Lessons Learned from an Analysis of OALCF Use Digital Technology Competency Milestones

With the introduction of the OALCF (Ontario Adult Literacy Curriculum Framework) and its aligned reporting system in 2012, Ontario's Literacy and Basic Skills programs (LBS) have experienced extensive changes in the way they report program activity and demonstrate accountability. Many of the changes involve curriculum and assessment including

1. A curriculum reform that introduced a novel task-based pedagogy along with unique curricular standards, levels and performance criteria

2. A complex assessment scheme comprised of three distinct forms of assessment: Milestones, Culminating Tasks and Learner Gains (under development)

3. Restrictive reporting and assessment administration guidelines that disconnect both learners and instructors from the curricular accountability process, leading to a compliance-centred system rather than a learner- and learning-centred system.

Currently, only one of the three assessments is mandated, and that is the Milestones. Previous reviews[1] and this current project[2], indicate that some adult learners and their instructors/practitioners are experiencing several challenges with the Milestones, such as their overall difficulty, unfamiliar content, complex instructions and lack of fit with teaching and learning activities.

One of the ways that assessors have responded to the challenges is to rely on three digital technology Milestones to comply with the reporting targets, and make sure that all learner plans contain a completed Milestone. An early review of the Milestones[3] revealed that the three digital technology Milestones were completed more often than any of the other 60 Milestones. Although they represent only 5% of all Milestones, 21% of learner plans contained a digital technology Milestone.

In this research, we wanted to find out if these Milestones had maintained their popularity and appeal two years after the

OALCF was introduced. We also wanted to find out and document *why* they are being used so often. By investigating this question, we learned more about Milestone use in general, and uncovered a series of challenges, contradictions and inequities that are directly related to the new curricular accountability system.

How often are the digital technology Milestones used?

When we compared reporting data from 2013-2014 with data collected six months after the Milestones were introduced in 2012, we found out that the digital technology Milestones (MS 54, 55 and 56) have maintained their popularity.

MS 54 (Log into a user account) is completed four times as often as the most popular reading related Milestone (MS 1, Read a classified advertisement and an email). This is striking, considering that an average of only 1.6 Milestones were completed by each learner in 2013-2014. This means that the Milestones in general are used only to fulfill reporting requirements, and the digital technology Milestones have a predominant role.

	Six Months After	Two Years After	
	All Plans	All Plans	Francophone
MS 54	11%	12%	13%
MS 55	6%	6%	6%
MS 56	4%	2%	3%
	21%	**20%**	**22%**

Why are digital technology Milestones so popular?

When we asked assessors to complete a survey (181 assessors responded) and interviewed a total of 26 assessors, instructors and coordinators, they told us why they rely on digital technology Milestones. Overall, they have both an important

administrative function, and they are more pedagogically useful.

One of the reasons they are used is to ensure that every learning plan has a completed Milestone. This is especially important when working with learners who may decide to leave a program soon after registering. They can be completed by most learners soon after entering a program because they don't require the same amount of preparation time as other Milestones. This is a concern when working with learners who have only 0-8 years of education or exceptionalities and disabilities.

> *When assessing with Milestones, it is the Digital Tech Milestones that students most easily relate to.*
>
> Survey Respondent

Study participants explained that the digital technology Milestones also have pedagogical uses as they

- Are more appealing to learners, easier to use, and predictable compared to other Milestones
- Can be adapted to ensure the use of truly authentic and skill appropriate texts and activities
- Represent actual activities that the learner is engaged in, and learners immediately recognize the texts used for testing purposes
- Can be used in blended learning programs, in preparation for online courses (e-Channel[4]), and specialized computer courses that support employment
- Introduce learners to the Milestone testing system and concept of competencies in a supportive and non-threatening way.

Completing a digital technology Milestone also provides assessors with information that they can use to support instruction. At least half of survey respondents indicated that their completion tells them that learners will be able to do the same activity (e.g., Log into a user account) at the same level of difficulty in their daily lives. Completion also tells them that learners have acquired particular digital technology skills and knowledge. In comparison, when asked a similar survey question about *all* Milestones, no choice received 50% agreement, indicating ambivalence about what the Milestones in general tell assessors and instructors.

