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# Educating the Educable: Reviewing Best Practices for Academic Learning Programs

Prepared for

Empowerment Squared

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# **Executive Summary**

This report presents the findings of a project conducted by the McMaster Research Shop for Empowerment Squared. Empowerment Squared is an organization based out of Hamilton, Ontario dedicated to empowering newcomer, racialized, and marginalized youth and communities through academic, sports, and recreational programs; advocacy and mentorship; and community leadership. Their mission is to build "a world where everyone is empowered with the tools and opportunities to thrive and contribute to society" (Empowerment Squared, 2021). Empowerment Squared's core programming includes Out-of-School-Time (OST) academic programs with newcomer and marginalized children and youth. The programs aim to improve program participant's academic skills (e.g., Summer Literacy and Homework Circle programs).

The purpose of this report is to explore best practices and design for OST academic programming with newcomer and marginalized youth. In addition, the report identifies approaches to assess literacy skill development among youth within OST literacy programs.

The team conducted a literature review to determine OST program components that best support learners. Effective program elements included tutoring/mentorship, culturally responsive approaches, and helping youth to develop critical thinking and reflection skills. While many promising pedagogical approaches were identified, a common theme amongst the approaches was encouraging youth to engage more deeply with content.

The team also conducted a literature review of literacy assessments, and identified some literacy assessments and resources. Literacy assessment varied in availability of validity evidence and ease of use, and we identified a lack of openly accessible literacy assessments.

At the conclusion of this report, we provide a summary of promising program design components and discuss assessments/approaches to literacy assessment.

### Introduction

### Overview

Empowerment Squared is an organization that provides newcomer and marginalized youth with a diverse scope of programming that helps them to succeed in their academic and personal pursuits, build their confidence, and make safe and healthy decisions in their day-to-day life. All youth programs offered by Empowerment Squared are free of charge.

Empowerment Squared approached the McMaster Research Shop to conduct a literature review to answer the following question:

• What is the best design (or promising designs) for out-of-school time (OST) academic learning programs for newcomer and marginalized youth?

Design components contributing to the success of these programs may include aspects of the environment conducive to learning and well-being, the pedagogies used, skills and experiences of program staff and volunteers, length of programming, and the extent of parental involvement.

The Manager of Educational Programming of Empowerment Squared was also interested in ways to assess program progress and outcomes, specifically for literacy programs. Thus, we conducted a secondary review to answer the following question:

• What is a convenient and effective way to assess literacy skill development among program participants?

The goal of this report is to provide Empowerment Squared with a plain-language summary of the best designs for OST academic learning programs for newcomer and marginalized youth. A secondary goal of this report is to provide effective ways to assess literacy skill development among program participants. Empowerment Squared will use this review to inform the design of its existing programming and to evaluate the effectiveness of its literacy programming.

#### Definitions

Various terms are used in the OST programming literature. The definitions for terms commonly used in this report are included here.

**English Language Learners (ELLs)**: Individuals who are unable to fluently communicate in English, who often come from non-English speaking households, and who require specialized support in the English language (Glossary of Education Reform, 2013).

**Marginalized:** Disadvantaged groups who face systemic discrimination, i.e., are not given the right to fully participate in society (Government of Ontario, 2021).

**Newcomer:** Immigrants and refugees who arrived in a country in the past five years (New Youth, 2019).

**Out-of-School Time (OST):** Supplementary instruction occurring outside the regular school day (Lauer et al., 2004).

Pedagogy: Approach to teaching.

**Racialized:** Groups that have racial meanings attached to them in ways that negatively impact their social, political, and economic life (Government of Ontario, 2021).

# Methodology and Limitations

This section details the methods we used to meet our research objectives, which involved two literature reviews. The first review explored best design for OST programming and the second review explored ways to assess literacy skill development. This section also discusses research limitations and how the team attempted to address these limitations.

### Best Program Design Review

#### Methodology

To answer the research question, we conducted a literature review to explore current knowledge on the topic of best design for OST programs. We searched for peer-reviewed studies and grey literature using McMaster University's research databases: ERIC and the PsycINFO index of OVID.

To ensure that our review captured programs that could inform Empowerment Squared program design, our search specified both program and population components. A summary of search terms can be found in Table 1.

Component	Search Terms
Program	after-school, academic, homework club, homework circle, extracurricular, out of school, education program, summer program
Population	Newcomers, immigrants, marginalized, racialized, refugees K-12, elementary, middle-school, secondary school, school-aged

Following the initial search, we included articles that focused on OST programs aiming to improve academic skills of school-aged newcomers and/or marginalized youth. This included reports that identified best practices for OST programs and studies that explored the effectiveness of individual OST programs. We excluded articles published in languages other than English and focused on articles published after 2010.

Our team initially excluded articles describing programs that were either in-school or not focused on our target population (i.e., newcomers/marginalized youth). However, we felt that a number of articles contained program design elements and/or recommendations that were relevant to the Empowerment Squared context. We included some of these articles, despite these articles describing either in-school programs or OST programs not focused on newcomers/marginalized youth.

