



WPI

Faculty Institute for Online Teaching

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WPI Then & Now



Founded in 1865 as the
Worcester County Free Institute
of Industrial Science to teach
both theory & practice



- 4,435 undergraduate students
- 2,107 graduate students
(620 are fully online)
- Small class sizes taught by WPI
faculty

Recognized Excellence

- Wall Street Journal:
#1 Faculty that best combine research and Teaching
- Forbes:
Top 25 STEM colleges
- Princeton Review:
#5 Best Career Services
- Payscale.com:
#22 Best Value College/Top Return on Investment

THE WALL STREET JOURNAL.

WSJ

Forbes

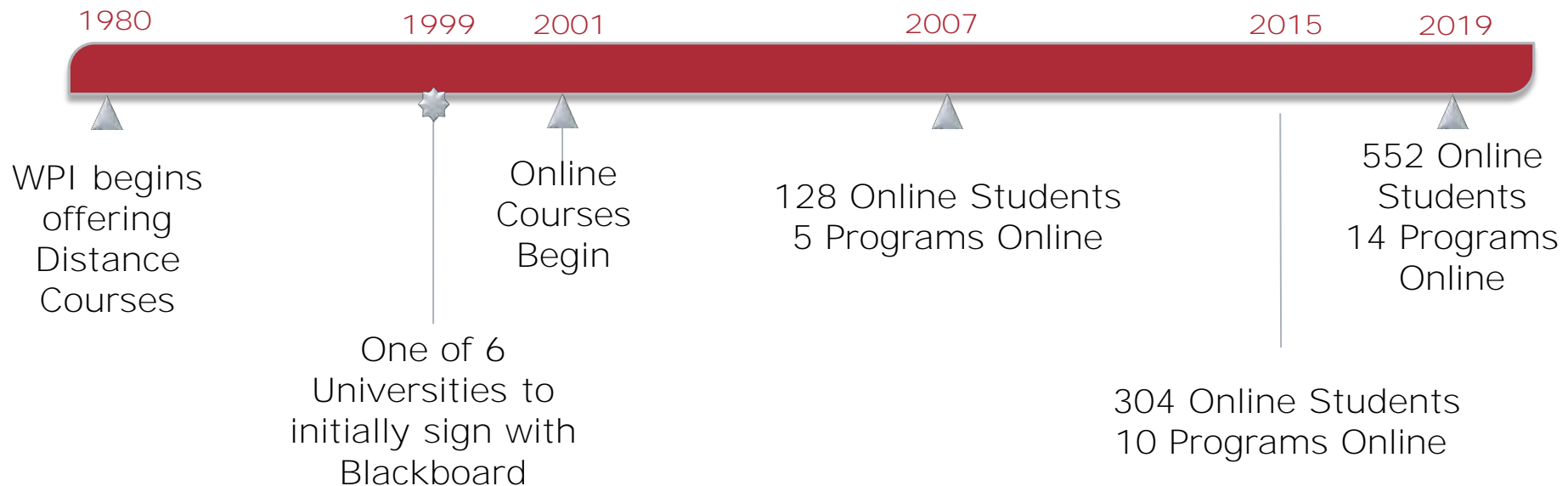
The
Princeton
Review®



Online Master of Science and Graduate Certificate Offerings

- Biotechnology
- Bioscience Administration
- Construction Project Management
- Cybersecurity
- Computer Science
- Data Science
- Electrical & Computer Engineering
- Fire Protection Engineering
- Life Sciences Management
- Mechanical Engineering
- Power Systems Engineering
- Robotics Engineering
- Systems Engineering
- Environmental Engineering

Historical Perspective



The Need for the Faculty Institute for Online Teaching

"Online College Students 2015: Comprehensive Data on Demands and Preferences"

Joint project of The Learning House, Inc. and Aslanian Market

Perceptions of quality of online study	27% of respondents
Inconsistent/poor contact and communication with instructors	21% of respondents
Lack of direct contact with other students	17% of respondents
Inconsistent/poor quality of instruction	17% of respondents

Best Practices for
Online Teaching
Checklist,
Implemented in 2015



How can I translate my in-class exercises to an online delivery?

How will I know if my students are understanding if I can't see them?

Is there a better way to build assessments for online students?



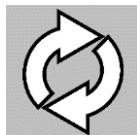
Faculty Institute Description



\$1500 Stipend
Upon Completion



Required for New Faculty
Teaching online. Strongly
Encourage for Existing Faculty



Iterative Process –
Alignment with Research
Stakeholder Input

Faculty Institute Offerings

- ✓ Offered 8 Rounds of FIOT
- ✓ 117 Faculty participated in at least the first phase
- ✓ Faculty come from all areas of Business, Science, and Engineering
 - ✓ 70 Online course sites developed
- Time constraints interfere with faculty completion

Results from the Faculty Institute



Faculty course evaluation asks students to rate “My overall rating of the quality of this course” on a 5-point scale.


Increased from an average of 4.0 to 4.2 for the same faculty before and after participating in the Institute (5% increase)

Students like:

- ✓ More organized course
- ✓ Better content delivery
- ✓ Faster feedback
- ✓ Improved assessments
- ✓ Easier peer-to-peer communication

Faculty observations

- Can focus more on learning outcomes
- Fosters a learner-centered environment
- Better utilization of flipped classrooms



Professor noted that she had typically 3-5 responses to a question in a traditional classroom, but in the online synchronous classroom, the same question resulted in over 70 responses, with 100% of the class engaged through the chat function

Lessons Learned

timing is everything



- Support from the Provost's Office is essential, both in terms of endorsement of the Institute's goals as well as financial incentive for faculty.
- Need to work more on dissemination, demonstrate value to the community.
- Need to balance the level of support and instruction needed for all participants.
- **Some participants didn't have enough time after the Institute to develop their course (a few weeks).**
- Others had a gap that was too long (up to a year). These situations affect collaborative nature of the Institute and affect completion rate.

Recommendations

- ✓ Consider mandating participation in the Institute, especially for new faculty
- ✓ Incorporate online teaching support into other faculty mentoring activities at your university
- ✓ Garner the support of academic leadership in promoting the value and benefits of the Faculty Institute for Online Teaching



Questions?



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