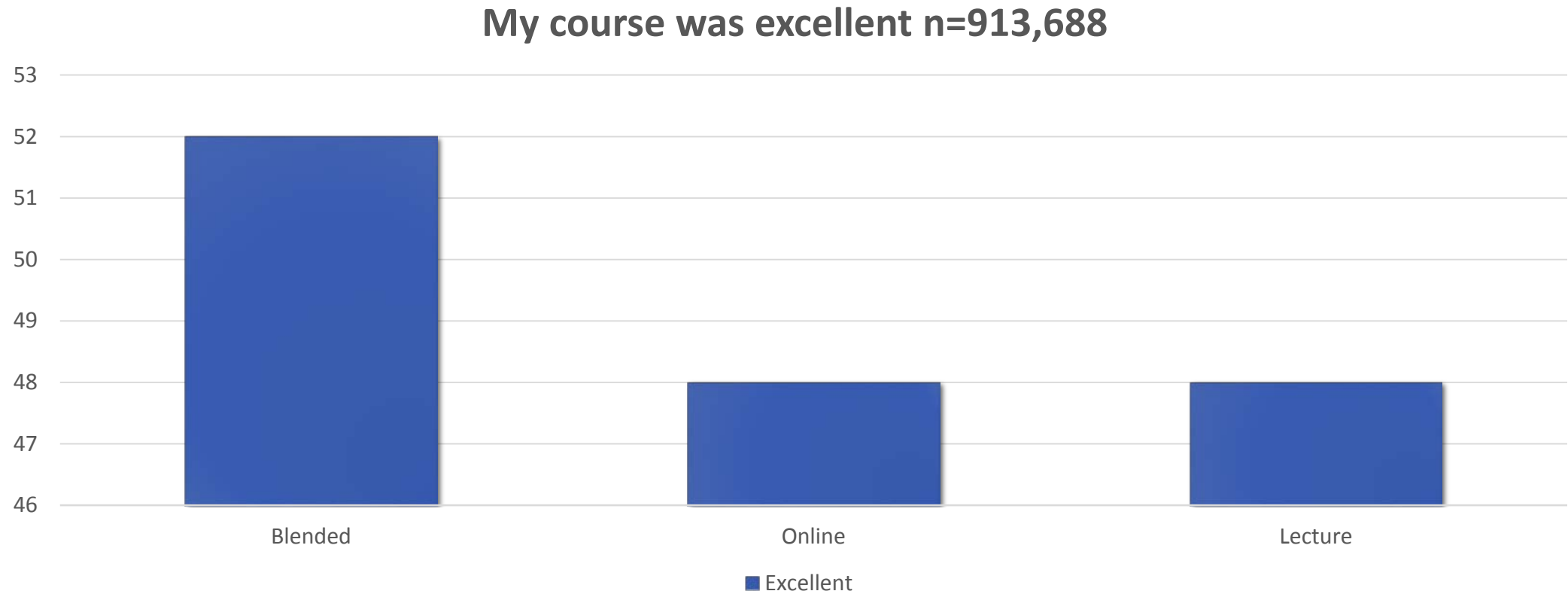


# Our full-time students are working!



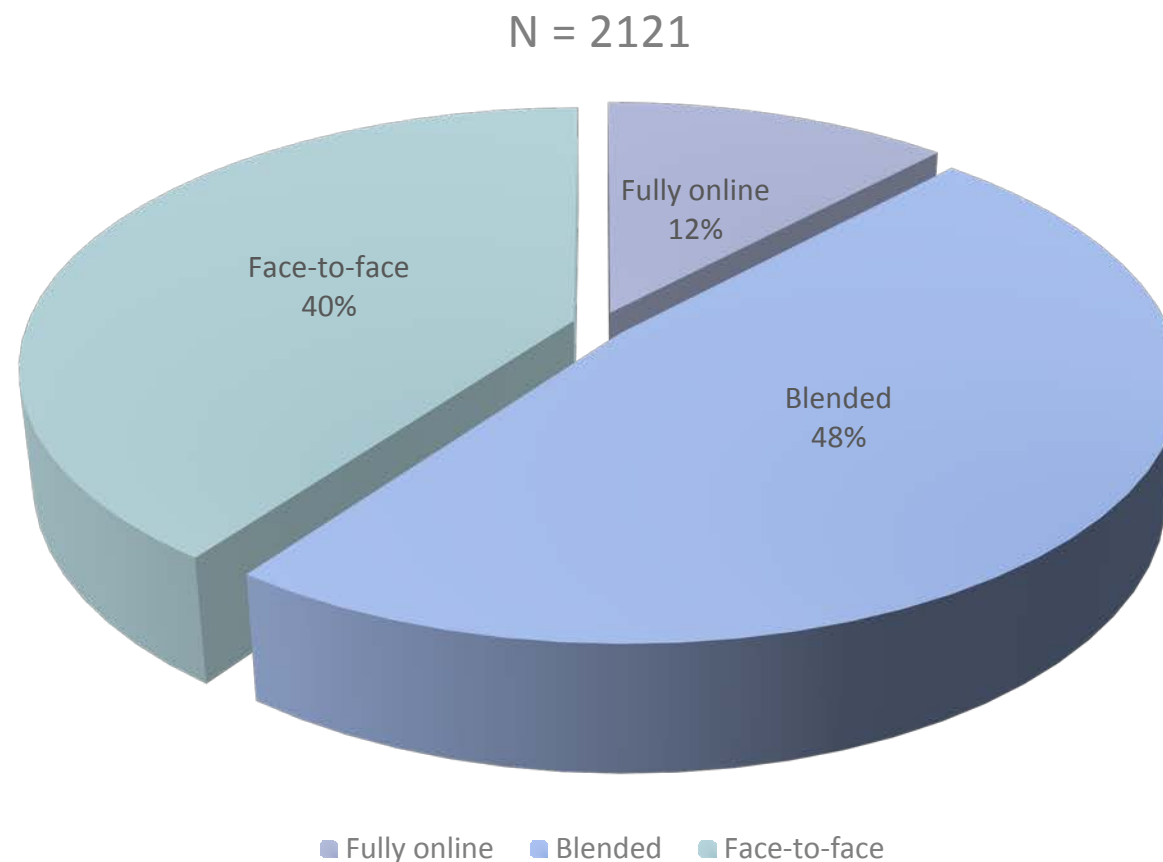