#### Limitations

The research team faced a couple of constraints when conducting the Best Program Design literature review.

**Lack of relevant programs in the Canadian context:** Our findings may not be generalizable to programs in Canada as only four out of 28 included articles explicitly described programs in the Canadian context.

**Time constraints:** Due to time constraints, we limited our literature search to scholarly databases. As a result, we may have missed OST programs containing helpful design components, but that have not been formally evaluated. Further, we focused on summarizing articles published after 2010, so this report may not be a comprehensive review of all relevant OST programs. We also excluded one article that was ordered from other university libraries that did not arrive in time to be included in the report.

#### Literacy Assessment Review

#### Methodology

To answer the secondary research question, we conducted a literature review to identify literacy assessment tools. We searched for peer-reviewed and grey literature through McMaster University's research databases: ERIC and the PsycINFO index of OVID. To supplement our review, we searched for additional literacy assessment tools using the Google search engine. Table 2 presents a summary of the search terms used.

Component	Search Terms
Literacy	Literacy, language development, reading education, literacy education, writing education
Assessment	Evaluation, assessment, testing
Population	K-12, elementary, middle-school, secondary school, school-aged

**Table 2.** Example search terms for the literacy assessment literature review.

We included articles that described and/or evaluated the effectiveness of literacy assessment tools for youth in Kindergarten to Grade 12. We excluded articles published in languages other than English.

#### Limitations

The research team faced a few constraints when conducting the Literacy Assessment literature review.

**Lack of evidence in the OST context:** Most articles described and/or evaluated the effectiveness of literacy assessment tools in an in-school context, administered by teachers. Thus, our findings may not be generalizable to the OST context.

**Lack of open-access literacy assessments:** Many articles described tools that are only accessible via a paid license. We conducted a supplementary Google search for open-access literacy assessments and included the assessments in the Appendix of this report.

**Lack of validity evidence:** Although we found extensive lists of literacy assessment tools, most studies described the implementation of literacy assessment tools with only a minor focus on the validity/reliability of the tools.

**Time constraints:** Due to time constraints, we limited our search to articles that reviewed literacy assessments, rather than articles that reported on individual assessments. To ensure we captured literacy assessments that may be particularly relevant to Empowerment Squared, we conducted a secondary literature search for articles assessing literacy of school-aged newcomers and marginalized youth. We also excluded one article that was ordered from other university libraries that did not arrive in time to be included in the report.

# Findings

This section will provide an overview of the findings from the Best Design and Literacy Assessment literature reviews.

### Best Program Design Review

In the Best Design review, we found 28 relevant articles. The information from these articles is organized under the following headings:

- 1. What sort of environment is conducive to learning and well-being?
- 2. What sort of methods or strategies (i.e., pedagogies) are most effective for teaching skills to school-aged children?
- 3. What skills and experiences should program facilitators possess?
- 4. What is the ideal length of these programs?
- 5. To what extent, if at all, should families be involved in the programs?

Further details about specific articles/programs may be found in Tables 3 and 4, which summarize the program type, learning element(s), program activities, and outcomes.

#### 1. What sort of environment is conducive to learning and well-being?

The program environment includes elements that promote emotional safety and/or well-being (David P. Weikart Center for Youth Program Quality, 2014). In our review, we found that the learning environment encompassed not only a physical location, but the social culture in which youth learn. While aspects of the physical location are important (e.g., program space is free of hazards, well-ventilated, and is suitable for the activities offered; David P. Weikart Center for Youth Program Quality, 2014), most articles highlighted the importance of creating environments where youth feel safe, respected, and heard in order to facilitate positive learning experiences. Programs built such a learning environment by including a tutoring/mentorship component, being culturally responsive, and/or helping youth develop their self-reflection skills.

#### The Role of Tutors and Mentors

Research findings indicate that positive relationships with adults in the learning environment can significantly contribute to one's willingness to learn and academic progress (McWhirter et al, 2019).

In the literature, some programs for newcomers and/or refugees included a tutoring and/or mentorship component. Tutors/mentors were college, university, and/or graduate students (Rotich, 2011; Dover & Rodriguez-Valls, 2018; McWhirter et al., 2019). Rotich (2011) described a program focused on supporting newcomer youth to thrive in their schooling, as well as to become accustomed to the North American learning environment. The program collaborated with local university and college students who went through a rigorous screening and training process, and were matched to a participant with whom they would establish a long-term mentoring relationship. Mentor responsibilities included providing homework help, facilitating discussions and activities on health and physical activity, and providing youth with guidance and support for adapting to their new school environments (Rotich, 2011).

While Rotich et al. (2011) focused on supporting youth to thrive in their schooling, McWhirter et al. (2019) provided Latinx youth with a mentorship program for college and career readiness. Mentors, who were graduates from the same program, worked with youth to develop study strategies, goal setting, transferable skills that would be useful in the workplace, and feedback on post-secondary applications (McWhirter et al., 2019).

