



STRUCTURAL ANALYSIS OF COURSES AS A PRECURSOR TO MOVING THEM ON-LINE

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ABOUT US

➤ Bill Hazelton

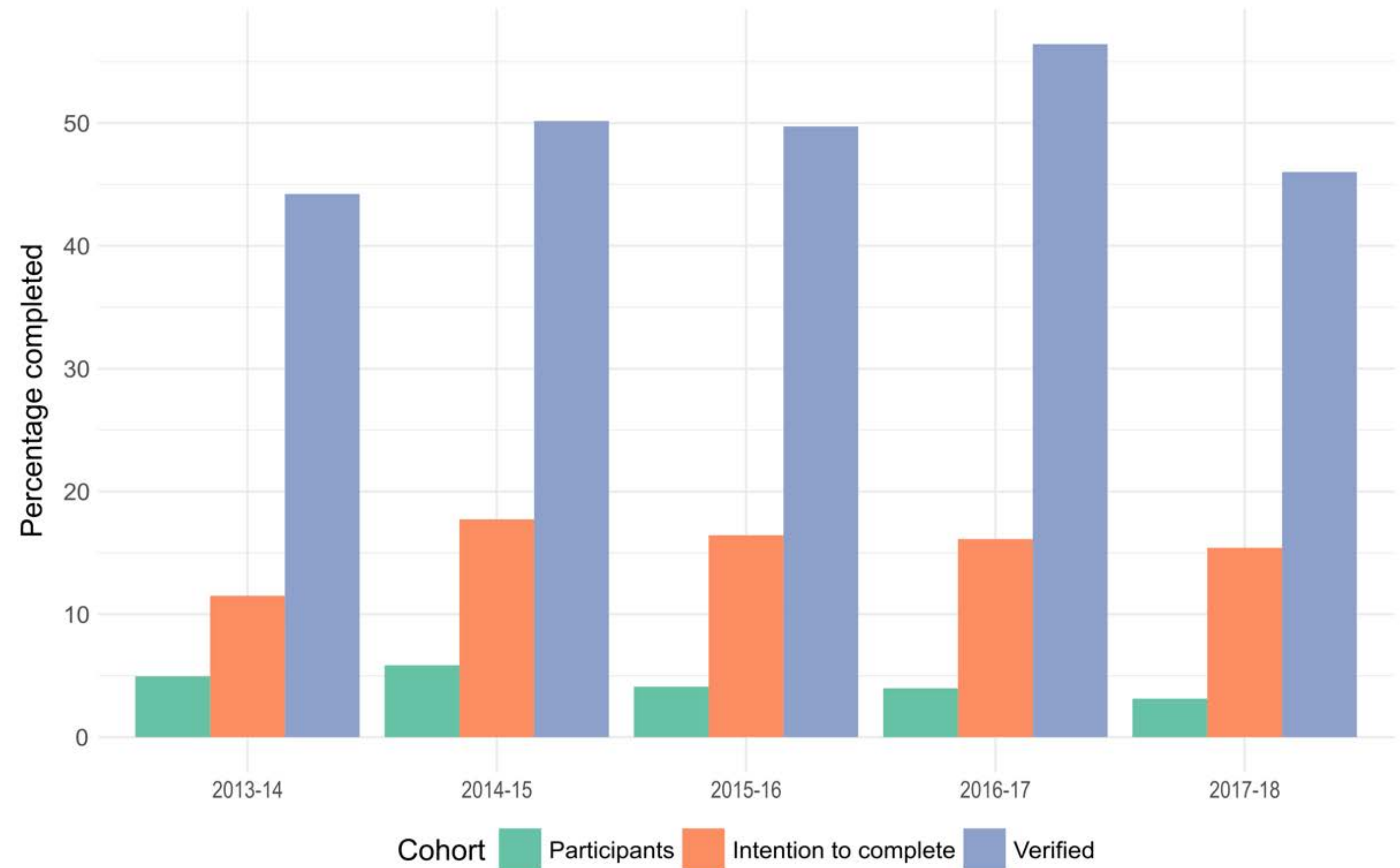
- Surveyor for 40+ years and licensed 35 years
- Educator and researcher for over 30 years
- Worked as a surveyor on 3 continents
- Professor at Troy University