# University of Central Florida (Moskal et al 2013)



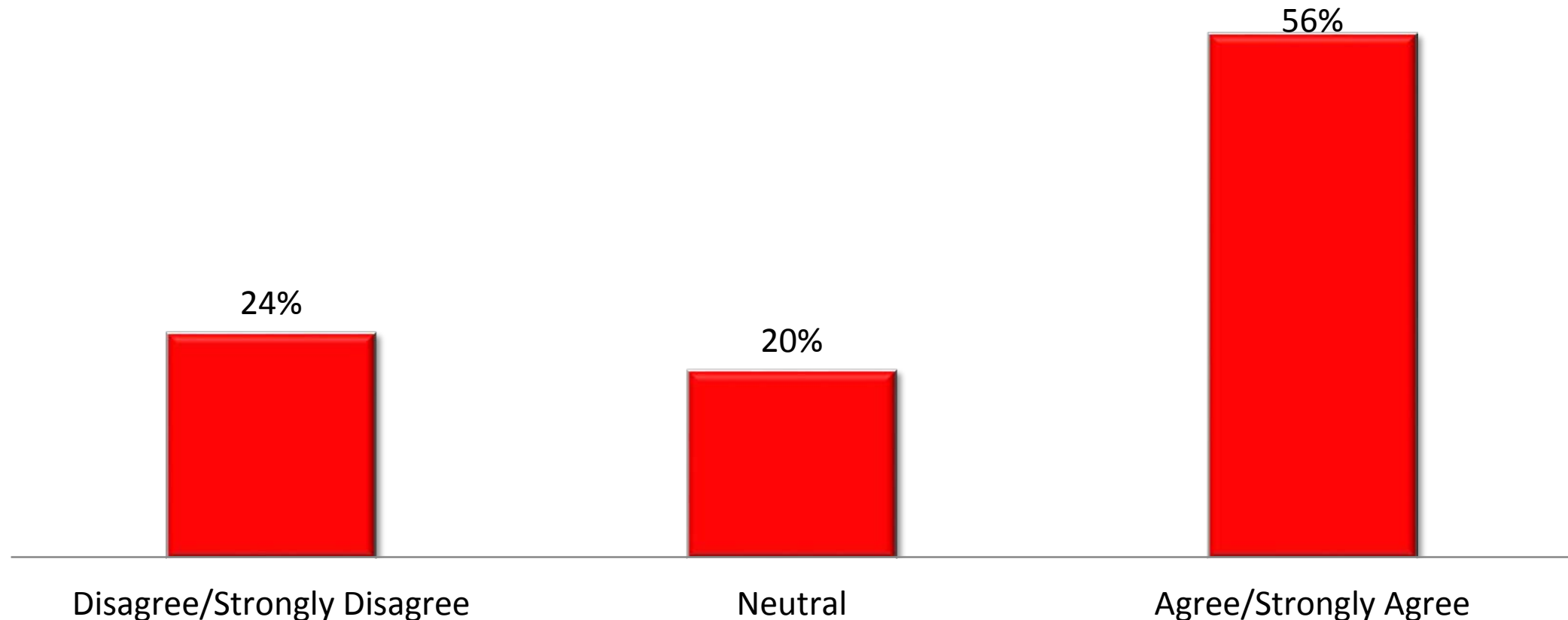
# Preference for blended course format at York University