Mentors not only provided academic and social support to newcomer and marginalized youth, but also acted as positive role models. Lozenski et al. (2017) supported the cultural identity of African youth through mentorship from Black elders. Having role models from the same cultural community, race, and marginalized backgrounds helped youth shape their personal identity and helped them to reframe their understanding of race and representation. The integration of participants' culture within the program was an element used by several other programs to create an environment that is conducive to learning and well-being.

#### **Cultural Responsiveness**

Culturally responsive learning environments acknowledge and celebrate cultural diversity, providing a safe and supportive space for growth (Flint et al., 2019). Programs that target and support the cultural identities of newcomer and marginalized youth have the capacity to foster belonging, skill development, and positive identities within this population (Cinamon, 2016).

Similar to Lozenski et al. (2017), other programs also integrated cultural elements; this helped youth explore their personal identities, promoted an inclusive environment, and/or enhanced learning. Both McWhirter et al. (2019) and Rotich (2011) facilitated cultural celebrations with participants, giving them an opportunity to share their cultural identities, foods, and traditions. Participants learned about each other's customs and traditions, engaged in artistic activities such as singing traditional songs and painting cultural expressions, and shared celebrations and hardships of their own or their families' immigration journeys. Additionally, McWhirter et al. (2019) promoted positive ethnic identity with immigrant Latinx youth. Youth developed strategies to cope with discrimination and stereotyping within a safe environment using written affirmation activities. These affirmations reminded participants of their personal and cultural strengths, contributions, and achievements. These affirmation activities were inspired by Sherman et al. (2013), who used affirmation tasks to help youth explore their core values and thus reduce social identity threat. One task asked youth to read examples of common values that people hold (e.g., friends and family, sports) and then asked youth to describe something important to them (Sherman et al., 2013). McWhirter et al. (2019) also used a poetry slam to help participants affirm their cultural strengths, and one participant wrote, "I owe it to my beautiful race...dominant...triumphant and showing where we are from."

Meanwhile, Harper et al. (2017) integrated cultural aspects in their science program to empower Karen youth (first-generation refugees from Burma). The program included Karen language lessons and supplemented scientific knowledge with cultural understanding of issues (e.g., reading books about the Ramadan moon when learning about different cycles of the moon). The program also used platforms such as photovoice, which allowed youth to take photographs relating to their interpretations of science and culture. At the end of the program, the facilitators shared and celebrated a visual narrative of the participants' pictures, interviews, and sessions. The study concluded that integration of cultural discourse helped Karen youth bridge their newly learned scientific knowledge with their cultural understandings from their home and community (Harper et al., 2017).

Translanguaging was also used as a method to bridge cultural identities of newcomer and/or marginalized youth in an English Language Learner (ELL) setting. Translanguaging is defined as the usage of a speaker's full language repertoire to facilitate their learning of a new language (Garcia & Seltzer, 2016; Dover & Rodriguez, 2018). A language repertoire includes all languages that one speaks, including different levels of formality within each language (e.g., formal, informal/casual). Exploring one's language repertoire helps youth better understand who they are and how they present to others (Dover & Rodriguez, 2018). Al-Jubeh and Vitsou (2021) found that translanguaging strongly influenced refugee participants' willingness to participate

in daily discussions, story reading, and activities, and helped these youth become aware of and comfortable with their bicultural identities (Al-Jubeh and Vitsou, 2021).

#### Facilitating Self-Reflection

Four programs promoted the development of critical thinking and self-reflection skills amongst youth, further helping them understand and shape their individual identities (Daniel & Eley, 2018; Player, 2019; Bajaj et al., 2017; Lozenski, 2017). Daniel & Eley (2018) and Player et al. (2019) used writing to help youth critically analyze and reflect on their identity. Player et al. (2019) note that playwriting provided women of colour a safe space to share their experiencebased knowledge and discuss their perceptions of sexism and racism within the community. Lozenski et al. (2017) helped African youth better understand their racial identity and build their critical reflection skills through a research project that explored how race and representation can influence personal actions and behaviours. Bajaj et al. (2017) also promoted critical thinking and identity formation for newcomers through an after-school human rights advocacy club, and helped them develop their empathy skills. Both Lozenski et al. (2017) and Bajaj et al. (2017) used these critical reflection skills to help youth understand social and political issues within their communities and around the world.

Al-Jubeh and Vitsou (2021) used the Persona doll to create a safe social environment for refugee primary school children and to explore identity. The Persona doll is a resource for educators that can be used to discuss cultural, social, and ethnical differences in a safe environment. In this study, the program facilitators created an imaginary name, identity, and culture for the doll that matched the identity of the participants. This shared sense of identity helped youth develop positive attitudes, increased their engagement within the classroom setting, and helped develop their empathy (Al-Jubeh & Vitsou, 2021).

# 2. What sort of methods or strategies (i.e., pedagogies) are most effective for teaching skills to school-aged children?

The pedagogies used by programs varied greatly depending on the program aim and/or skills taught. This provided many examples of promising pedagogical approaches for newcomer and marginalized youth OST programs.