> *I believe Digital Technology Milestones more directly relate to future learning and the use of skills in daily life.*
>
> Survey Respondent

However, some study participants also said that the digital technology Milestones provide very limited information about progress and program accomplishments. During an interview, an assessor explained that they need to be augmented and better contextualized to reflect a variety of digital environments and literacy practices. In addition, she elaborated, they need to include networking/sharing aspects, and they need to be integrated with other competencies and task groups.

What makes them more useable and useful compared to other Milestones?

The digital technology Milestones were designed differently compared to other Milestones that require reading. They don't follow the same content-related design principles, nor do they incorporate the same test question formats. We can see this difference when comparing the sample Milestone 99 (Review the staff directory) and Milestone 54 (Log into a user account).

> *Digital milestones are important, but need to be vastly overhauled in order to be useful. I use them extensively, as I primarily teach computing courses. Many of our students identify digital literacy as their main barrier to independence or employment.*
>
> Survey Respondent

Content and context differences

Unlike the sample and all other Milestones, the digital technology Milestones are actual activities carried out in a digital environment. They are not made-up approximations of a literacy activity. To complete Milestone 54 a learner is directed to log into an online account. The learner and assessor can choose which online account is used. This means that they have control of the content, the context and the complexity of the test task. Both the learner and assessor are directly involved in the accountability process. This also means that the experience and capabilities of the learner are acknowledged and respected, and the expertise of the assessor is relied upon.

If, for example, the learner chooses to log into a Google account the following situated and authentic literacy processes are in play:

- Recognize familiar logos, images and formats to situate and understand activity
- Attach complex and situated meanings to key words such as Google, email, password

- Relate complex and situated actions to key words such as 'sign in'
- Make possible adaptations and modifications if familiar elements are different from previous experiences (i.e. different formats, terms, organization, etc.).
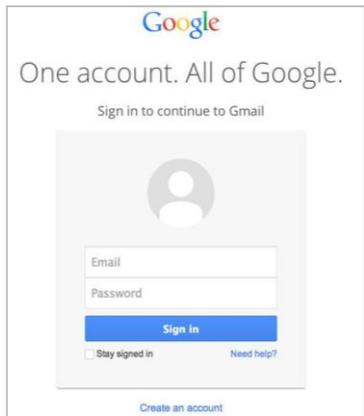
In comparison, MS 99 and other Milestones that involve reading texts are made-up approximations of textual formats and content that a learner may or may not be familiar with. The learner and assessor have no control over content, context and complexity, except by choosing a different Milestone. This means that learners must respond to a text that has been decontextualized and disconnected from the way a text would actually appear outside the testing situation.

- Test texts contain no familiar logos, symbols, place names, and organization names; contextual cues that could help situate the text in learners' lives have been removed
- The content may be unfamiliar and not related to learners' goals, interests and life experiences
- Some digital texts have been removed from their environment and presented in pen and paper format, further decontextualizing them
- A readability analysis is not provided to assessors to help them determine text difficulty (i.e. difficulty of vocabulary and syntax).

In the sample Milestone, learners must rely only on their decontextualized reading abilities, which are not used outside the testing situation. These decontextualized abilities are developed within school settings and involve extensive test-taking experience and the development of a comprehensive set of reading skills, knowledge, strategies and insights. This means that the content of the Milestones can be extremely challenging for adult learners with 0-8 years of education, for learners who use English or French as a second language, for learners who primarily communicate using ASL, and for learners with exceptionalities and disabilities that could complicate the development of literacy.

Adding to the design challenges are restrictive administration guidelines that over-emphasize the role of the Milestones for learners and place unnecessary testing restrictions on instructors. Although the Milestones are used as one of the mechanisms that produce a measure of program effectiveness, they are not used to assess the progress of individual learners. This means they are a high-stakes test for programs but a low-stakes test for the learner. They are not used to demonstrate readiness to participate in further education or training, as an indicator of course completion or as an indicator of skill development. The study's findings revealed that programs continue to use a range of other assessments and curriculum frameworks to gather this sort of information. In addition, according to the *Milestones User Guide*, instructors are cautioned *not* to rely on the Milestones for these purposes[5].

