

Teaching and Learning in an Evolving Educational Environment

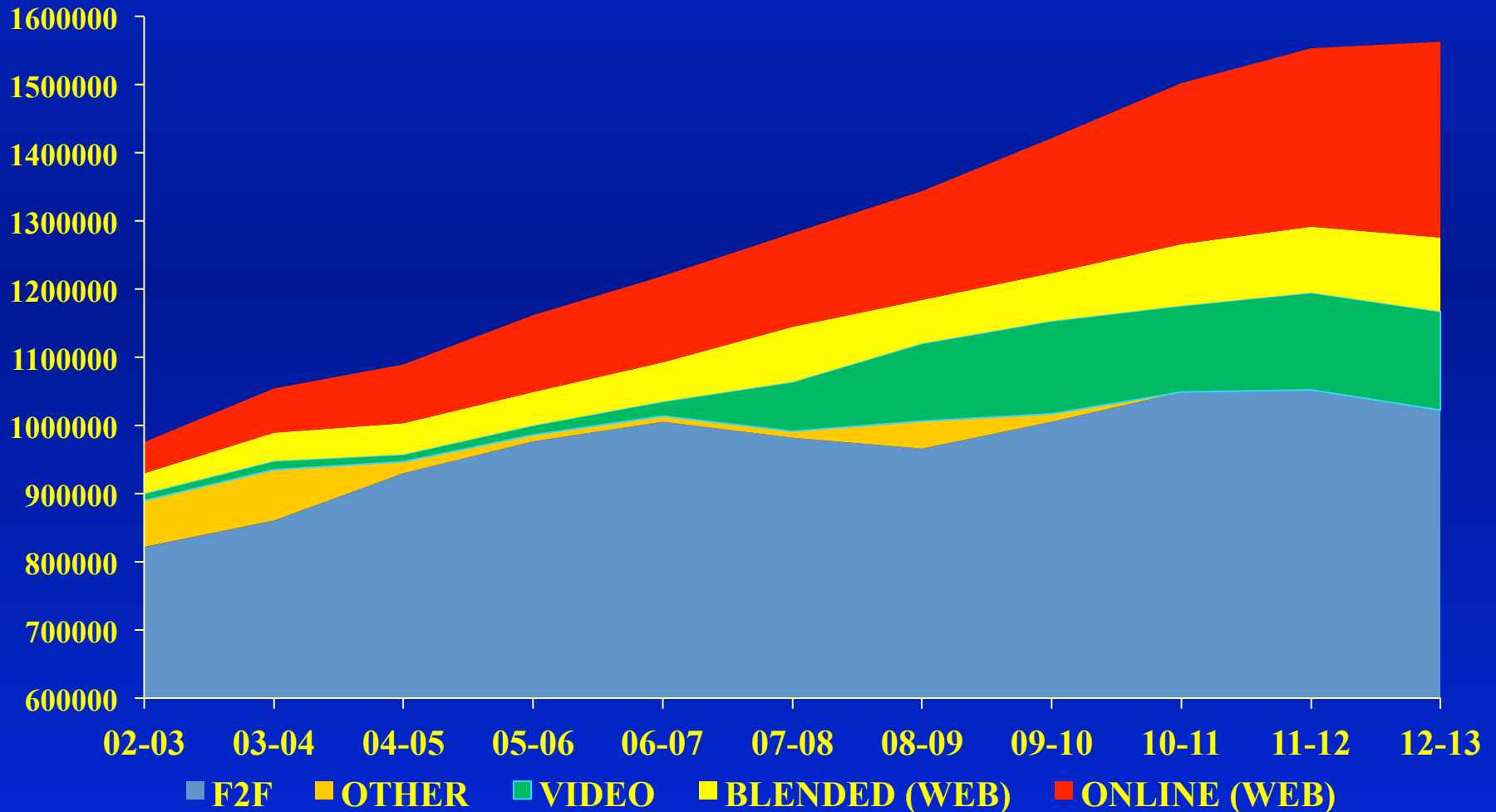
Chuck Dziuban

Research Initiative for Teaching Effectiveness
University of Central Florida

The University of Central Florida

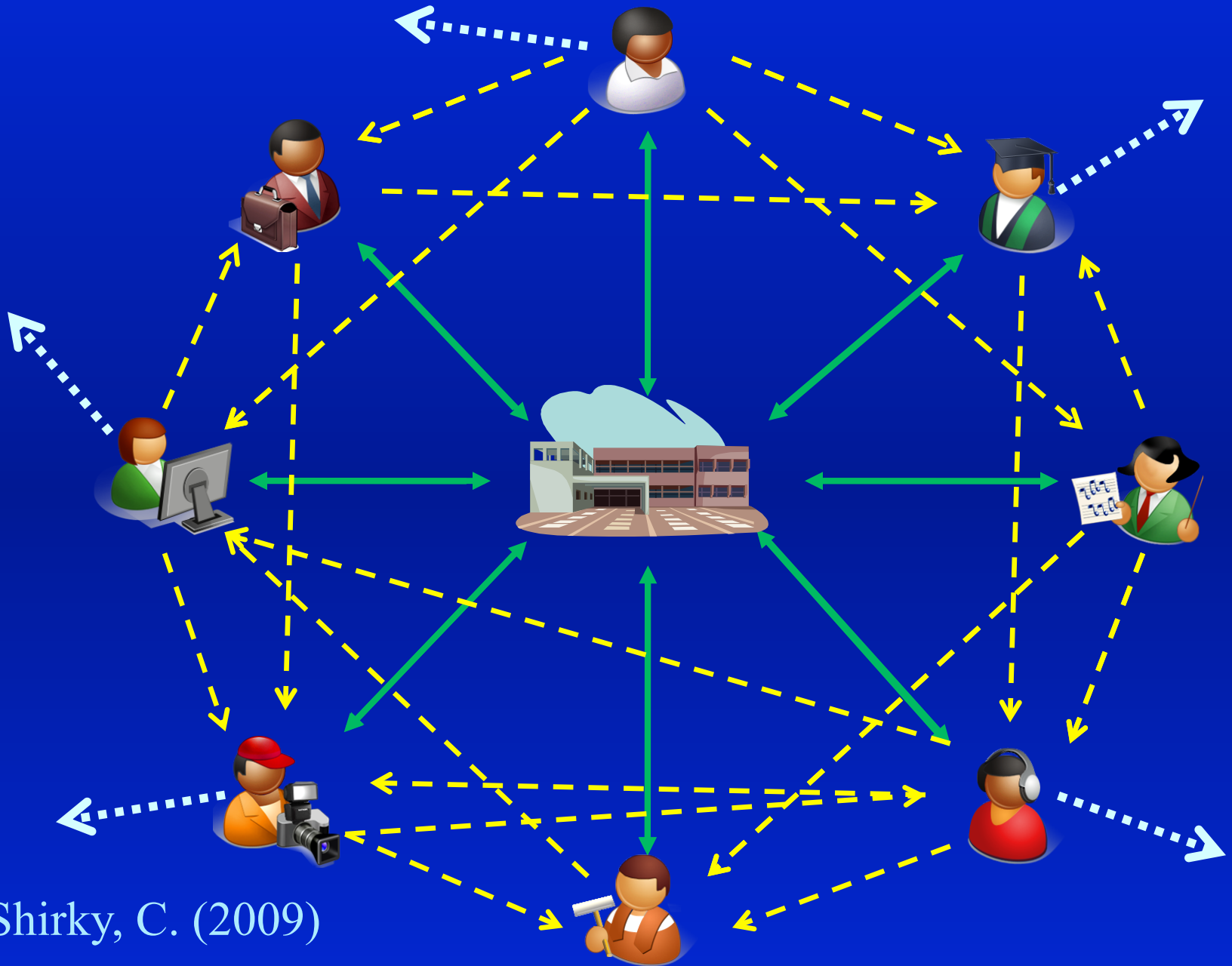


UCF SCH Growth



Unbundled classroom





Shirky, C. (2009)

Emerging learning modes

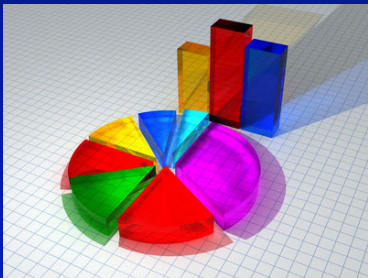


Mobile Learning



Lecture Capture

Learning in the Cloud



Online Learning



Web 2.0

Adaptive Learning



Flipped Classroom



MOOCs

Blended Learning



How do we know?



...or do we know?

Students

Faculty

Success

Retention

Reactive behavior
patterns

Generational
comparisons