OST programs enhanced learning by empowering youth and providing engaging learning activities. For example, McWhirter et al. (2019) used social cognitive career theory and sociopolitical development theory to help prevent dropouts and promote college readiness. Harper et al. (2017) took an inquiry-based approach to help learners understand and connect with science and culture, and to promote self-reflection and critical thinking skills. Ryu et al. (2019) aimed to foster science learning for refugees by creating engaging ways for youth to participate (e.g., using jokes, taking turns). This led to greater engagement with classroom material and a positive change in participants' abilities to listen, respect, and value each other's opinions (Ryu et al., 2019). Garcia (2013) also fostered science learning through engaging activities. To improve science and leadership skills of middle-school girls, who are historically

underrepresented in science, youth participated in photo-documentation and storytelling, which increased their participation in science, technology, engineering, and mathematics (STEM) and helped them to develop leadership skills (Garcia, 2013).

Two articles described pedagogical approaches for enhancing student success within the school environment. Hardy and Grootenboer (2013) described the use of 'learning architectures', i.e., conditions conducive to learning. The program used a community garden to stimulate discussions and relationships between refugee youth and their teachers, which improved student well-being, engagement, and overall success in school (Hardy & Grootenboer, 2013). Decapua and Marshall (2010) facilitated ELLs' transition to the U.S. education system through the Mutually Adaptive Learning Paradigm. This approach highlighted the relevance and interconnectedness of the content youth were learning, and resulted in increased classroom participation, and better writing and critical thinking skills (Decapua & Marshall, 2010).

Several articles described programs aiming to improve literacy skills, either within the context of OST programs or within the school environment.

#### Literacy Skills - OST Programs

Two OST programs that aimed to improve literacy skills in newcomer youth focused on collaboration. Kelly (2012) found that this improved literacy skills as well as leadership skills. Flint et al. (2019) focused on facilitators creating caring relationships with newcomer youth by giving them opportunities to share their lives, cultures, and lived experiences within the classroom community, and making efforts to listen, understand, and participate with them. The program used three activities to facilitate learning:

- Heart maps: creative boards for youth, where they used visual pictures and words to indicate things, people, and places that were important to them
- "All About Me" presentations: youth used technology to share aspects of their lives and cultures that they wanted to share with their peers
- Graffiti boards: used to visually represent themes in the novel they read

All activities were multimodal and collaborative, allowing youth with different language capabilities to participate in discussions and improve their literacy skills (Flint et al., 2019).

Daniel & Eley (2018) aimed to improve participants' literacy skills by engaging them in the process of self-reflection during their after-school writing workshop. Youth learned how to connect and communicate multiple aspects of their identity in their written works. The authors used semantic maps as a tool to visualize ideas that youth had about identity, and allowed them to link these ideas in a cohesive essay or written piece. The semantic maps were used as a brainstorming tool, which helped youth analyze texts they read, their own written work, and the writing of their peers. The authors also used a form of questioning they named the "connective press"; youth were encouraged to make connections between different aspects of

their identities, preparing them for future activities that require this skill (e.g., post-secondary applications) (Daniel & Eley, 2018).

The use of heart maps (Flint et al., 2019) and semantic maps (Daniel & Eley, 2018) were cited by authors as an example of scaffolding, which is another effective strategy for teaching literacy skills (Daniel & Eley, 2018). Scaffolding often begins with guiding learners, then having the learners observe others, and finally allowing learners to practice skills on their own (Hausner, 2000; Lauer et al., 2004). Scaffolding for literacy skills may include the use of tools (e.g., concept maps), reading texts for learners, and prompts to further engage learners in the texts (Daniel & Eley, 2018).

Translanguaging was not only used as a tool for cultural support among newcomer youth, but also used to facilitate language learning within programs. McWhirter et al. (2019) used translanguaging to facilitate better learning of the English language amongst Latinx highschool youth. Al-Jubeh and Vitsou (2021) used translanguaging in an after-school program for refugee and migrant primary school children in Greece. This approach helped increase student comfortability with dual language learning (Al-Jubeh and Vitsou, 2021). The Storybooks Canada Platform also used translanguaging to help youth maintain their first language while learning English; this platform enhanced learning by providing youth with stories in their native languages (Gilman & Norton, 2020). This helped them make connections between the plot, phrases, and terms they were learning in English stories to their first languages (Gilman & Norton, 2020).

Another OST program enhanced second-language learning through implicit and explicit approaches (Stanat et al., 2012). Stanat et al. (2012) described a summer program that compared the use of theatre (implicit approach) and formal language lessons (explicit approach). While participation in the theatre program led to a slight increase in grammar and reading skills, additional participation in formal lessons led to significantly better grammar, reading, and vocabulary skills (Stanat et al., 2012).