➤ Yitong Wu

- Chancellor's Fellow at Troy University
- Student at Troy University

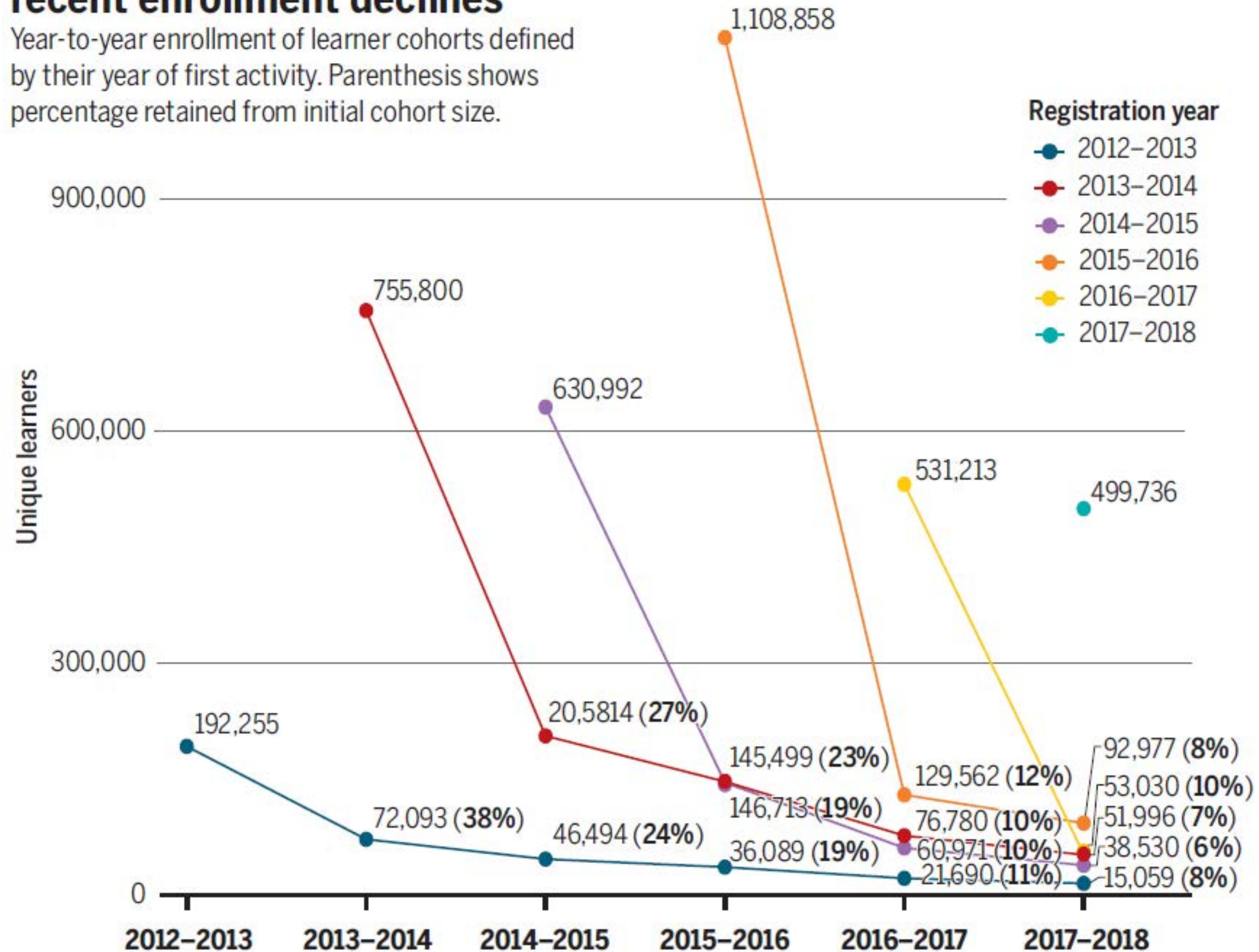
WHERE ARE THE MOOCs?

- 8-10 years ago, MOOCs were seen as a major threat
- We don't even discuss them any more
- Participation is slowly declining
- Completion and retention rates very low