---



# I would take another course in the future that has both online and face-to-face components [at York U]

---



N = 2121, 34 courses

# Many blends are possible

---

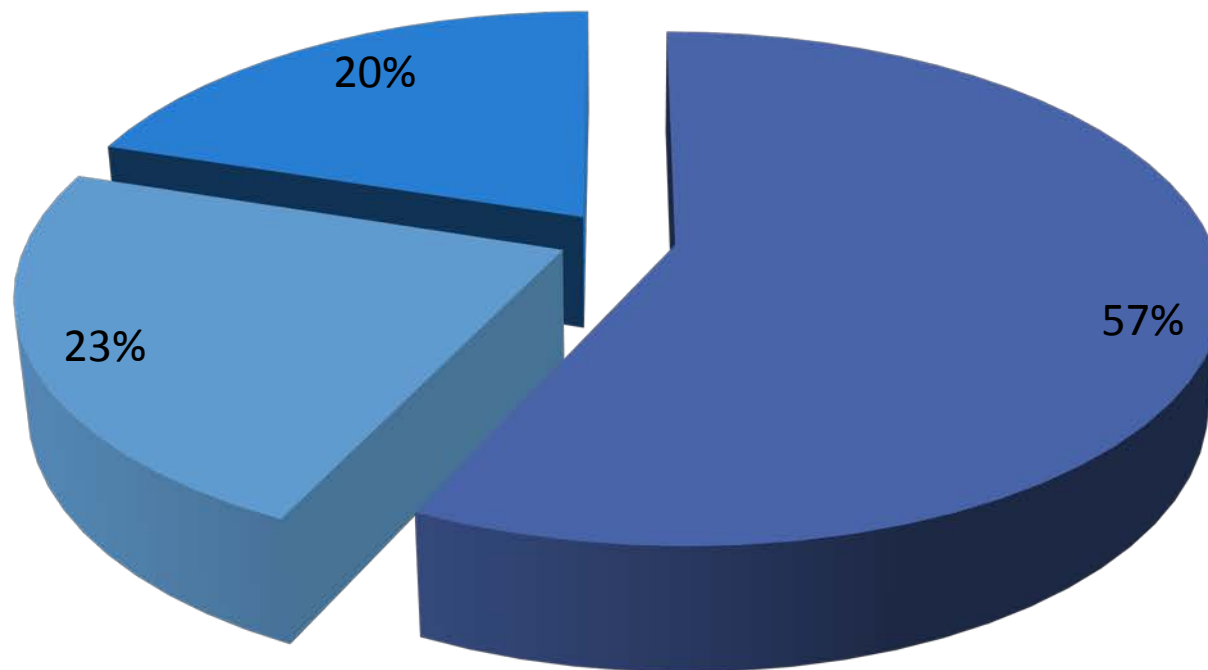
- Weekly replacement
- Alternating week replacement
- Beginning or end replacement
- Tutorials/online lectures
- Others ???



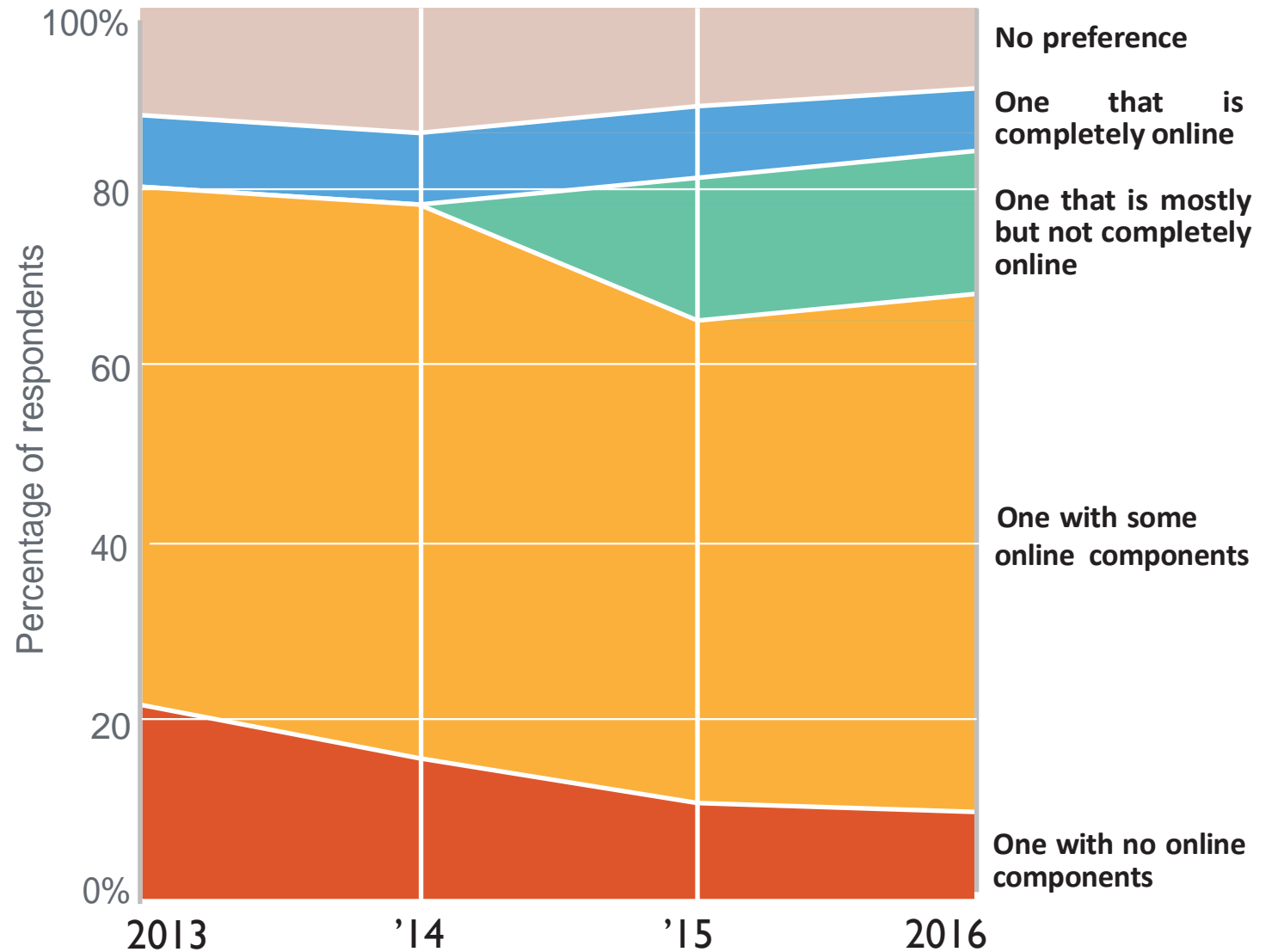
# Taking this blended course increased my interest in the material [at York U]