Access to the Milestones is restricted. This prevents some instructors from reviewing the tests and preparing their learners. Subsequently, assessors rely on the same few Milestones for learners. Instructors and assessors are also told not to provide detailed and pedagogically useful information to support a learner before, during and after the test.

Approaches to developing test questions

In addition to their different approach to content development compared to most other Milestones, the digital technology Milestones also contain a different approach to test questions. In fact, they contain no test questions. Rather than use test questions to determine if a learner understands the text, the digital technology Milestones contain a checklist. Assessors observe the learner carry out an activity as required by the text (i.e. enter a username and password, and then click to login). *The learner responds to the digital text in an authentic way that looks the same in the testing situation as it looks outside the testing situation*. This reflects a situated practices approach.

In comparison, the sample Milestone uses a series of test questions to gauge understanding:

- Who works in room 301?
- What room number does Ms. Nguyen work in?
- In which department does Teresa work?
- What is the telephone number of Johanna Reid's department?
- Which department(s) is located on the third floor?
- Who shares an office with Raj Gupta?

The test questions are based in part on the 5Ws format, which is commonly used as part of a range of reading comprehension activities in school settings. However, only this aspect of a reading comprehension approach is used. Other, more complex aspects are not incorporated. This approach has two pedagogical implications that advantage some learners and disadvantage others.

When used in combination with decontextualized and abstract texts, the 5Ws approach requires a strong basis of reading skills and knowledge. The sample also includes complicated phrasing, such as "In which department does Teresa work?" and "Which department(s) is located on the third floor?" Study participants commented that the Milestones contain "convoluted" questions. These elements combine to disadvantage learners with limited educational experiences.

Learners with more extensive educational experience have a distinct advantage, as the tests do not contain complex reading comprehension questions. Milestone test-takers are not required to

- Read a text in its entirety
- Retell and recount what was read
- Identify the main idea
- Find supporting details (using the 5Ws approach)
- Summarize
- Write responses using complete sentences.

The Milestone design advantages some learners and disadvantages others. In addition, they don't actually assess what is learned and how literacy is commonly learned in programs. This leads to an unfair assessment, and a perverse situation in which programs are held accountable for things they don't actually do. Furthermore, the data collected from the digital technology Milestones and used to evaluate program effectiveness is not standardized in any way. The lack of standardization on the most commonly used Milestones contradicts the aim of the Milestones to provide 'objective' and 'reliable' results that can be used in the ministry's Performance Management Framework to to evaluate individual program performance and 'effectiveness'.

Future directions

Study participants expressed a need to enhance the OALCF Use Digital Technology Competency and reformulate the Milestone system so that it is truly learning- and learner-centred. The design differences and appeal of the digital technology Milestones provide important insights that could inform such adjustments. A truly learner-centred process means instructors and learners are directly involved and have control over content, context and complexity. Their direct involvement would help ensure that the Milestones

- Contain content that is familiar and relevant to individual learners at an appropriate development level, including recognizable images, symbols, place and organization names, etc.
- Use follow-up responses and test questioning approaches aligned with goal paths and learner goals
- Have a direct connection to teaching and learning, and
- Become an assessment that supports learning and meaningful conversations about literacy development.

[1] Refer to Endnote 4, in AlphaPlus (2015) *Research Overview - Assessment Challenges, Contradictions and Inequities: An Analysis of the use of digital technology and OALCF Milestones.*
[2] For more details about the study refer to AlphaPlus (2015) *Research Overview - Assessment Challenges, Contradictions and Inequities: An Analysis of the use of digital technology and OALCF Milestones*.

[3] Mazzulla, M., & Geraci, K. (2013) Milestones Review Project: Research Report. Unpublished report available from MTCU.
[4] e-Channel delivers LBS training using a web-based format. Refer to http://www.tcu.gov.on.ca/eng/eopg/programs/lbs.html
[5] Refer to page 5, in MTCU (2012) *Milestones User Guide.* Refer to http://www.tcu.gov.on.ca/eng/eopg/programs/lbs_oalcf_milestones.html