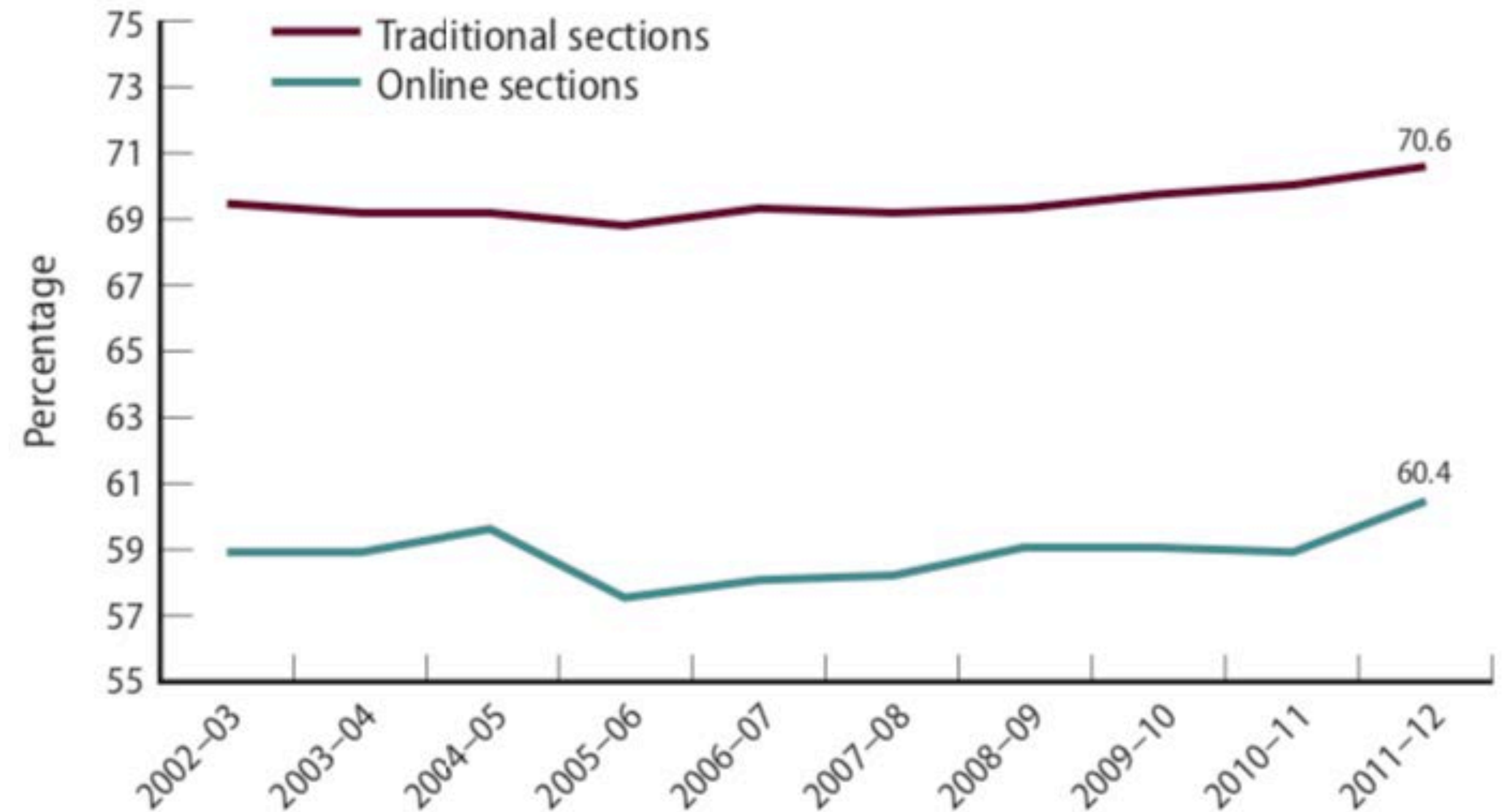
Consistently low retention and recent enrollment declines

Year-to-year enrollment of learner cohorts defined by their year of first activity. Parenthesis shows percentage retained from initial cohort size.