#### Literacy Skills - In-School Programs

Our review included a report and a meta-analysis which explored instructional strategies for improving the literacy skills of immigrant youth. The Canadian Council on Learning (CCL) report recommended instructional strategies for improving the literacy skills of immigrant youth based on a literature review. They found that collaborative reading, systematic phonics instruction, multimedia-assisted reading, and diary writing are effective in improving English literacy skills of immigrant youth (CCL, 2009). A meta-analysis on literacy strategies for immigrant youth also identified collaborative reading as an effective strategy; diary writing and structured writing were identified as moderately effective strategies (Adesope et al., 2011). The CCL also noted that strategies for improving literacy skills were especially beneficial for youth from a lower socio-economic status and who are traditionally less confident readers. English as a Second

Language (ESL) literacy instruction was most successful when delivered in a classroom setting, rather than in an environment where youth work alone or in small groups (CCL, 2009).

Chou (2013) described the use of the Content and Language Familiarity and Novelty Continuum approach to improve English listening skills of youth in Taiwan. This approach involves teachers integrating familiar content and language with new content and language; the study found that this helped youth understand information and follow instructions in English (Chou, 2013).

Kesler (2010) found that for ESL high school youth, the use of phonetic clues and shared reading helped improve literacy skills. Shared reading in particular required few resources (Kesler, 2010).

Lau (2013) described a curriculum aiming to improve ELLs' critical literacy skills at a middle school in Canada. The curriculum approach was informed by Cummins' Academic Expertise Framework, Janks' synthesis model of critical literacy, and poststructuralist/feminist advocacy (Lau, 2013). Cummins' framework focuses on *meaning* by helping youth connect new concepts to prior knowledge and experiences, *language* by helping youth become more aware of the features of language, and use by helping youth use the language to express themselves (Lau, 2013). This approach leverages the knowledge and experiences of the youth to further engage them when learning a second language (Cummins, 2001; Lau, 2013). Janks' model includes domination, access, diversity, and design, through which youth learn that language is used to maintain and regulate power, how access to language helps youth with academic and social success, recognizes the diversity of youth, and uses various learning strategies (Janks, 2000; 2010; Lau, 2013). The poststructuralist/feminist approach incorporates self-reflexivity and emotional engagement, which is another important element in critical literacy (Lau, 2013). The integration of these approaches within the curriculum helped youth with their literacy skills, and also helped them to better integrate into the North American classroom environment (Lau, 2013).

#### 3. What skills and experiences should program facilitators possess?

The articles we reviewed varied in their provision of information around the skills and experiences of OST program staff/facilitators.

Lauer et al. (2004) conducted a review to assess the effectiveness of OST programs for at-risk, marginalized youth and noted that while many studies did not report on the training/qualifications of facilitators, the quality of facilitators influences the effectiveness of programs. Further, the supervisors of facilitators should have theoretical knowledge of the skills being taught, and have experience and confidence in teaching those skills (Lauer et al., 2004).

Some programs highlighted the special skills or experiences of program facilitators. The facilitators in the program described by McWhirter et al. (2019) were graduate students in a counselling psychology program. The facilitators in Rotich (2011) included professional staff as

well as college and university student mentors; the mentors received ongoing help from the staff to ensure they felt supported in their role. Some of the training included cultural competency and interpreter training (Rotich, 2011). The mentors indicated that the program gave them the opportunity to effectively contribute to their community while learning about other cultures from the youth. Due to their involvement in the program, the mentors indicated that they felt better prepared to work with people from different cultures in the future (Rotich, 2011).

Duffy et al. (2000), an article included in the review by Lauer et al. (2004), conducted a study on an OST program for at-risk elementary youth using a responsive technique to literacy education. Facilitators assessed participants' academic performance and emotional needs daily, and used this evaluation to create and change their teaching components. This study reported that using a responsive technique helped many youth improve their word identification and fluency. The authors concluded that not only the literacy program design, but also the facilitator, is key in ensuring that youth improve their literacy skills (Duffy et al., 2000).

Newcomer et al. (2021) described approaches that two teachers used to support students' wellbeing in school, and used their findings to recommend areas in which teachers may require support. The areas that program facilitators may need support with include creating space for personal disclosures, working closely with families, and contextualizing new concepts using real-world examples (Newcomer et al., 2021).

#### 4. What is the ideal length of these programs?

In their review of OST programs, Lauer et al. (2004) reported that reading programs running for 45 to 210 hours and mathematics programs running for 45 to 100 hours had a positive influence on the reading and mathematics performance of youth, respectively.

In their review of in-school literacy programs, Adesope et al. (2011) reported that studies lasting three months or less reported greater effects on literacy skills compared to studies lasting greater than three months.

Articles describing individual programs varied in reporting the length of their programming, so program length was unclear in many cases. Based on the articles that did report program length, both after-school and summer programs ranged in length. After-school programs ran from two to three times per week to once per week, spanning four months to two years. One summer program ran for five weeks, while another reported running for three days per week for six weeks.