Engagement
Demographic
profiles
Strategies for
success

Information
fluency

Chuck,
this has nothing to
do with me...



SoTL projects

Faculty SoTL projects

Civility

Manipulatives
in chemistry

Higher order
evaluation models

Theater

Virtual worlds

Constructive
Engagement

Online Persona

Essay
Comments



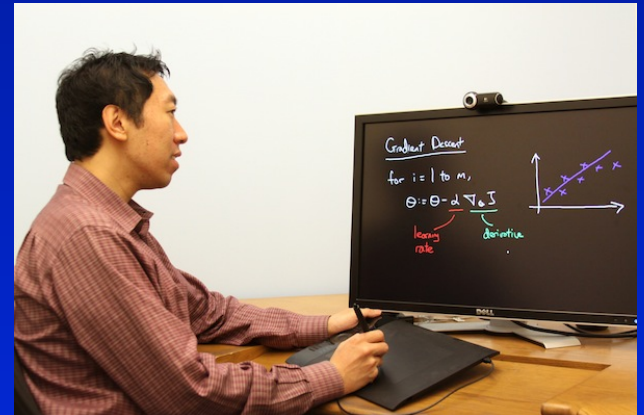
How do you maintain your teaching persona online?

- Bill Phillips – Center for Distributed Learning

Who are you?

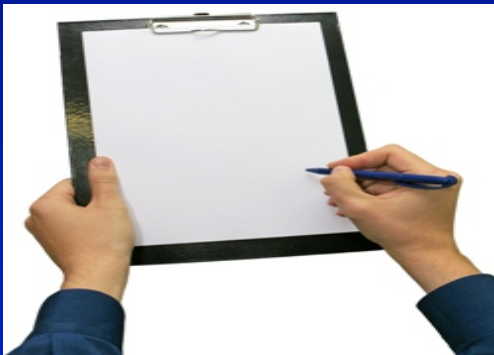


Who are you?



Higher order evaluation models in online learning: Constructive engagement

- Aaron Liberman – Health and Public Affairs
- Assessment as part of the learning process