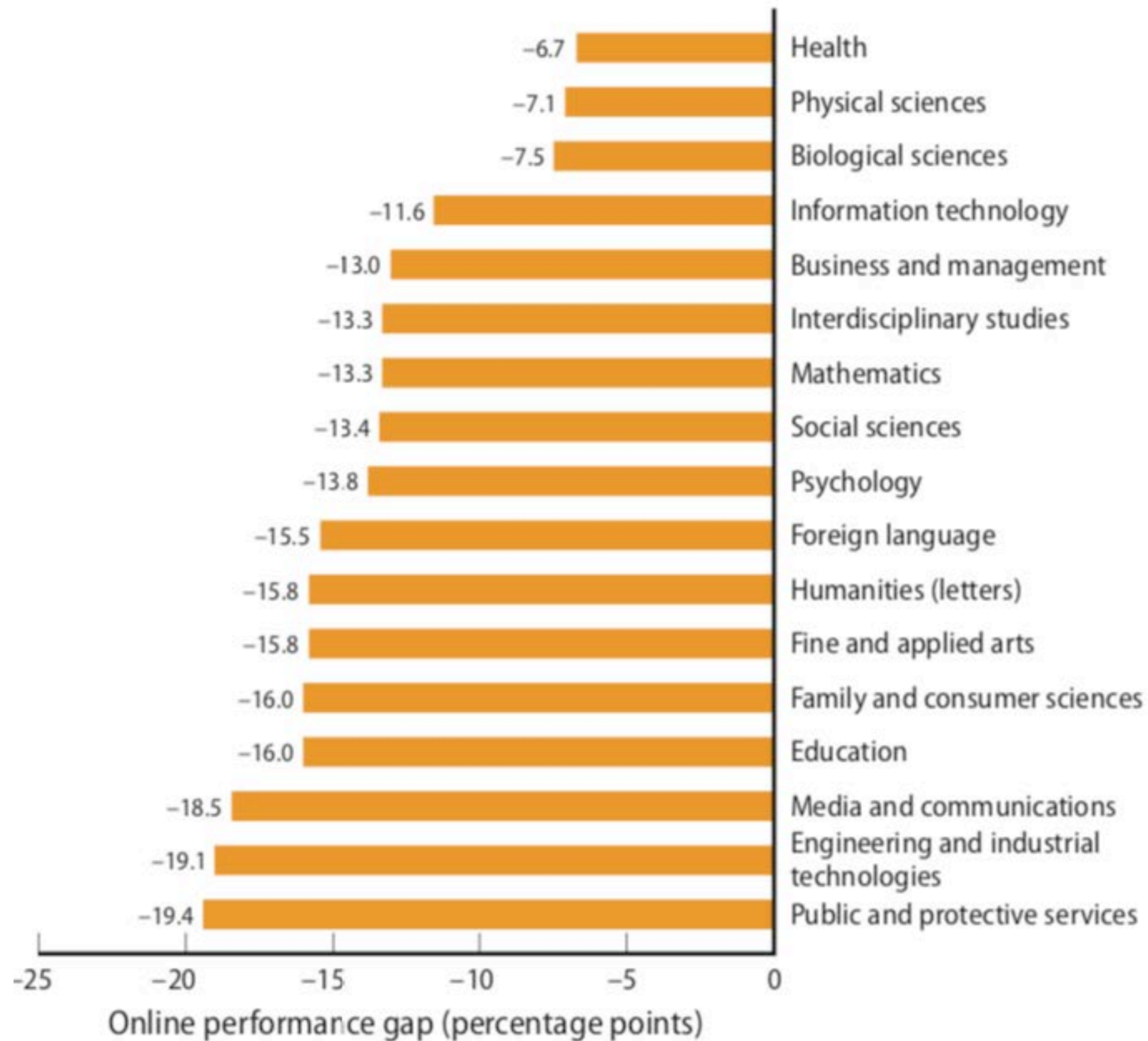
ON-LINE COURSES IN GENERAL

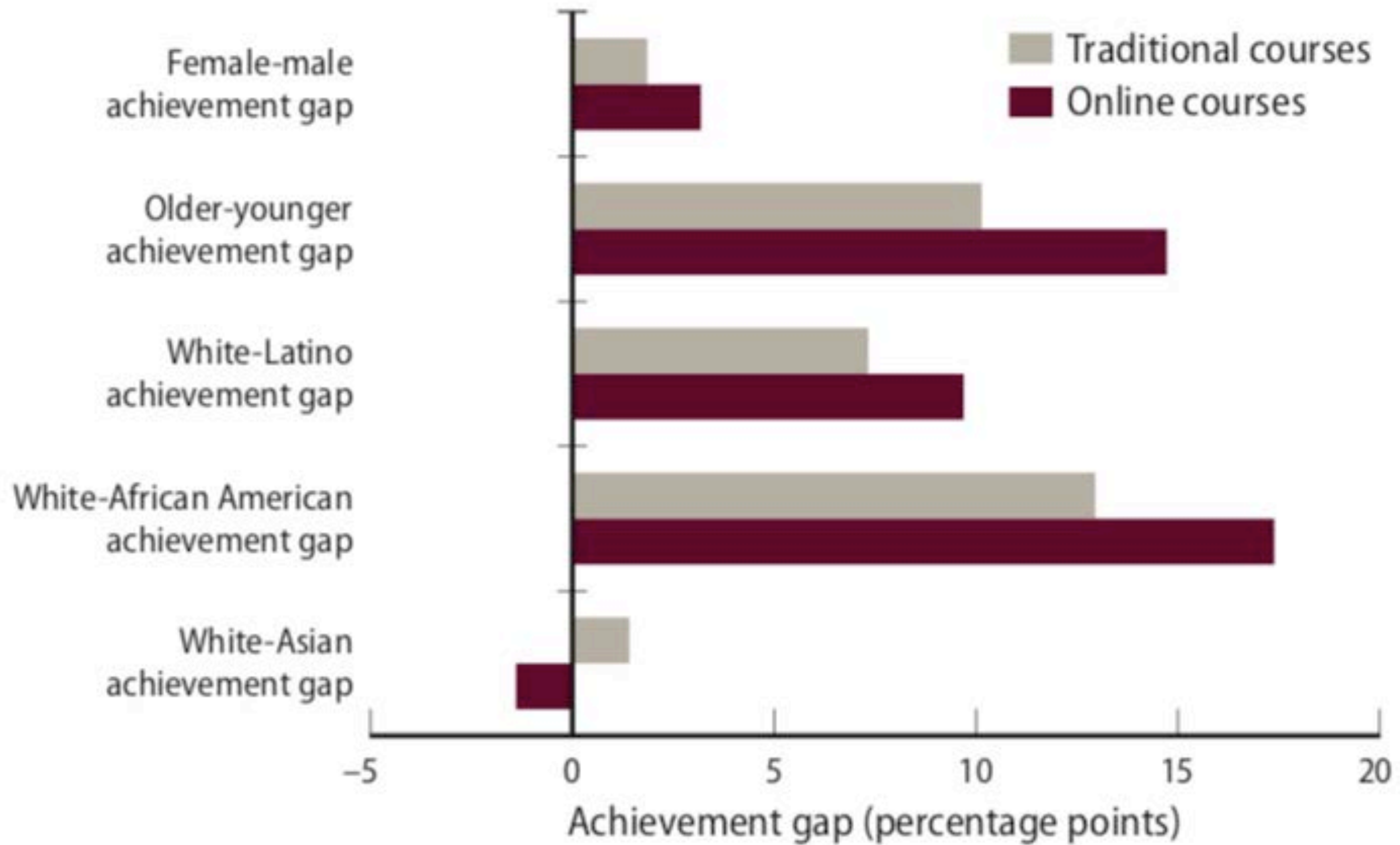
- Pass rates are, on average, about 10 percentage points lower, based on multi-year California Community College courses
- This difference can be termed the ‘performance gap’ for on-line vs traditional (F2F) courses



