# ETEC 524 Assignment 3: Innovative technology integration proposal

## Introduction

The use of technology in teaching and learning at VCC has grown dramatically, with more and more courses using technology to improve the student experience. At the same time, we face growing challenges in adapting to a changing postsecondary education environment. We need to grow our ecosystem of educational technologies to meet these challenges.

While our learning management system continues to be important, there are challenges that require us to look beyond the LMS:

1. The need for a robust ‘learner journey’ tool that can enable students to plan/prepare, record/reflect, collect/curate, and share/showcase all stages of their learning, including prior learning.
2. The demand for a student-owned portfolio space that students can take with them as they move between institutions, or from education into work.
3. The ability for external assessors to assess performance during work placements.
4. The requirement for ongoing and authentic assessment strategies and tools.

Overall, we lack a robust, scalable, high-quality solution that can meet these requirements. We are therefore proposing that the college implement [PebblePad](https://pebblepad.com/resources/case-study/transforming-nursing-education-for-remote-placements/).

## Why PebblePad?

### It integrates with our existing technologies

PebblePad integrates with other commonly used technologies, including Banner, Moodle and Kaltura, and supports single sign on.

### There is a local, provincial, national, and international user-base

Local users of PebblePad include UBC, KPU, Langara, JIBC, and Capilano University. Within the province, Selkirk College is also using PebblePad. Outside of BC, The University of Waterloo are prominent users. There is a ready-made community of users of the tool in Canada, particularly in BC. Already a community of practice has been created to share examples of PebblePad in practice. BC users share resources as OER, meaning that new adopters have a head start in the creation/localization of training and other resources.

### It offers a range of features that meet our current and future needs

* **Personalized Learning**: PebblePad allows students to create portfolios documenting their learning journey, accomplishments, and reflections. This fosters self-directed learning and empowers students to take ownership of their education.
* **Authentic Assessment**: The platform enables educators to design authentic assessments, track student progress, and provide timely feedback.
* **Collaboration and Reflection**: PebblePad facilitates collaboration among students and educators, promoting peer feedback, group projects, and reflective practice.
* **Career Development**: By showcasing their skills, experiences, and achievements in portfolios, students demonstrate their competencies to prospective employers.

## Evaluation of PebblePad

We used two frameworks to evaluate the suitability of PebblePad for our context: the SAMR (Puentedura, 2010) and the SECTIONS (Bates, 2014) frameworks.

### SAMR

The SAMR framework categorizes the extent to which technology can be used, and its impact on teaching and learning.

* **Substitution**: Technology is used as a direct substitute for a traditional tool without significant change in the tasks performed. PebblePad replaces more rudimentary e-portfolios or paper-based assignments. Students and educators can create digital portfolios to store and showcase their work. While this improves the process, it doesn't fundamentally change how portfolios are created or assessed.
* **Augmentation**: Technology is used to enhance the task or workflow. With PebblePad, features such as multimedia integration, feedback mechanisms, and collaboration tools enhance the e-portfolio experience.
* **Modification**: Technology allows for significant task redesign. With PebblePad, this could involve reimagining how portfolios are used within the curriculum. For instance, educators might design interactive assignments or reflection prompts within PebblePad, fostering deeper student engagement and critical thinking. The platform's flexibility allows for customization of assessment criteria and integration with learning outcomes, enabling instructors to tailor assignments to meet specific educational goals.
* **Redefinition**: New possibilities become feasible due to technology. In the context of PebblePad, this might involve completely transforming the nature of assessment and learning experiences. For example, students could collaborate on group projects using PebblePad, engaging in peer feedback and reflection in real-time. Additionally, PebblePad's integration with other learning management systems (LMS) or tools could facilitate seamless integration of e-portfolios into broader educational practices, such as competency-based assessment or experiential learning initiatives.

### SECTIONS

We used Tony Bates’ SECTIONS framework to identify benefits and challenges in the following categories:

* **Students**: PebblePad provides a platform for creating and managing digital portfolios. It allows students to showcase their work, reflect on their learning experiences, and receive feedback from instructors and peers.
* **Ease-of-Use**: PebblePad offers a user-friendly interface for both students and educators.
* **Costs**: For an initial pilot the cost is not excessive. As we add more users, the per license cost is reduced.
* **Teaching and Learning**: Educators can design authentic assessment tasks, promote reflective practices, and encourage collaboration.
* **Interactivity**: PebblePad promotes interactivity via peer feedback, collaborative workspaces, and multimedia integration.
* **Organizational Issues**: Implementation will require infrastructure support, training and professional development, although the fact that it is offered as SaaS mitigates the IT support requirement.
* **Networking**: PebblePad facilitates networking among users by enabling collaboration and communication.
* **Security and Privacy**: A completed PIA is available from BCNet.

## Cost Analysis

If we start at the lowest level with 1000 licenses, the annual license fee is around $20,000 CAD + taxes. Additional fixed costs for the first year would include a one-off implementation fee of $20,000. Adding enhanced support from PebblePad (recommended for the pilot year) would cost a further $5,000.

* The total cost for year one, with 1000 active users would therefore be around $45,000 CAD + taxes.

## Implementation Strategy

A more detailed implementation plan will be prepared if/when PebblePad licenses have been purchased. The following assumes a one-year pilot:

1. **July 2024- Sept 2025 – Identify Pilot Group**: Select a group of faculty and students based on preliminary needs analysis. Determine evaluation metrics.
2. **Sept 2024- Dec 2024 – Customization, Integration and Testing**: Customize platform to align with college's branding etc. Integrate with existing LMS, Banner, SSO etc. Test all functionality prior to pilot launch.
3. **Dec 2024 – Mar 2025 - Training and Support**: Provide comprehensive training for faculty, staff, and students.
4. **Jan 2025 – Dec 2025: Piloting of the tool in courses** **and programs.**
5. **Jan 2026 – Evaluation**: Evaluate effectiveness of the tool and decide whether to proceed.

## Conclusion

PebblePad will enable us to meet many of the challenges we face in terms of authentic assessment and work-integrated learning. It will work with our existing technologies, and will not require extensive ongoing technical support, as the infrastructure is hosted by BCNet. It is a cost-effective solution, and piloting with fewer users initially will allow us to identify and resolve problems before we move to site-wide use.

## References

Bates, T. (2014). Choosing and using media in education: The SECTIONS model. In *Teaching in digital age*. Retrieved from <https://opentextbc.ca/teachinginadigitalage/part/9-pedagogical-differences-between-media/>

Puentedura, R. (2010). *The journey through the SAMR model. iPad Educators: Sharing Best Practice in the use of Mobile Technology*. Retrieved from <https://www.powerschool.com/blog/samr-model-a-practical-guide-for-k-12-classroom-technology-integration/>