Fairer evaluation

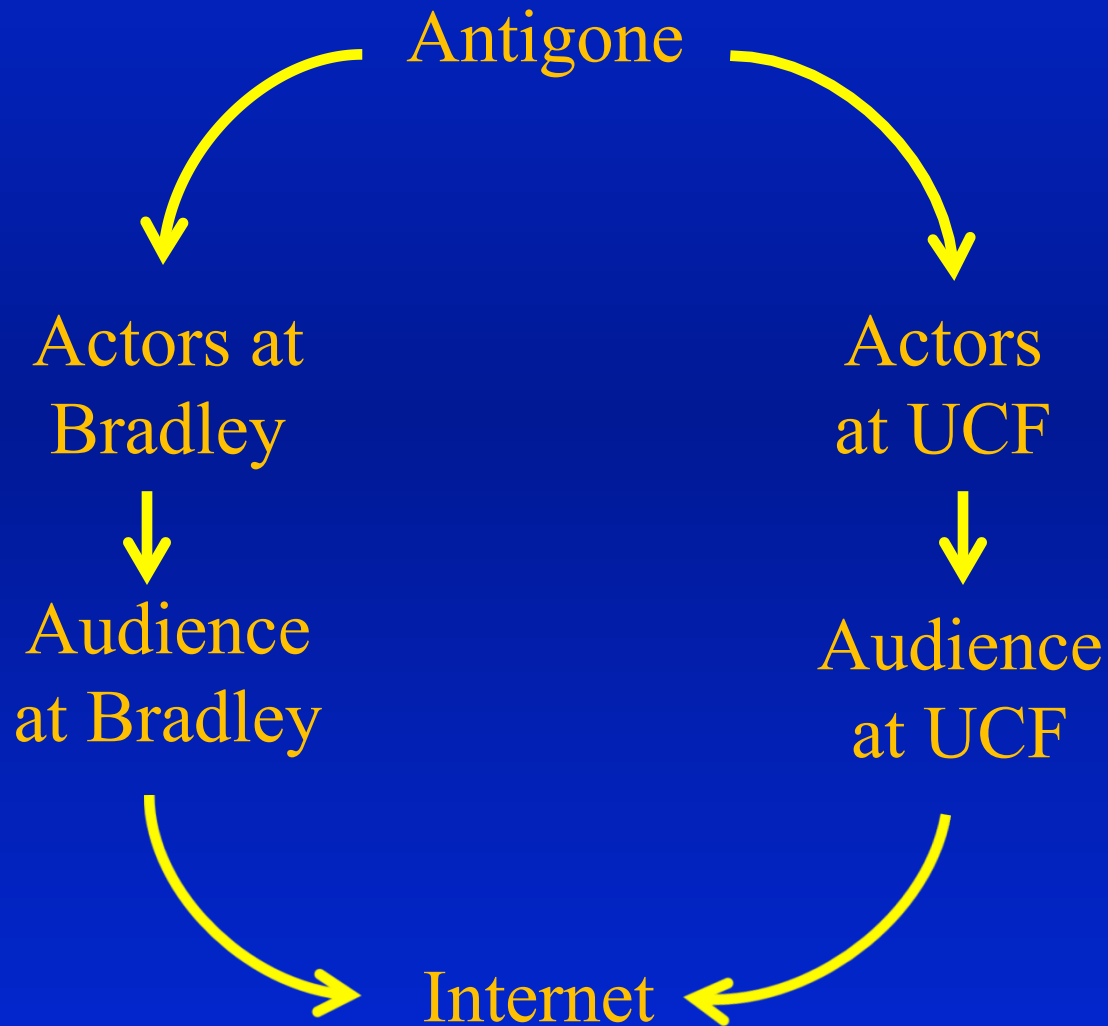


Improved student
interaction



Improved instructor
interaction

Online theater



John Shafer - Theater



Some interesting learning models



An engagement model: Web 2.0



An authentic model: Public relations

Robert French
Auburn University



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Ads That Work

So, What Do You Live For? Dreams?

TC Bank- Dream Rangers

TC Bank- Dream Rangers

0:00 / 3:11

Persuasive :: Creative :: Worth Your Time

Selinah Has AIDS

Selinah has AIDS

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[Immediate Internship Position Available in Kennesaw, GA](#)

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Martin Waxman, Gini...

★★★★★
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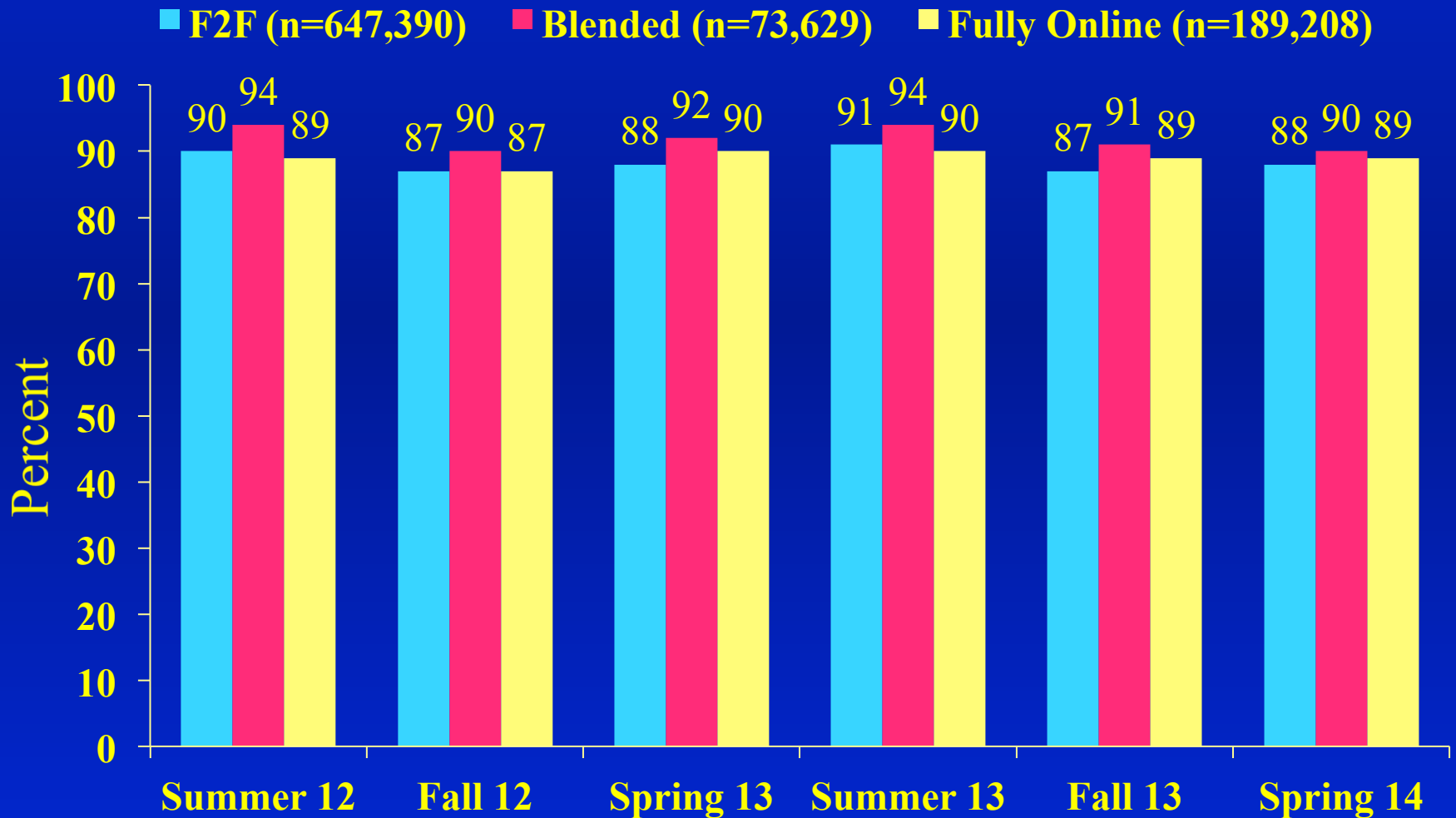
Second Life model