PERFORMANCE GAP

- ▶ The performance gap varied by discipline
- ▶ Engineering technologies have among the worst performance gaps
- ▶ Various minorities have additional performance gap handicaps

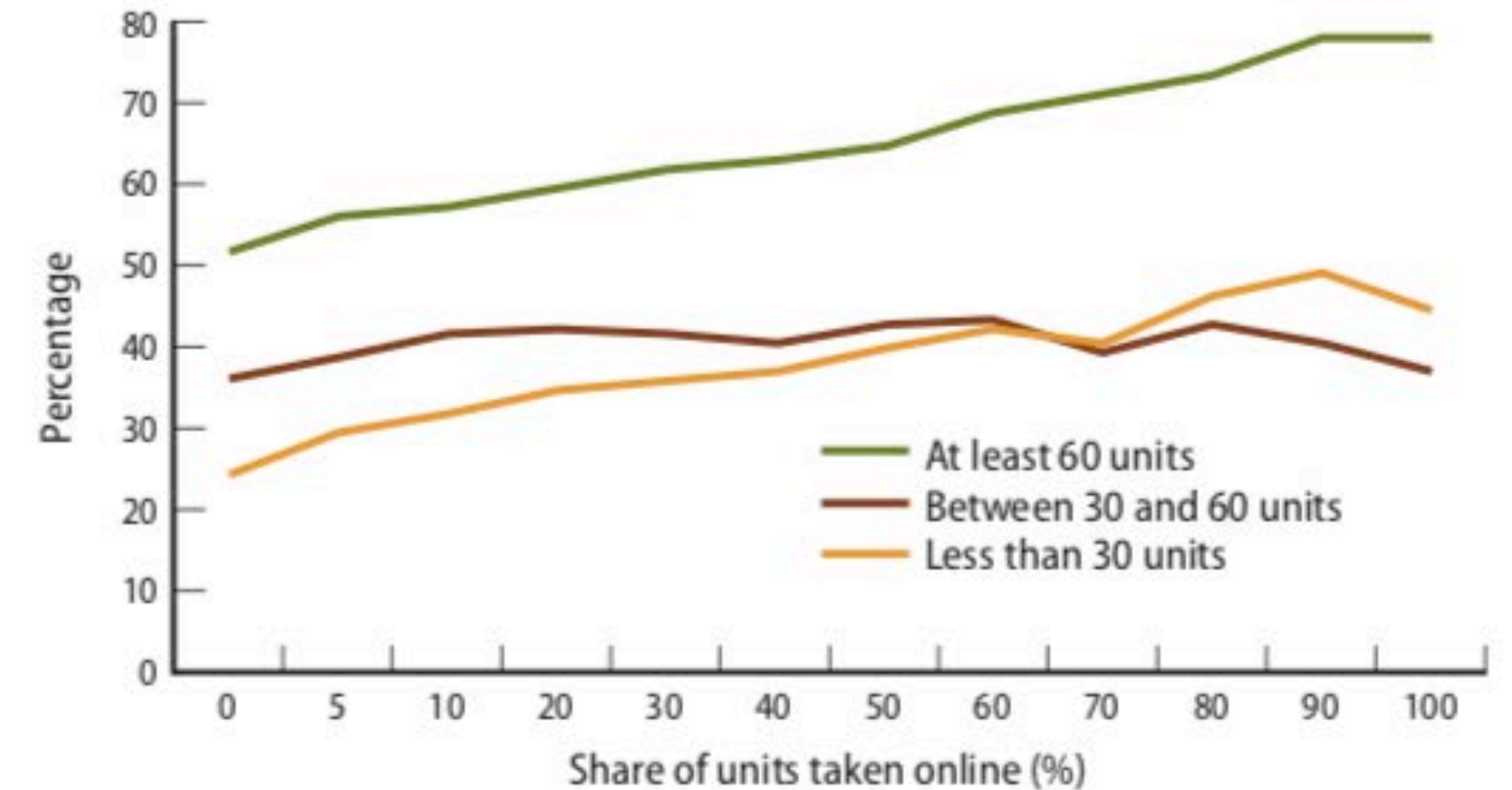




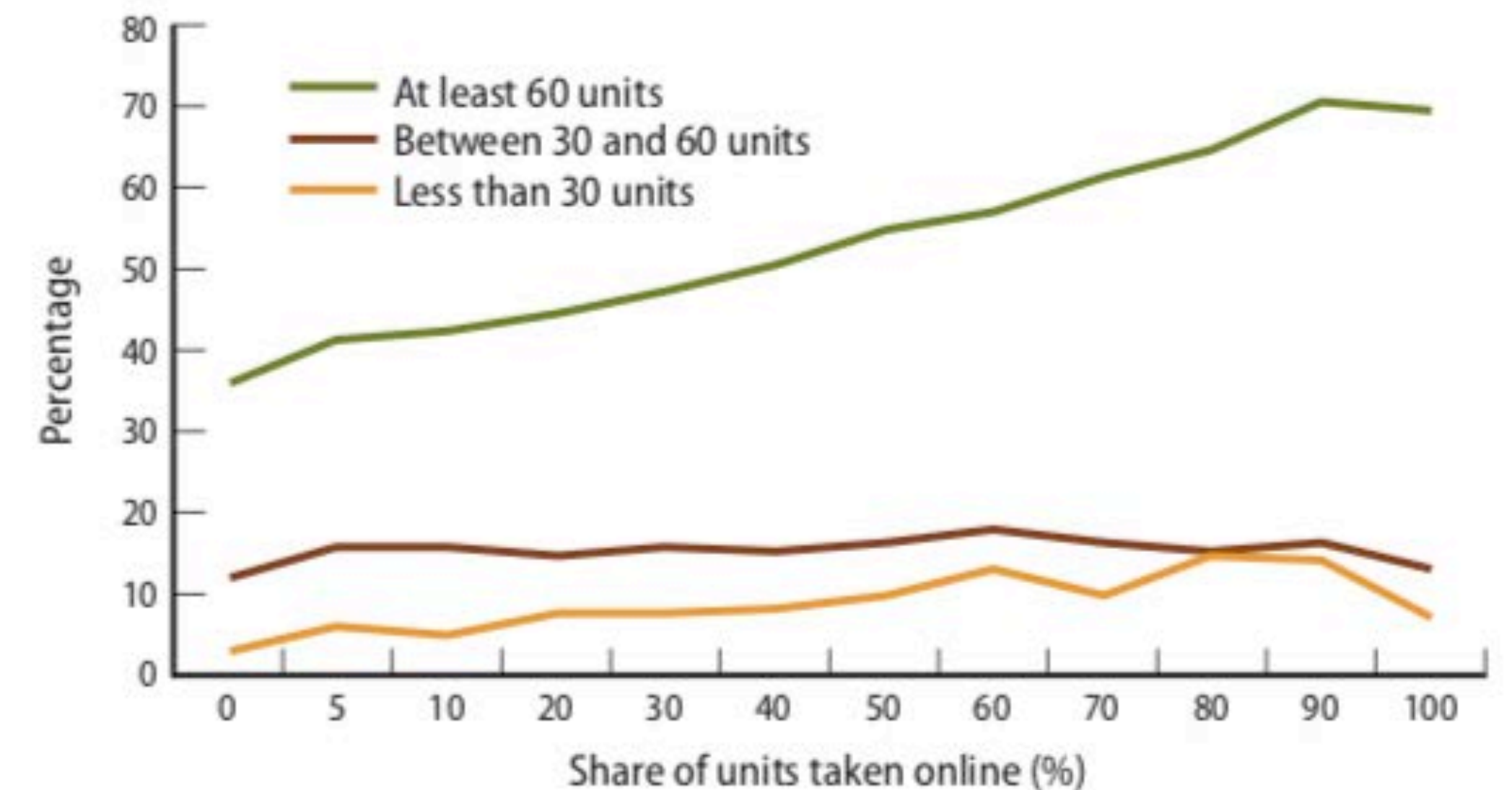
COURSES VS PROGRAMS

- While individual courses are problematic, overall student success at the program program seems largely unaffected, and perhaps better if on-line courses are included
- This may have a lot to do with student dedication and convenience of on-line courses