---

■ Strongly Agree/Agree   ■ Neutral   ■ Strongly Disagree/Disagree



Students  
don't  
want "all  
tech, all  
the time"



But what about  
performance with  
different blends?

---

## Success and withdrawal rates by modality (Moskal et al. 2013)

| Success by modality     |         |                |
|-------------------------|---------|----------------|
| Modality                | n       | Success (%)    |
| Blended                 | 69,436  | 90.8           |
| Fully online            | 188,776 | 88.3           |
| Face-to-face            | 839,028 | 87.7           |
| Lecture capture         | 16,354  | 83.9           |
| Blended lecture capture | 45,213  | 84.7           |
| Withdrawal by modality  |         |                |
| Modality                | n       | Withdrawal (%) |
| Lecture capture         | 18,037  | 5.3            |
| Fully online            | 188,916 | 4.3            |
| Face-to-face            | 933,846 | 3.1            |
| Blended lecture capture | 55,665  | 3.0            |
| Blended                 | 70,045  | 2.8            |



# Meta-analytic studies



Trusted evidence.  
Informed decisions.  
Better health.

[Cochrane.org](https://www.cochrane.org)



[Browse](#)

[Advanced Search](#)

[Cochrane Reviews ▼](#)

[Trials ▼](#)

[More Resources ▼](#)

[About ▼](#)

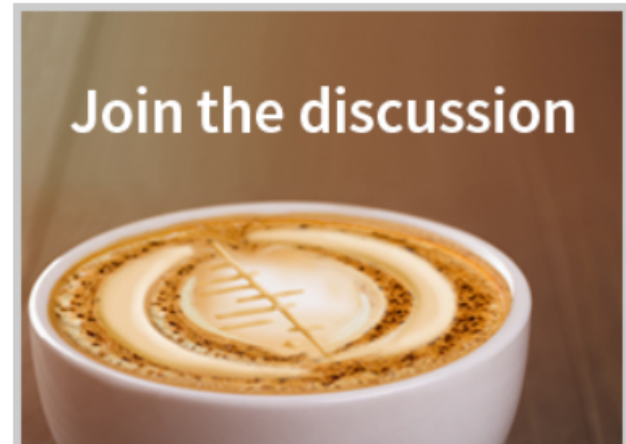
[Help ▼](#)