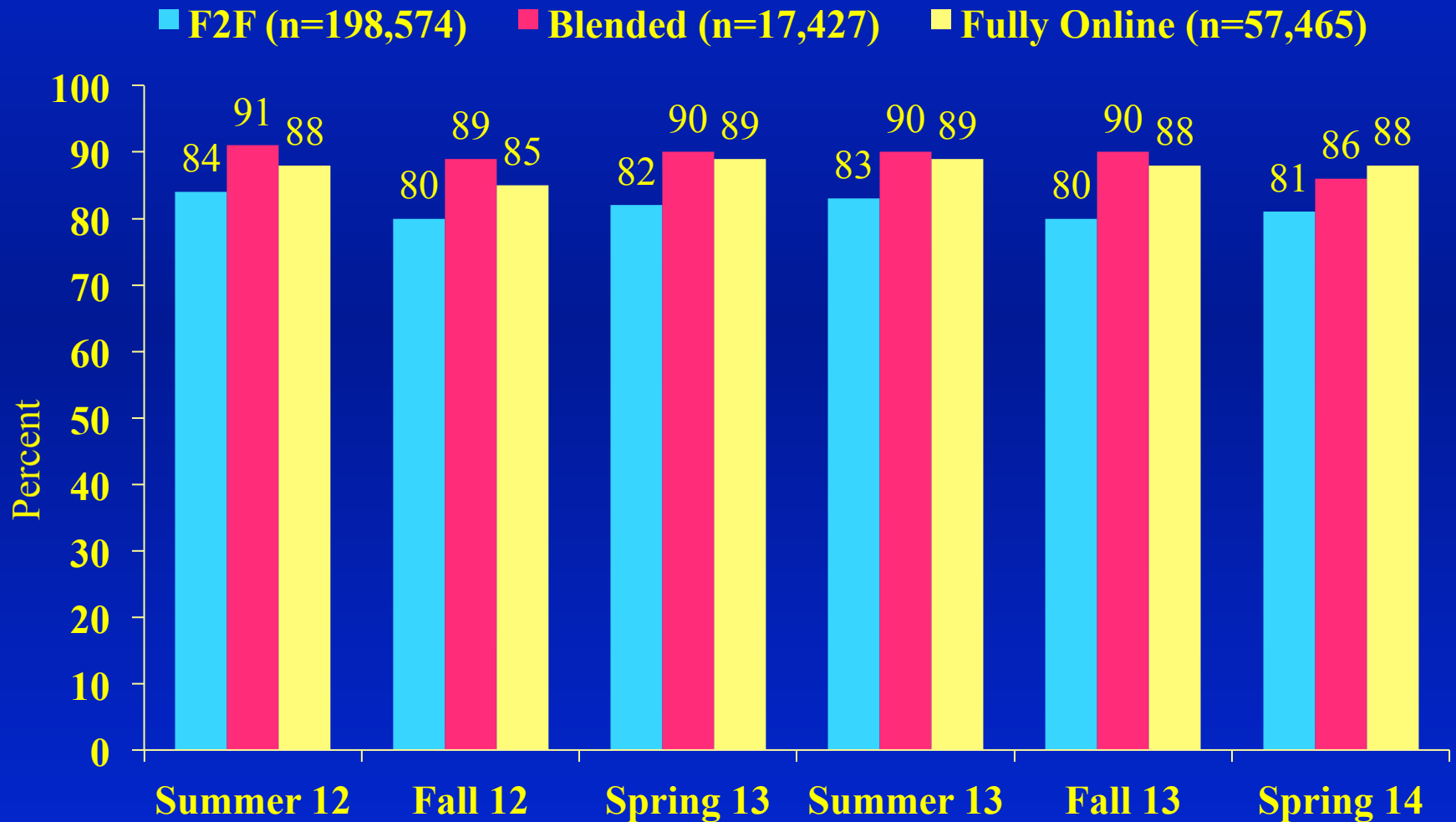
Student success



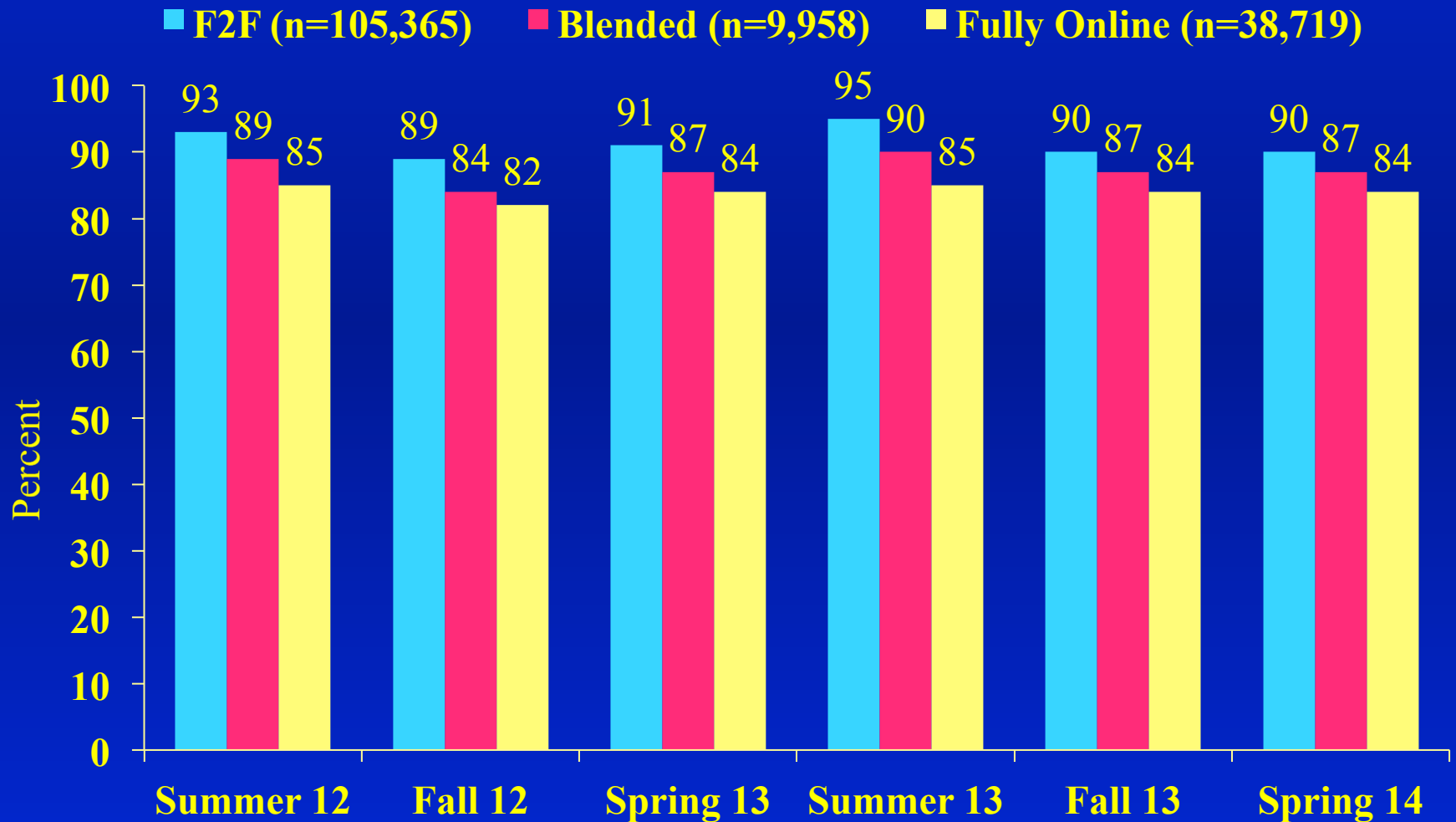
Student success



Success Rates by Modality for the College of Sciences Summer 12 – Spring 14



Success Rates by Modality for the College of Arts & Humanities Summer 12 – Spring 14



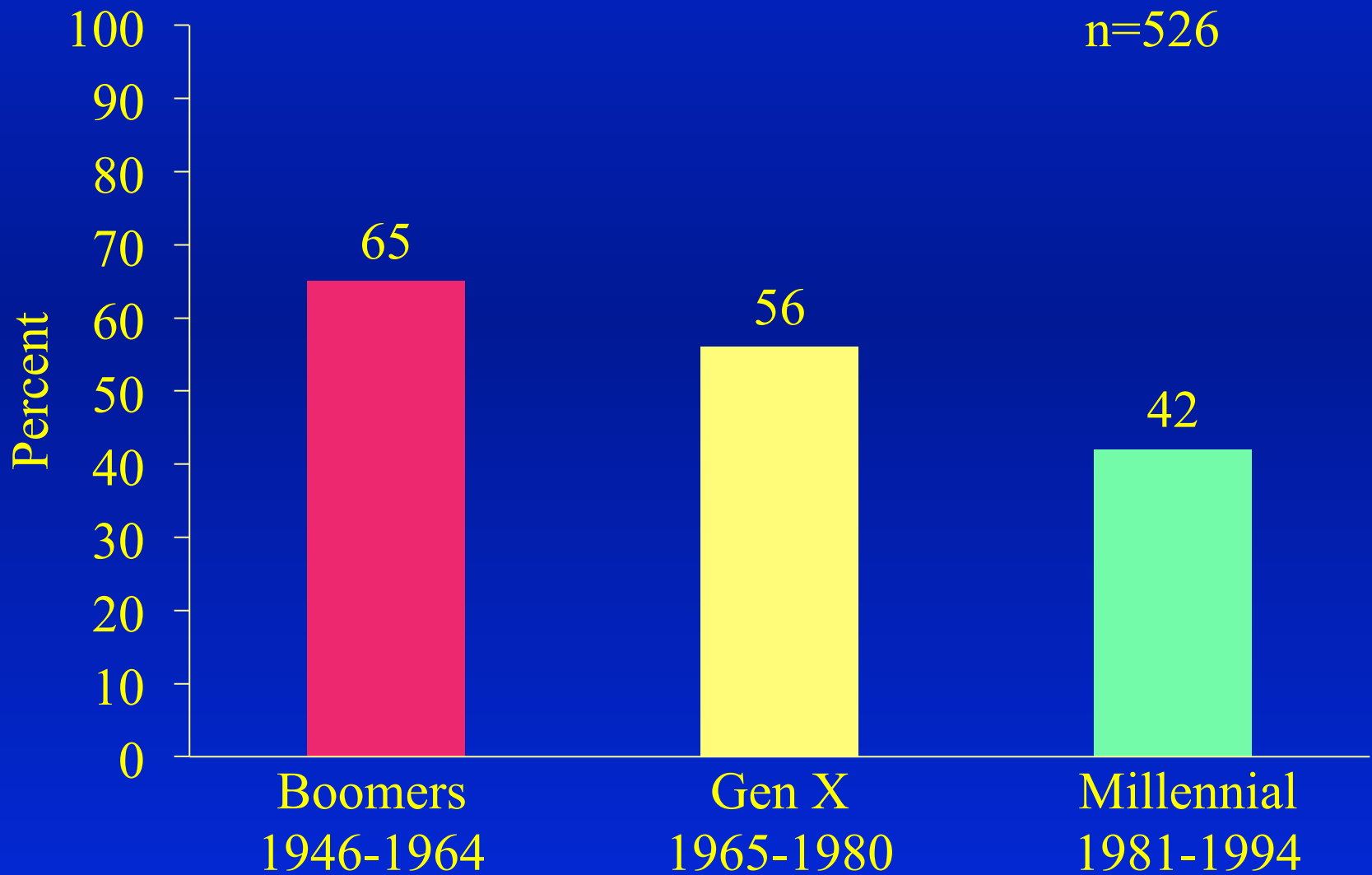
Generations



Some characteristics of the generations

- **Matures (prior to 1946)**
 - Dedicated to a job they take on
 - Respectful of authority
 - Place duty before pleasure
- **Baby boomers (1946-1964)**
 - Live to work
 - Generally optimistic
 - Influence on policy & products
- **Generation X (1965-1980)**
 - Work to live
 - Clear & consistent expectations
 - Value contributing to the whole
- **Millennials (1981-1994)**
 - Live in the moment
 - Expect immediacy of technology
 - Earn money for immediate consumption

Non-ambivalent satisfaction with online and blended courses



Disruption



**NOW! ELECTRIC TYPING AT LESS THAN
STANDARD OFFICE TYPEWRITER PRICE!**



**AT LAST! POWER TYPING AT A PRICE
THAT EVERY BUSINESS CAN AFFORD!**

Now at last doctors, lawyers . . . every businessman . . . can afford all the benefits, all the prestige of electric typing at less than the price of most manual machines! On the new Smith-Corona Electric — the world's first electric portable typewriter — even inexperienced typists can produce clean, crisp, professional typing results!

