

How do you move from *diffusing* innovation to *embedding* innovation in everyday practice?



**BRITISH COLUMBIA
INSTITUTE OF TECHNOLOGY**

What do we hope to learn:

- Are faculty development programs meeting the needs of faculty?
- Are faculty development programs changing the curriculum or learning environment in meaningful ways?
- Once innovations have been diffused to a broad audience, how can they best be embedded into every-day practice?

How are we collecting our data?

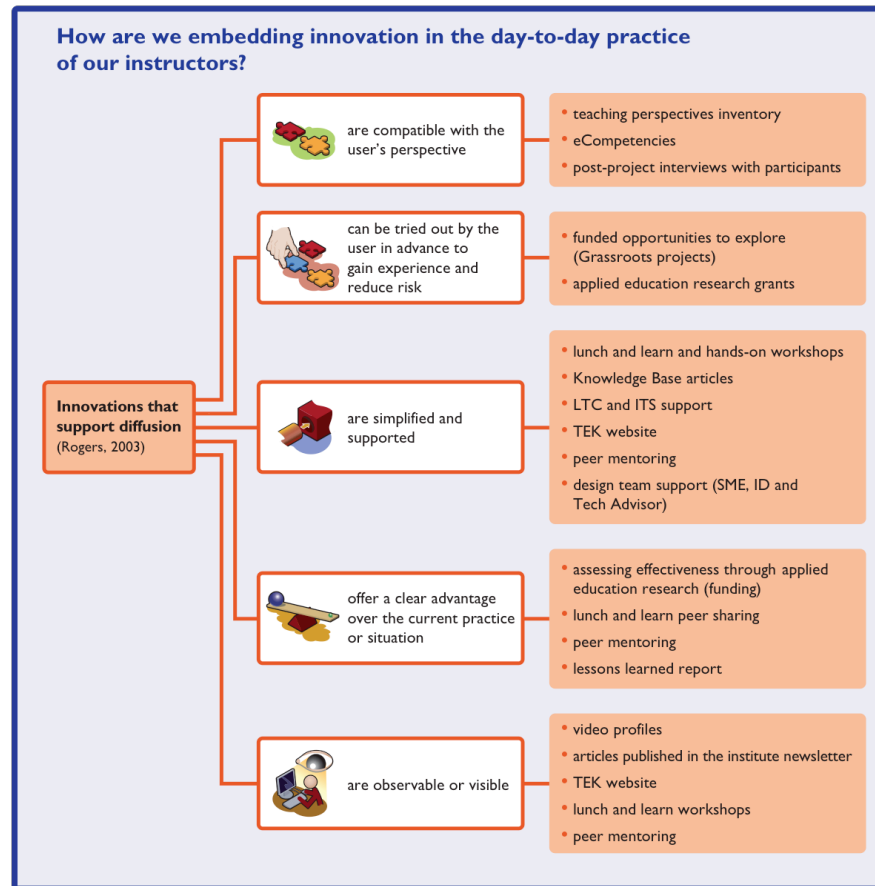
- Instrumental case-studies approach
- Interviews and focus groups with instructors
- eCompetencies survey

About BCIT

BCIT is a polytechnic with an applied focus and close ties to industry.

- 48,000 students, 275 programs, 2,200 instructors
- Instructor contact hours:
 - technology instructors: 15 hours/wk (15 prep and 5 hours of office hrs.)
 - trade instructors: 25 to 30 hours/wk
- types of credentials offered:
 - Bachelor's Degree: Business Admin, Engineering, Science, Nursing
 - Bachelor of Technology (applied)
 - Diploma: Technology, Trades Training or Technical Studies
 - Certificate, Advanced Certificate or Post Diploma
 - Master's Degree (under development)

How are we embedding innovation in the day-to-day practice of our instructors?



A research project carried out by the Learning and Teaching Centre at the British Columbia Institute of Technology, Vancouver, Canada.