A. Likelihood of transferring to a four-year institution



B. Likelihood of earning an associate's degree

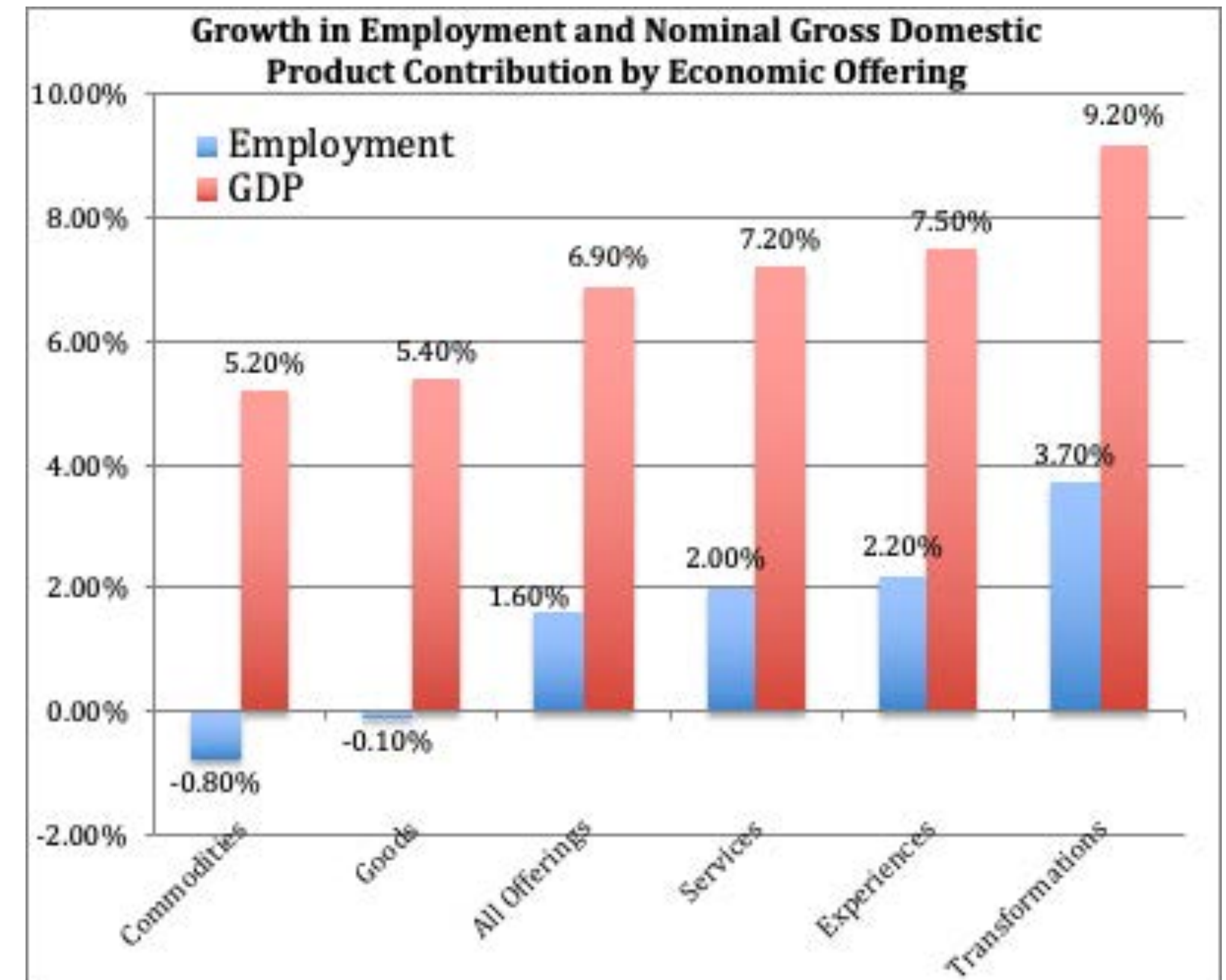


ON-LINE COURSES

- Despite being touted (largely by administrators) as the cure to many of higher education's problems, it appears that on-line courses aren't
 - But on-line courses are clearly helpful to some students
 - Can we avoid throwing out the baby with the bathwater?
- What are we doing wrong?
- Can we fix it?
- Starting point:
 - The difference between learning, education and school