Compact, convenient and truly portable, the Smith-Corona Electric Portable gives you up to eight clean carbon copies, permits crystal-clear mimeograph duplication, does a smarter, better all-around typing job with more speed, less typing effort!

Why keep a manual typewriter when low-cost electric typing is here — have your local dealer show you the Smith-Corona Electric Portable today!



Smith-Corona ELECTRIC PORTABLE TYPEWRITER



Perfect for accurate billing!
Solves the secretary problem!
Easier typing and fewer errors!



Repeat keys for special jobs!
Letter-perfect typing results!
Up to 8 clear, clean carbons!



Add prestige to your business!
Truly portable, carries easily!
Ideal for perfect duplication!

Disruptive innovation!

- There's one in YOUR future!!
- And another one right behind it!

Wayne Hodgins, 2007

Will massive, open online courses (MOOCs) revolutionize higher education?

Sebastian Thrun

- Stanford University



Analytics



Signals



MAP-Works



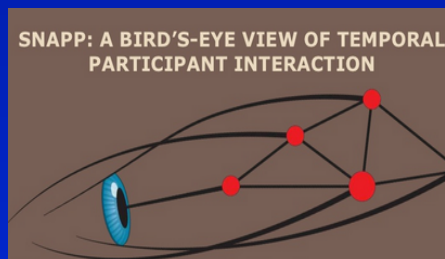
Predictive
Analytics
Reporting (PAR)
Framework



Carnegie Mellon-
OLI



Degree Compass



SNAPP

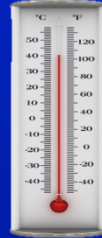


Civitas
Learning

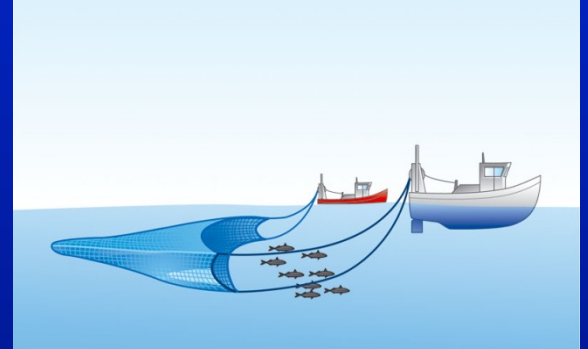
Metaphors for analytics



Landscape



Thermometer



Trawl net



Road map



Clan



ATM

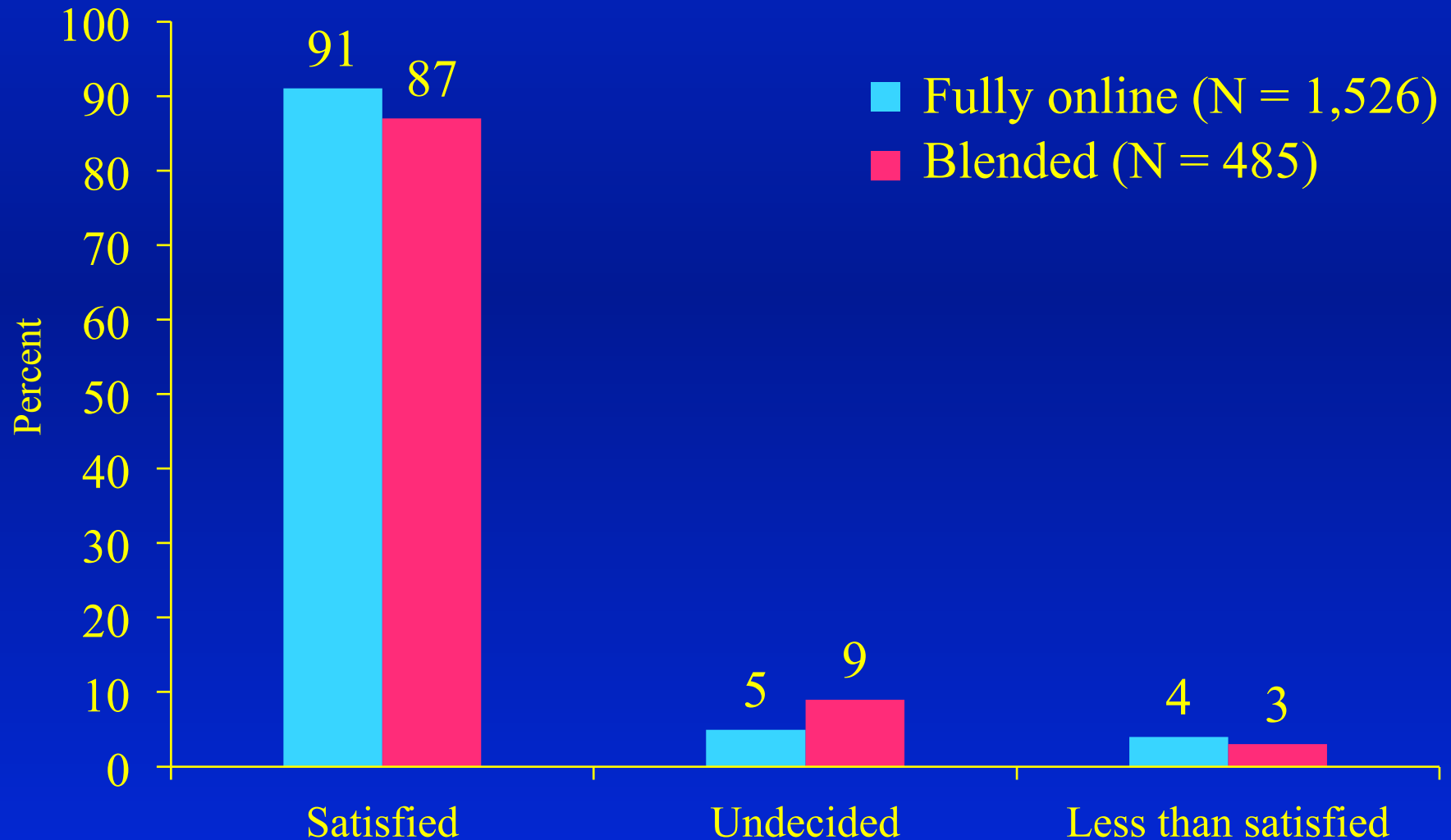


Work-out room

Are you satisfied?