#### 5. To what extent, if at all, should families be involved in the programs?

Programs involved families to various extents. Two programs integrated family/parental involvement within the programs. Rah (2013) designed an OST program around increasing

parental involvement to help their children succeed in school. In addition to involving parents, Rah (2013) provided further support for families by providing transportation and a hot dinner for children, childcare, and gift packages for families. Children's academic performance improved and behavioural problems decreased; parents also became more involved in school and there was a reduction in family conflict (Rah, 2013). Rah (2013) suggests that involving parents in an after-school program for newcomer children and families may increase participant retention in such programming, foster positive relationships between parents and their children, and help families feel more connected and supported by their community. O'Donnell and Kirkner (2014) described a program aiming to involve families in their children's education to help improve success in school. The program provided weekly education sessions for family and monthly family-school socials (O'Donnell & Kirkner, 2014). The program led to better relationships between families and teachers, and after two years, the students' work habits, grades, and test scores improved (O'Donnell & Kirkner, 2014).

Two articles describing OST programs mentioned family involvement. Rotich (2011), who described a program for newcomers and refugees, provided resources for children's families. Harper (2017), who described a program for Karen newcomers, recruited a parent co-teacher in their science and culture program. This presented a learning environment where the facilitator represented cultural knowledge of the Karen community and was able to conduct Karen language lessons for the youth (Harper, 2017).

**Table 3.** Articles describing OST programs with newcomer and/or marginalized youth. The Program Type includes the program modality (e.g., after-school, summer school; in-person, remote), target population, and location. The Learning Element describes the academic element/skill targeted by the program. The Program Activities describes the way in which the program aimed to teach the learning element. The Outcomes include evidence of learning as a result of the activities. The table is organized alphabetically by author(s) last name.

Author(s) (Year)	Program Type	Learning Element	Program Activities	Outcomes
Al-Jubeh & Vitsou (2021)	An after-school, in-person program for refugee and migrant Arabic-speaking primary school children, run by a non-profit organization in Greece. The program ran every week for four hours per week.	Academic skill building program to increase children's comfortability with the languages, awareness of dual cultural identities, and their willingness to learn and participate.	The program used the Persona doll method and translanguaging to bridge children's learning with their family.	This program helped youth develop positive attitudes, increased their interest and willingness to participate in the classroom, increased their empathy, contributed to their language development, and helped consolidate their bicultural identity.
Bajaj et al. (2017)	An after-school, in-person program for newcomer and refugee youth run in a high school in the U.S. The program was offered over two years.	Academic skill building program that aimed to foster changes in youth's critical thinking, reflection, identity formation, and empathy skills.	The program employed a participatory pedagogy, which aims to change attitudes and actions of youth through increased knowledge.	The program helped youth understand the complex realities of refugee and at- risk, low socioeconomic individuals. Although the program did not directly improve participants' academic performance, it did help them form a community amongst themselves and provided an

				outlet to relieve school- related stress.
Daniel & Eley (2018)	An in-person, after-school program for racialized newcomer teenagers in the U.S. The program was a research–practice partnership with a high school. The program occurred once weekly for one semester.	Academic skill building and literacy program aiming to improve self-esteem and literacy skills.	The pedagogical approach was to build meaningful relationships between participants. This program used literacy activities to teach youth how to critically self-reflect and to foster relationships between the student and teacher.	The program resulted in improved cohesion of writing and reading through critical self-reflection.
Dover & Rodriguez- Valls (2018)	An in-person, summer program for refugees, newcomers, and long-term English learners in the U.S. It involved a partnership between the community, the university, and a district.	Academic skill building program to teach youth about identity, family and culture, community, and their place within the community.	The program uses translanguaging, a culturally relevant pedagogy, which facilitated a social space for educators to co-learn with youth.	Culturally-responsive teaching increased participants' comfort and confidence, which helped them to grow academically. Co-learning with participants encouraged participants to share their interests and cultural journeys with program facilitators.
Flint et al. (2019)	In-person, summer program for newcomer high school youth, run out of a high school in the U.S. The program ran three	Program aimed to improve literacy skills and build teacher-student relationships.	The program ran activities focused on creativity, multimodality, and collaboration, as this creates a supportive environment conducive to improving literacy skills.	The program resulted in improved teacher-student relationships, although the impact on language development was unclear.

	days per week for six weeks.			
Garcia (2013)	In-person program for middle school girls from groups that are historically underrepresented in science, run by an interdisciplinary learning centre in the U.S.	The program aimed to improve STEM and leadership skills.	The program sought ways to inspire and prepare underrepresented youth to become the next generation of scientists and connected youth's lived experiences to critical race theory, identity theory, and experiential learning theory. Students participated through the use of photo-documentation and stories.	The program led to increased participation in STEM and the participants showed a continued interest in science or a newly discovered interest in science-related topics. Participants also developed leadership skills.
Gilman & Norton (2020)	In-person, after-school programs for multilingual learners in Vancouver, Canada using the Storybooks Canada platform.	The article explores how the Storybooks Canada platform could be used to help maintain one's first language and support English language learning.	The article did not describe a program per se, but rather described a study of which stories were most interesting. This data was used to recommend stories for multilingual learners.	Given the universal themes of the stories, and the 18 languages available in text and audio, Storybooks Canada is a valuable tool for the maintenance of the first language, while supporting English language learning.
Harper (2017)	An after-school program designed for Karen (newcomers from Burma) in the U.S. The program ran for four months.	Academic skill building program aiming to create an inclusive environment where science knowledge could be shared.	This program used the critical pedagogy of space to decolonize the learning environment. The setting of the classroom was changed, and a parent co-taught the program and provided opportunities for cultural	The interconnection of culture and science created a rich environment for youth to practice their critical thinking skills, and empowered them to identify as stakeholders and