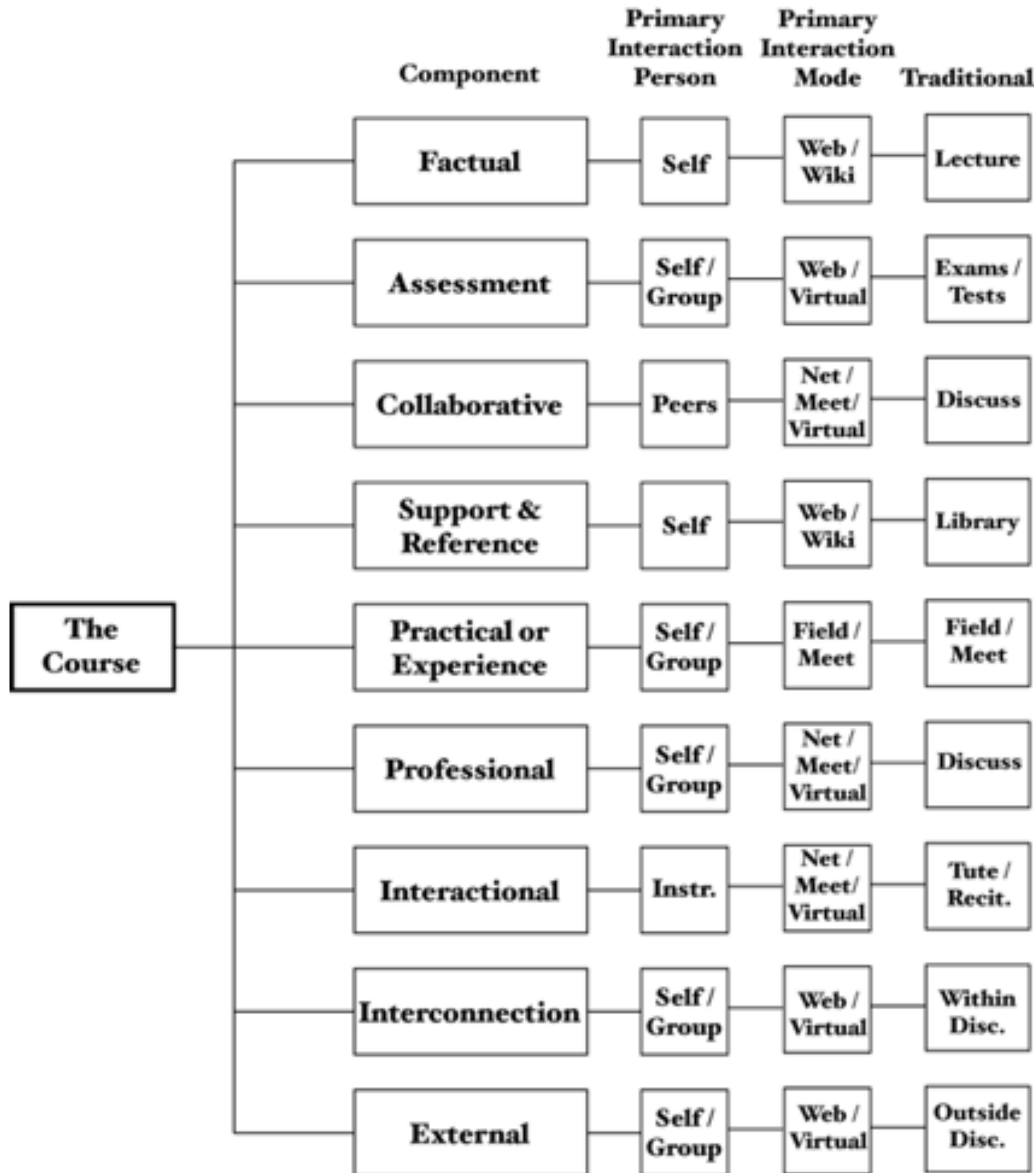
ECONOMICS

- Education is a transformational industry: it changes who people are
- Transformational industries have the greatest profit growth, which comes from both meeting a need and potential profit margins
- It is also where employment growth is happening
- Chart covers changes 1959 to 2009



COURSE DEVELOPMENT

- If we breakdown a course into a series of pieces, we can look at each one and see how we can best meet the needs of the course through each piece
 - We must realize that optimizing any one piece will cause the whole to be sub-optimal, and *vice versa*
- Keep the focus on learning, but with the flexibility to allow individual learning processes, i.e., multiple paths to learning
- Note that learning factual material is really good on-line, but learning other skills is more problematic



NINE COMPONENT ANALYSIS

- The nine components of a course and the primary interaction people and modes
- Not all apply to all courses
- Note how few involve an on-line lecture, and yet that component seems to dominate on-line courses

COST OF DEVELOPMENT

- On-line courses are seen as cheaper to implement and operate
 - Easy with faculty on salary: incremental costs = \$0
- Realistic costs are about \$200,000 per credit hour, whether done in-house or through a professional computer-based trainer
- Low-cost courses may be contributing to on-line course woes
 - We are eliminating the interactional component that can overcome shortcomings in the material and its presentation

CONCLUSIONS

- On-line courses are often touted as ‘The Answer’
 - But the answer may be ‘42’
 - Are we asking the right question
- Education is one sector of the economy that is growing, in numbers, profitability and employment
 - Do we really want to give it our least?
 - Is this a recipe for success?
- Thinking more deeply about the structure of courses may help here

QUESTIONS

THANK YOU!