Student satisfaction in fully online and blended courses



Students' positive perceptions about online and blended learning

- Convenience
 - Reduced Logistic Demands
 - Increased Learning Flexibility
 - Technology Enhanced Learning
- 
- Reduced Opportunity
Costs for Education

Students' less positive perceptions about online and blended learning

- Reduced Face-to-Face Time
- Technology Problems
- Reduced Instructor Assistance
- Overwhelming
- Increased Workload

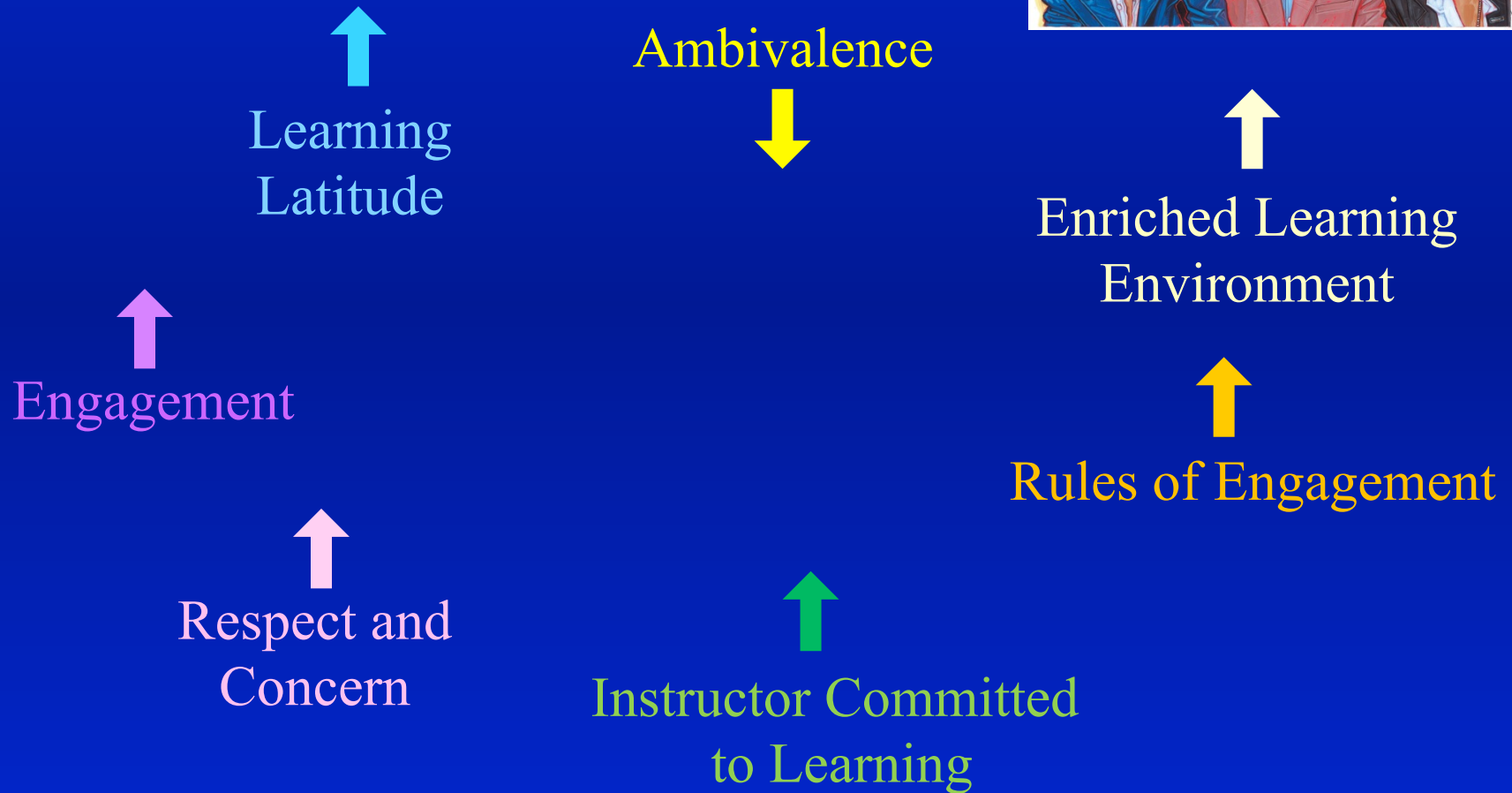
Increased Opportunity
Costs for Education

The Anna Karenina principle

“Happy families are all alike; every unhappy family is unhappy in its own way”



I can't get no.... Student satisfaction



Student evaluation of instruction

“This guy is so boring,
my pillow needs a
pillow!”

-Ratemyprofessor.com



Rate My Professors: University of Central Florida



- “She is very powerful in motivating the class to participate and is very clear. She is a very kind teacher who teaches from her heart!”
- “Explains everything so clearly and is really enthusiastic about the material. I loved going to class.”
- “Works really hard to ensure all of his students succeed in his class. He returns assignments filled with remarks and suggestions. Very friendly and easy to talk to.”
- “Often late or unprepared. Never available outside class. Can be cruel and intimidating to students.”
- “She is lacking in creativity and consistently fails to engage the class because all she does is read from her PowerPoints without expanding.”
- “Boring, biased, boring, arrogant, boring, self-absorbed—did I say boring?...”

