Incorporating Sociotechnical Cybersecurity Learning Within Undergraduate Capstone Courses

INDIANA UNIVERSITY

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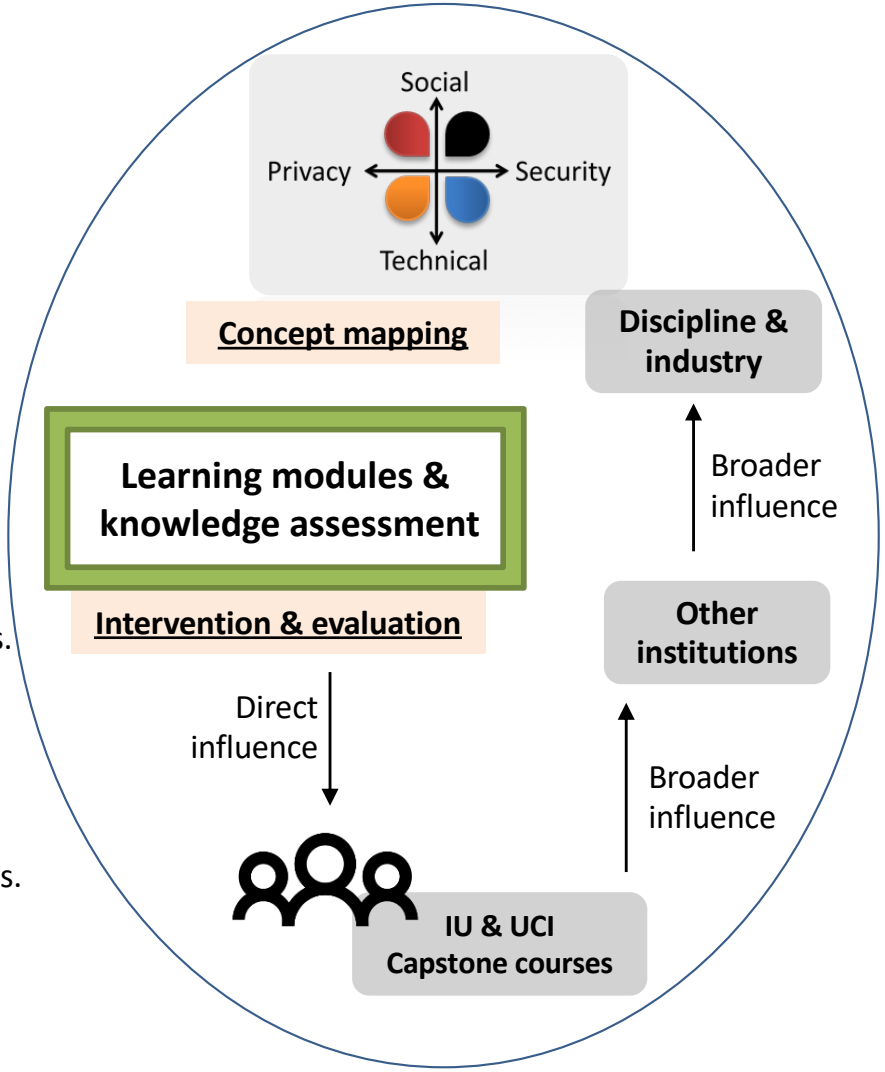
Challenge:

- Typical computing curricula *do not* require any courses in cybersecurity.
- Cybersecurity electives often cover *only* technical topics.

Solution:

- Get input from experts and clients.
- Design and test learning modules.
- Assess pre-class knowledge.
- Deliver learning modules.
- Assess post-class knowledge and evaluate student project outcomes.



Scientific Impact:

- We design, deliver and evaluate a suite of learning modules and a knowledge assessment.
- The project will benefit: 1) students in capstone courses, 2) educators from other institutions, and 3) students who seek workplace development.

Broader impact:

- Educational practices, computing students' career development, and workplace development in the software industry.
- Postdoctoral mentoring & REU, academic publication, open-access materials, and industry outreach.

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