## Cochrane Database of Systematic Reviews

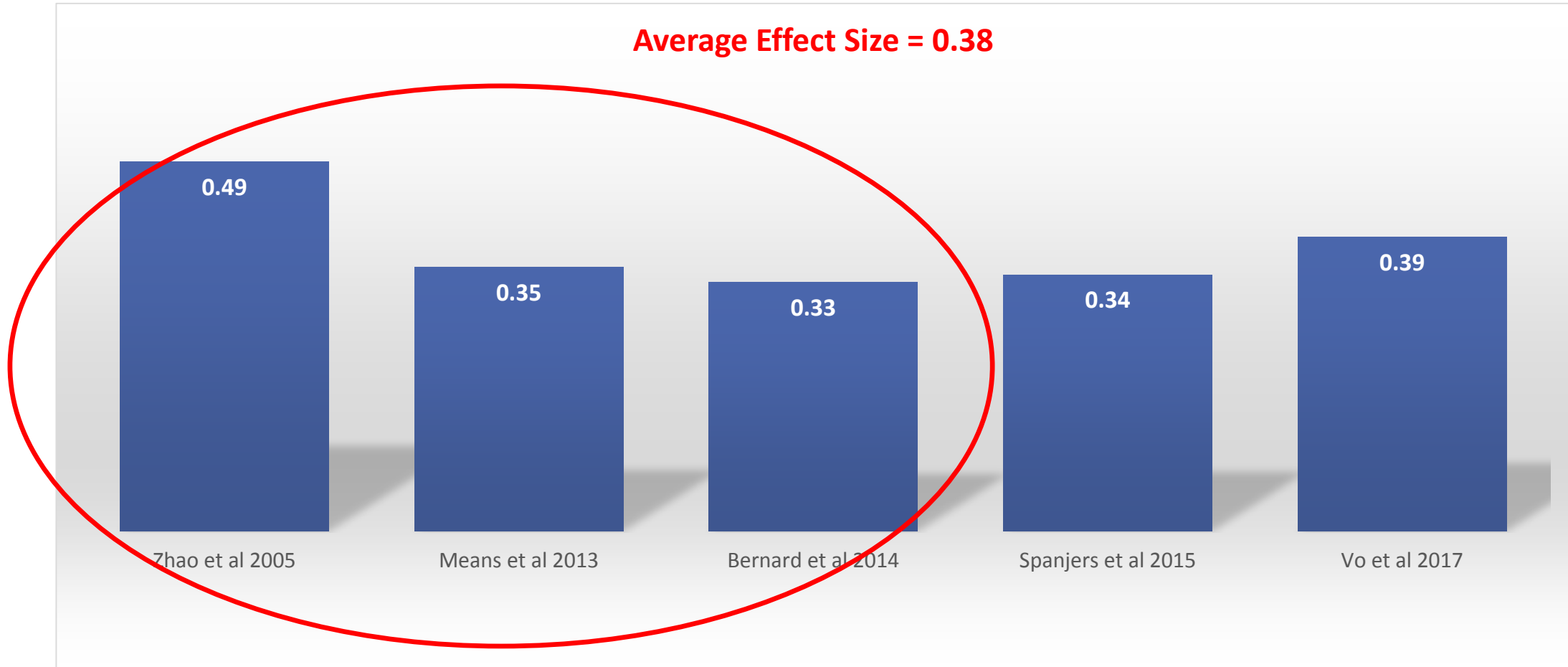
The *Cochrane Database of Systematic Reviews (CDSR)* is the leading resource for systematic reviews in health care. The *CDSR* includes **Cochrane Reviews** (the systematic reviews) and protocols for Cochrane Reviews as well as editorials. The *CDSR* also has occasional supplements. The *CDSR* is updated regularly as Cochrane Reviews are published 'when ready' and form monthly issues; see [publication schedule](#).

To explore Cochrane Reviews you can use the [advanced search](#) or you can browse [by topic](#) or [by Cochrane Review Group \(CRG\)](#).

