ASSESSING THE UNSEEN
ROLES OF CONFIDENTIALITY AND TRUST IN SOFTWARE ENGINEERING WORK-BASED LEARNING PROGRAMMES

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Context
14 out of 15 Scottish universities have recently started to offer work-based learning degrees. Including research-led universities that deliver professional work-based degrees, e.g., medicine. The same approach can be used to deliver work-based professional software engineering degrees. In the Scottish context, industry and universities need to form a 50/50 delivery partnership.

Challenge
Established professional work-based degrees have established partners, e.g., National Health Service. Established partners have long-standing data sharing arrangements on student progress. Software engineering work-based learning degrees require multiple industrial partners. Many companies concerned about IP and will not permit free-ranging discussion and code sharing.

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Possible Solutions
Consider the example of assessing the ability of a student to refactor a company code base, but the academic is unable to observe performance or code base in company.

Open Badges
Student completes refactoring of company code base and is awarded an open digital badge.

Workplace mentors, clients, and peers can award open digital badges indicating attainment of skill.

Transferable Skills
Student refactors company code base during practice semester and is assessed upon return.

Student presented with an agreed artificial and unseen code base to refactor to demonstrate skill.

Oracle Outreach
Student refactors company code during practice semester, but must lead a session on the topic.

Session would be delivered to children or peers and the student would need to handle questions.

What About Formative Assessment?
Idea of a university is a vibrant community of practice in search of truth.

Opportunity to coordinate a vibrant community of practice of work-based learning students.

Challenge is that companies may not permit students to talk about sensitive information.

Unclear how to maintain confidentiality and trust while also ensuring maximum freedom.

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