Rate My Professors: Emory University



- “She is very powerful in motivating the class to participate and is very clear. She is a very kind teacher who teaches from her heart!”
- “Explains everything so clearly and is really enthusiastic about the material. I loved going to class.”
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An evaluation protocol

- Feedback
- Interest in learning
- Use of class time
- Organization
- Continuity
- Pace of course
- Assessment of your progress
- Texts and supplemental material
- Description of objectives
- Communication
- Expression of expectations
- Availability to assist
- Respect and concern
- Stimulation of interest
- Facilitation of learning
- Overall assessment

A decision rule for the probability of faculty member receiving an overall rating of *Excellent* (n=1,280,890)

If...

	Excellent	Very Good	Good	Fair	Poor
Facilitation of learning	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication of ideas	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respect and concern for students	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Then...

The probability of an overall rating of Excellent = **.97** &

The probability of an overall rating of Fair or Poor = **.00**

A decision rule for the probability of faculty member receiving an overall rating of *Poor* (n=1,280,890)

If...

	Excellent	Very Good	Good	Fair	Poor
Facilitation of learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Communication of ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Respect and concern for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Then...

The probability of an overall rating of *Poor* = .90 &

The probability of an overall rating of *Very Good* or *Excellent* = .00

A comparison of excellent ratings by college unadjusted and adjusted for instructors satisfying rule (n=1,280,890)

<u>College</u>	Overall % Excellent	If Rule %
<u>Excellent</u>		
Education	59	99
Molecular & Microbiology	50	99
Health & Public Affairs	50	99
Arts & Humanities	49	99
Sciences	45	99
Hospitality Management	44	99
Business Administration	40	99
Engineering	39	99

Excellent ratings by course modality for all
instructors and those satisfying the rule (n=126,672)

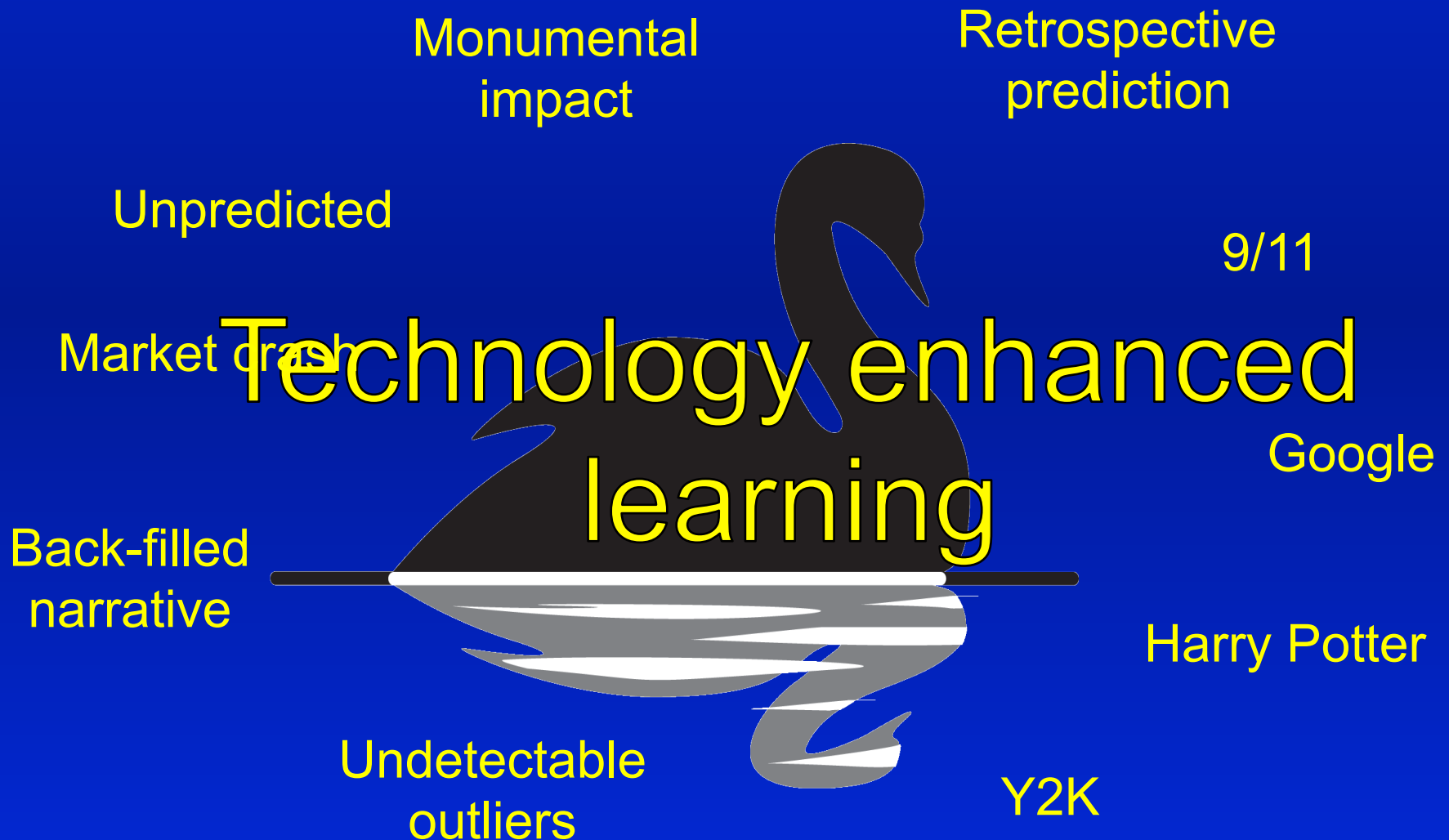
Course Modality	Overall % Excellent	If Rule % Excellent
Blended	57	99
Face-to-face	54	99
Online	53	99
Lecture capture	49	99
Blended LC	48	99

A comparison of excellent ratings by class size decile
unadjusted and adjusted for instructors satisfying the rule
(n=1,17,664)

<u>Decile</u>	<u>Overall % Excellent</u>	<u>If Rule % Excellent</u>
1	54	97
2	51	97
3	54	98
4	52	98
5	46	97
6	47	97
7	48	97
8	44	97
9	44	97
10	41	97

[illegible]

Taleb: The black swan



Research Initiative for Teaching Effectiveness

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