Join the discussion

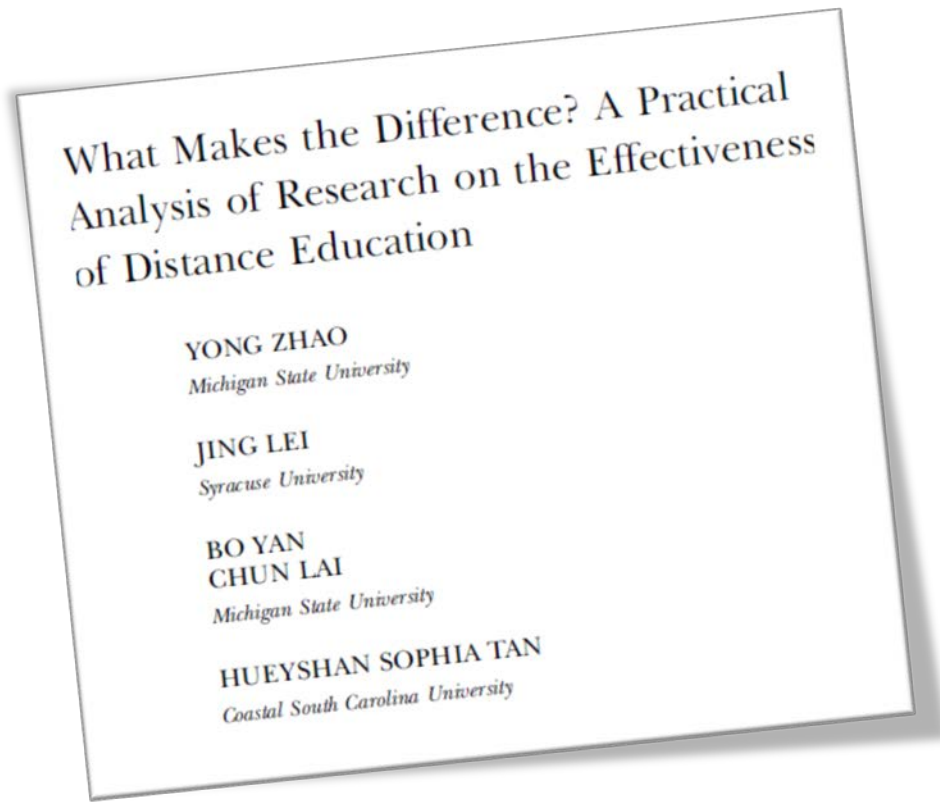


# Five meta-analyses show BL students higher than F2F



# Zhao et al. (2007) meta-analysis

---



- ❑ 100 % Online = face-to-face
- ❑ 90 – 100% Online > face-to-face
- ❑ 60 – 80% online >> face-to-face

Means et al.

>50%

Bernard et al

30% - 50%

Zhao et al.

60% - 80%

# Students attend 50% of classes when given the choice

---



**Asarta & Schmidt 2015**

Now to my study...

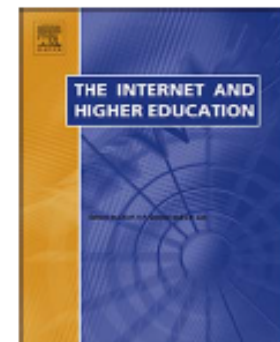
---



Contents lists available at ScienceDirect

## The Internet and Higher Education

journal homepage: [www.elsevier.com/locate/iheduc](http://www.elsevier.com/locate/iheduc)



The nagging question when designing blended courses: Does the proportion of time devoted to online activities matter?

Ron Owston\*, Dennis N. York<sup>1</sup>

*Faculty of Education, York University, Toronto, Ontario, Canada, 4700 Keele St., Toronto, Ontario M3J 1P3, Canada*



Low blend (27-30% online)

Medium blend (36-40% online)

High blend (50% online)

Supplemental (F-2-F classes/online tutorials)