Preliminary findings:

Factors that encourage embedding

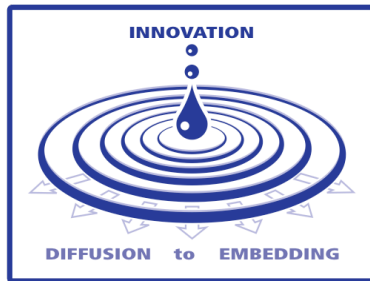
- Innovations are used by an interdisciplinary team
- Innovations are used by new student populations (students in remote areas, international, working students)
- Innovations are supported by program policies, faculty and management
- Management encourages faculty to explore
- Technology is stable and easy to use
- Ongoing customized training, sharing and support

Challenges to embedding innovation

- Lack of time (specialized teaching makes it hard to find replacement teachers; no TA's)
- Pressure from students to be innovative. This pressure makes some instructors feel uncomfortable. They fear embarrassment
- Limited access to technology and smart classrooms
- Increased workload
- Safety and security concerns
- More technical support required

What's next?

- Continue interviews and focus groups
- Create formal opportunities for interdisciplinary collaboration and interaction
- Customize faculty development programs
- Continue interviews and focus groups



observability

"I would like to observe another instructor's lessons to see how the technology is used."

"Collaborating with a colleague from another department on a project allows you to learn how to use a new technology and the associated technical skills."

"It's useful to regularly attend workshops and lunch and learns to see what faculty in other departments are doing."

"Instructors should show how they use innovations during departmental meetings."



advantage

"Educational technology can make learning more interactive . . . students can focus on doing rather than reading . . . there are more opportunities for peer-learning and leadership development."

"Educational technology by its nature can be more democratic."

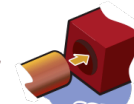
"Instructors need quick payback; the learning curve needs to be brief after the initial learning curve, the tools should help the class run more efficiently."

"The tools need to be intuitive and easy to use."

"It feels good when it works well and is effective for students."

"Great possibilities for internationalization -- connecting what we have here with the rest of the world."

"There was success, though limited, in getting students to think about their work and reflect on it through ePortfolios, while also building communication skills."



complexity

"Keeping up with each new version of the software means there is constant change."

"Support is needed for elearning techniques and procedures to enhance self-learning, instructor facilitation and intervention."

"We need to train students for elearning, especially international students."

"Online marking takes longer and can be limiting."



experimentation

"I can't get scheduled into a lab. It takes a lot of time to get a laptop cart from AV services."

"I'm mostly scheduled in "dumb rooms" . . . you really have to fight to get a "smart" room."

"I want the ability to be spontaneous; I need equipment there because I can't always predict when I want to use it."

"I just don't have the required time to "play with and investigate" the new technologies."

"Not enough time and support to practice using the tools."

"We are constantly understaffed, and finding someone to temporarily fill your spot is really hard."



compatibility

"I need to be really comfortable with anything I add to a course."

"The technology has to fit me personally."

"Some instructors are confident and encourage other instructors to use technology, but some are scared of technology and they fear embarrassment."



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Diffusion of Innovation Action Plan

Multiple Stakeholders, Multiple Perspectives

Each of these stakeholders will play a part in helping diffuse, and ultimately embed, the innovation of ePortfolios into the CSU Anywhere campus culture. Within any culture, it is important to identify each individual's perspective to meet his or her needs and communicate effectively.

Working in groups, you will be assigned one set of stakeholders. For each factor that affects innovation (compatibility, triability, complexity, advantage, and observability), suggest some strategies to help each stakeholder adopt the innovation and begin to build a culture of ePortfolios.

Factors Affecting Diffusion of Innovation:	Compatibility: <i>The degree to which the innovation is consistent with current values and perspectives of the users.</i>	Triability: <i>Trying out a new approach on a limited, trial basis to minimize risk and allow for experimentation.</i>	Complexity: <i>Innovations that are easier to understand and use will be adopted quicker than more complex innovations that are unsupported.</i>	Advantage: <i>The degree to which the innovation is perceived as better than a current situation.</i>	Observability: <i>The more observable or visible an innovation is, the more likely it will diffuse.</i>
Proposed Strategies:	What aspects of ePortfolio use can be identified as compatible with each of these stakeholders' current beliefs and practices?	How can each stakeholder experiment with ePortfolios?	How can we help make ePortfolios simple to understand and use for each stakeholder?	How can we communicate to each stakeholder that ePortfolios offer a clear advantage over the current practice or situation?	How can we make ePortfolios observable to each stakeholder, within both mass-media and interpersonal channels?
Group 1					
President					
Dean, Sciences					
Adjunct Faculty					
Graduate Student					