			discourse among youth. The program focused on the integration of culture with an inquiry-based approach, to understand and connect lived experiences with science.	experts in science. The involvement of parents as knowledge experts increased the influence of the program.
Kelly (2012)	In-person, after-school program for Latin and African American youth run by a school organization in the U.S.	The program taught literacy skills and also aimed to improve collaboration between ELLs and urban, low-income youth peers.	Activities focused on collaboration and forming connections.	The program helped youth support one another through building of leadership and literacy skills, and also helped them to gain confidence.
Lozenski (2017)	Program for African youth run by an African youth organization. This program was a shared collaboration between the school, a university, and the community.	Academic skill building program that prompted African high school youth to deepen their critical thinking and research skills.	The program used African- centred critical theory along with pedagogies of Black eldership to cultivate youth's understanding of self, their culture, their representation, as well as their critical thinking and research skills. The activities were focused on the context of their community and developed under the guidance of Black mentors.	The study concludes that having role models from the same community, race, and background helps youth hone their understanding of race and representation, and helps them shape their personal identity.
McWhirter et al. (2019)	In-person program for immigrant Latinx (70% Mexican; 15-20% Central	Academic skill building program aiming to promote	The program used a combination of academic support and enhancing critical consciousness.	The program promoted continuous English language development and

	American) high school youth in the U.S. The program ran in collaboration between a high school and Spanish students in a graduate- level counselling psychology program.	academic success, and college and career readiness. The program also aimed to increase literacy skills.	The program delivered a bilingual support system for newcomers through the use of their native language to increase their English literacy skills.	adaptation of activities to youth with varied language abilities.
Player (2019)	An in-person, after-school program for Black and Asian middle school girls, run by a school in the U.S. The program ran for one year.	Academic skill building program helping participants explore their identity, culture, and gender, along with constructs of racism.	The program used playwriting to explore constructs of feminism, heteropatriarchy, and race, and to develop writing and self- expression skills.	Playwriting helps racialized girls share their experience- based knowledge, and develop their sense of identity and community. The report emphasizes the importance of creating spaces for women and girls of colour to share their experiences, perceptions, and visions of sexism, racism, and empathy.
Rah (2013)	In-person, after-school program for Hmong refugee children (elementary level) and their parents in the U.S. The program ran for eight weeks.	Academic skill building program aiming to improve children's academic performance, and to increase parental involvement in helping children to succeed in school.	The program increased parental involvement to help children succeed in school. Children had play time with a recreational partner for 15 minutes, while parents spoke with other parents. The children then returned to their parents after an hour. This sharing aimed to build	Children's academic performance increased, behavioural problems decreased, parents became more involved in school, and family conflict was reduced. The skills taught by this program also

			a parent support network among the group.	improved children's leadership skills.
Rotich (2011)	An in-person, after-school program for at-risk newcomer and refugee children in the U.S.	Academic skill building program aiming to help youth transition into their new classrooms.	The program provided tutoring and mentorship by university and college students, enriching activities within the community, and resources for youth and families. The program also provided snacks, physical activity, and time for student reflection. The program provided cultural competency and interpreter training to all volunteers, and incorporated activities such as cultural celebrations to facilitate discussions and appreciation of cultural differences.	The program created an inclusive and supportive environment for youth to achieve academic guidance, gain self-confidence, and practice self-reflection and healthy lifestyles. Youth reported the program improved their grades and English literacy skills.
Ryu et al. (2019)	In-person, after-school program for Burmese refugee youth in the U.S.	Program aimed to foster science learning.	The program used a 'responsive approach' to incorporate students' contributions. Activities included discussions, poster presentations, and experiments. The program also blended jokes with science discourse, incorporated ethnic practices and knowledge in science discourse, and coordinated turn-taking with other's ideas to create a fun and inclusive environment.	Discussions that emphasized equal participation, decision making, and respect for one another's knowledge and opinions led to increased engagement. The authors of the article believe increased engagement supported science learning, although student learning was not directly measured.

Stanat et al. (2012)	In-person, summer program for third-grade second-language learners, run by a school organization in Germany. The program ran for five weeks.	The purpose of this program is to improve literacy (reading and vocabulary) skills.	The study compared the effectiveness of different approaches to second- language learning. The implicit approach was a theatre program, and aimed to help participants process language input and pay attention to their use of language. The explicit approach was formal language instruction/lessons. One group participated in the implicit approach only, while the other group participated in the implicit and explicit approaches.	The implicit approach group showed a slight increase in grammar and reading skills, while the participants who experienced both approaches had significantly higher grammar and reading scores, and somewhat higher vocabulary scores.
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**Table 4.** Articles describing in-school/other programs that included helpful/interesting design components. The Program Type includes the program modality (e.g., after-school, summer school; in-person, remote), target population, and location. The Learning Element describes the academic element/skill targeted by the program. The Program Activities describes the way in which the program aimed to teach the learning element. The Outcomes includes evidence of learning as a result of the activities. The table is organized alphabetically by author(s) last name.