1010 students in  
20 different courses

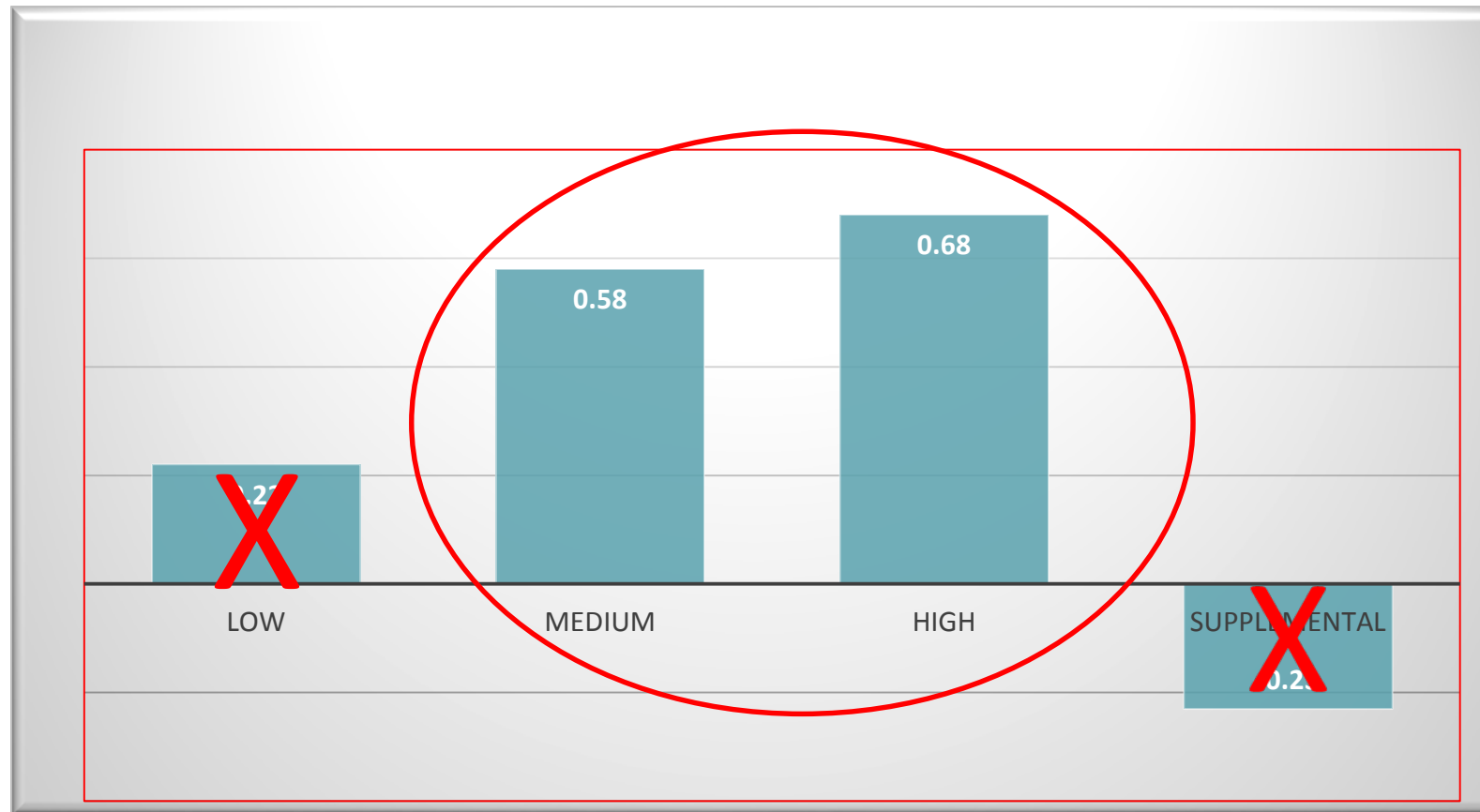


# What blends do students prefer most?

---



# What about performance?



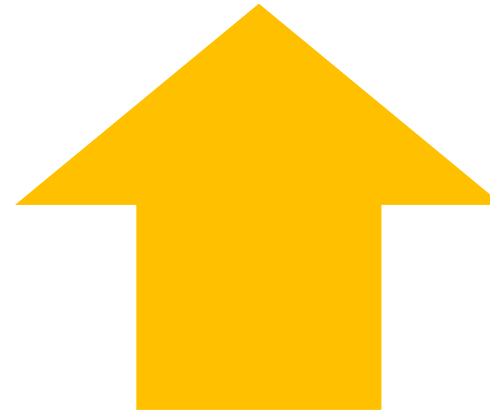
Grade point  
difference



50%  
preferred



33% less  
preferred



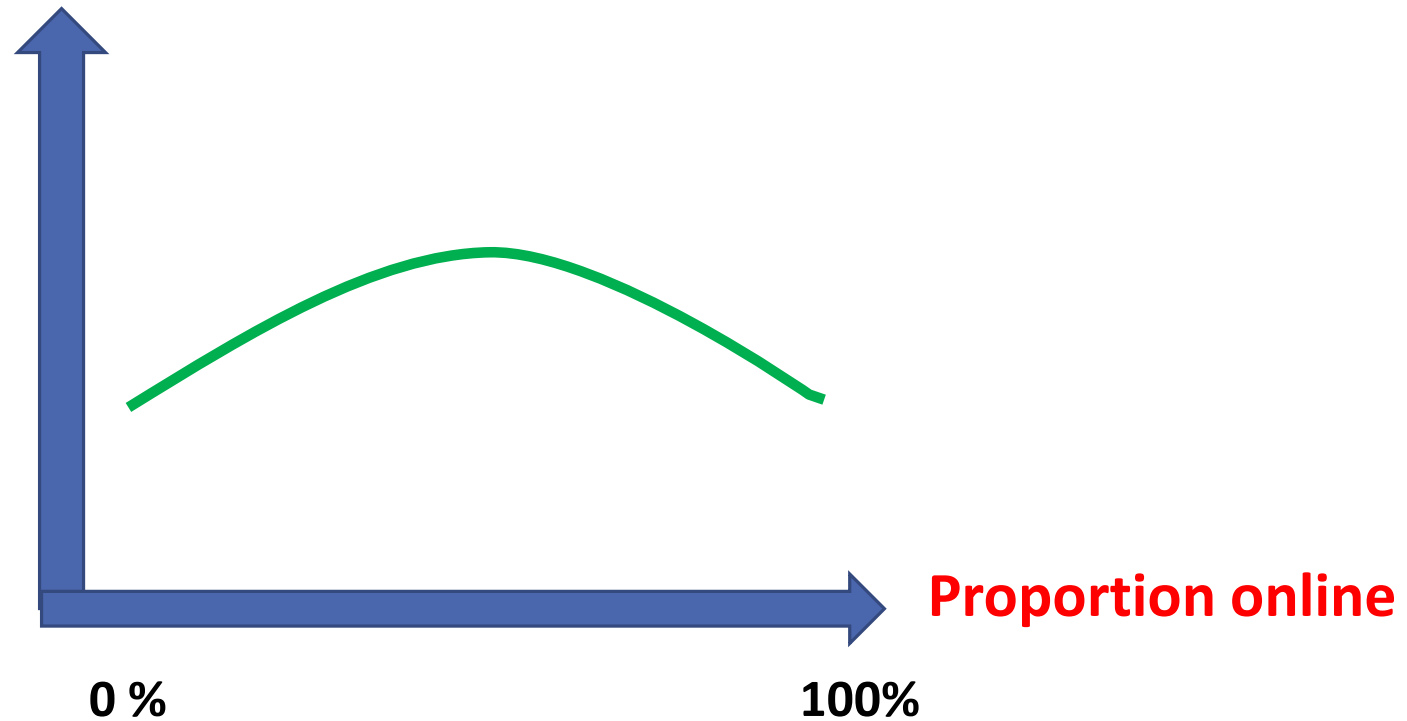
So what can we conclude  
about proportion of online  
time in blended courses?

