



2019/2020

## Adaptive 2.0

Pilot Project

Building on previous work, objectives of Adaptive 2.0 were to:

- → Increase Certificate of Qualification Exam pass rates for apprenticeship students using Adaptive Learning platforms.
- → Improved proficiency in subject areas for students who complete Adaptive Learning modules.

The Covid-19 pandemic greatly impacted the outcomes for Adaptive 2.0. Postsecondary partners were required to devote significant resources in the pivot to new online learning environments and had little capacity to devote to other initiatives. As a result, the two objectives for Adaptive 2.0 were deferred.

Program efforts did secure the advancement of two partnership projects, supported by eCampusOntario and Desire2Learn(D2L). Both partnerships furthered eCampusOntario's continued work in supporting member institutions in their creation of content for and adoption of Adaptive Learning. Additionally, these projects garnered further insights into the impact of Adaptive Learning on student experience and learning outcomes.

### CENTENNIAL COLLEGE

Centennial College developed Adaptive Learning modules for two courses in the areas of Product Design and Musical Theory. The Product Design course facilitated learner exploration and development of their own creativity to meet marketplace demand. The Musical Theory course explored how Adaptive Learning can reach learners with different levels of experience and training. This initiative leveraged user-testing with learners to evaluate and make improvements to the modules. Further plans include piloting these courses during the 2021/22 academic year.

### ALGONQUIN COLLEGE

The second project, launched by Algonquin College, was a course section for ENG1813: Communications 1. Initial results from this pilot indicate that learners who completed Adaptive Learning modules demonstrated improved proficiency in subject areas over those who did not. Both projects utilized D2L's LEaP as the Adaptive Learning platform.

# Important Considerations when Implementing Adaptive Learning

Numerous insights have been gained from Adaptive 1.0 and 2.0 and should be taken under consideration by institutions implementing Adaptive Learning.



## Resources Needed

- Participating institutions noted that limited time and capacity was often a key factor in their projects. Ensuring that dedicated resources are available was a key recommendation.
- Adaptive Learning projects are more resource intensive at the development stage. Once launched, the platform can be more self-directed with available technological support.
- Consider working with a vendor whose approach to content and platform development align with resources available internally.
- The learning curve for platforms can be time-intensive for some faculty and students. It is recommended that institutions carefully consider support and training necessary for success.

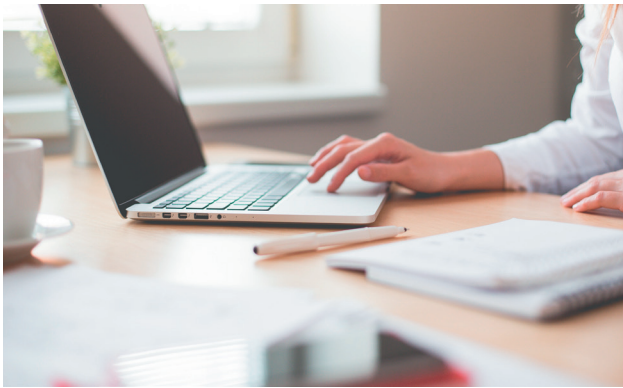
## Take a Team Approach

- Development and implementation of Adaptive Learning solutions benefits from a team-based approach. Depending upon the scale of the project, teams may include subject matter experts, teaching and learning support, platform vendor, course facilitators, as well as research and analytic support.
- Select a vendor and platform that is carefully aligned with needs and available resources. It was noted that each vendor approaches project management differently with some developing content in-house with the platform, while others partner with external subject matter experts for content. It is recommended that institutions consider working with a vendor whose approach to content and platform delivery is consistent with the resources available.



## Evidence-based Decision Making

- User analytics can identify struggle points and inform the design and implementation of targeted supports and resources.
- Best results are achieved when a single platform is used across the institution or sector.



## Adaptive Learning Platforms

- The use of a specialized adaptive learning platform is not necessarily required to integrate Adaptive Learning into a course. Other tools commonly available through Learning Management Systems, like quiz functions, can be used to develop adaptive learning opportunities.
- The identification of a set of common practices related to developing adaptive learning opportunities for learners could create a better understanding of adaptive learning pedagogy and approaches to course design that are not centred on specific adaptive learning technology.



## Supporting Student Experience and Learning Outcomes

- Adaptive Learning can allow students to better understand their own learning process and educators to better understand the needs of students.

## Institutions shared the following insights:

- » *Adaptive Learning solutions could be useful for students who were unsuccessful in a course through boosting confidence by identifying what they do understand and focusing their attention on knowledge gaps.*
- » *Motivate students to engage with the Adaptive Learning solution by clearly communicating the benefits to their learning.*
- » *Adaptive Learning could be highly beneficial in hybrid/blended courses where modules could be used as part of a student's online requirements.*
- » *Both students and faculty shared the benefits of using learning analytics to create curriculum maps that show where the learner is in the learning process.*
- » *Learning analytics should be used as a learning feedback mechanism for both students and educators.*