---

# Quality of experience in my course

---

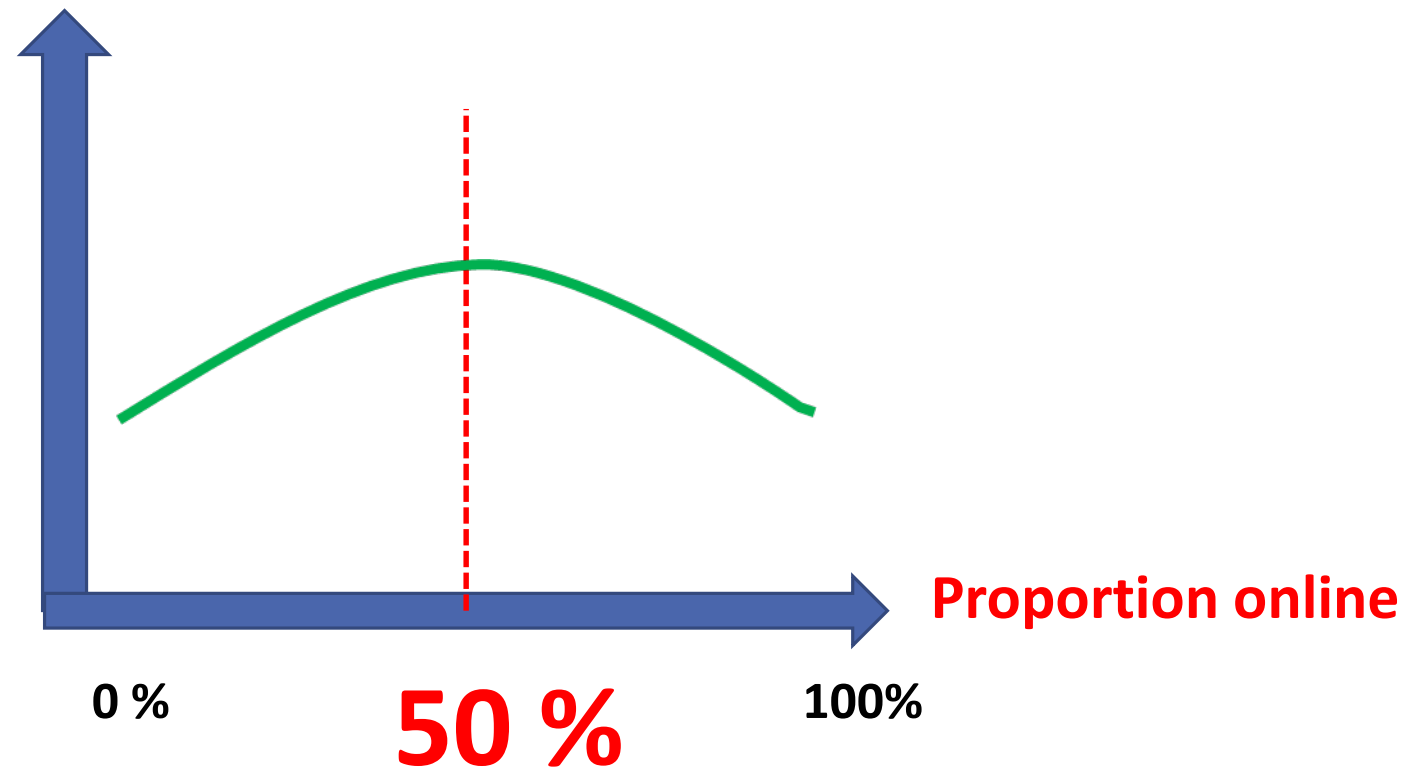
**Student satisfaction**



# Ideal blend???

---

Student satisfaction/performance



Student < > Student



**QUALITY OF INTERACTION IS KEY**

Instructor < > Student

**Instructor presence essential**

**Class discussions flow into online**

**Synthesize online discussions in class**

**Collaborative projects**

**FAQs – where students and  
instructors respond**

**Give frequent, focused feedback**

**Grade online activities appropriately**



# In summary...

Blended learning can lead to  
greater student satisfaction  
and learning

BUT

Consideration must be given  
to amount of time online and  
how that time is used



Questions/comments?

Follow up ...

[rowston@edu.yorku.ca](mailto:rowston@edu.yorku.ca)

@RonOwston

<http://ronowston.ca>