Author(s) (Year)	Program Type	Learning Element	Program Activities	Outcomes
Adesope et al. (2011)	A meta-analysis of literacy strategies for immigrants from Kindergarten to Grade 6 in Canada, the U.S., and the United Kingdom.	The meta-analysis explored the effects of different literacy strategies on literacy skills.	Program activities varied among the studies included in the meta- analysis, but included reading and writing interventions.	Among reading interventions, collaborative reading produced the largest effect. Among writing interventions, diary writing and structured writing were most effective. Studies lasting three months or less reported larger effect sizes than studies lasting longer than three months.
Canadian Council on Learning (2009)	A report recommending instructional strategies for immigrant youth in Canada.	The report recommended instructional strategies for improving literacy skills.	Instructional strategies included collaborative reading, systematic phonics instruction, multimedia- assisted reading, and diary writing.	Collaborative reading, systematic phonics instruction, multimedia- assisted reading (e.g., using closed captioning, audio/read-along materials, Fast ForWord program), and diary writing improve English literacy skills of

				immigrant youth, especially those with a lower socio- economic status. These strategies are most effective when used in a classroom, rather than a small group environment.
Chou (2013)	An in-person, in- school program for eleven-year-olds in Taiwan.	The program aimed to improve English listening skills.	The program used the Content and Language Familiarity and Novelty Continuum to guide the activities. It involves four steps in which teachers integrate familiar content and language with new content and language.	The program improved youth's listening skills, including their abilities to understand information and follow instructions.
Decapua & Marshall (2010)	An in-person program for high school ELLs with limited or interrupted formal education in the U.S. The program ran for five months.	Academic skill building program that aimed to facilitate youth's transition to the U.S. educational system.	The program used the Mutually Adaptive Learning Paradigm, with activities highlighting the relevance and interconnectedness of content, and the importance of individual responsibility.	Teachers were able to successfully facilitate youth's transition to the U.S. educational system. The youth participated more actively in classrooms, and improved their writing and critical thinking skills.
Duffy et al. (2000)	An in-person, summer program for second-grade youth struggling with reading in the	The program aimed to improve literacy skills.	The program used a 'responsive technique', in which facilitators assessed youth's academic performance and emotional needs daily, and used this evaluation to	Students improved their word identification and fluency. The authors concluded that both program design and

	U.S. The program ran for 30 days.		create and change their teaching components.	facilitators are important for improving literacy skills.
Hardy & Grootenboer (2013)	A program for refugee youth in Australia.	An academic skill building program that helped create conditions to facilitate student learning.	A community garden was used to stimulate discussions and relationships between refugee youth and teachers. The program focused on the importance of 'learning architectures', i.e., how learning opportunities are structured.	The garden helped improve student well-being and engagement, and ultimately assisted some marginalized youth in the school environment. The garden helped the youth connect concepts from class (e.g., sustainability, measurement) to real-world examples in the garden.
Kesler (2010)	In-classroom approaches for ESL high school learners in the U.S.	The article describes the use of four approaches (possible sentences, using context clues, repeated readings, and using our bodies) to improve reading skills.	Activities included using phonetic clues and shared readings. For example, contextual clues were used in cloze reading, where readers fill in the blanks in a passage.	Shared reading assisted ESL learners. The activities used were open-ended and required few resources, which allowed learners to actively participate. It also allowed teachers to easily adapt the exercises in their teaching.
Lau (2013)	A curriculum for ELLs at a middle school in Canada. The program ran for one year.	The curriculum aimed to improve critical literacy skills.	The activities were informed by Cummins' Academic Expertise Framework, Janks' synthesis model of critical literacy, and postructuralist/feminist advocacy. These approaches were integrated	Students not only gained language skills, but also a sense of efficacy for social change. The curriculum helped youth gain insight on their literacy skills and on

			to help youth understand content that they read, encourage them to connect content to their own experiences and emotions, and examine relevant social issues.	their use of words to better integrate into the socio- cultural environment of a North American classroom.
Lauer et al. (2004)	A meta-analysis of OST programs for low-achieving/at- risk youth in Kindergarten to Grade 12.	The article aimed to determine the effectiveness of OST strategies for reading and mathematics skills.	Program activities varied among the studies included in the meta- analysis.	Timeframe (e.g., after- school, summer school) did not moderate program effectiveness. Reading programs were most effective when they lasted 45 to 210 hours, and one- on-one reading was the most effective strategy. Mathematics programs lasting 45 to 100 hours were most effective, and it was better for learning activities to incorporate academic and social strategies, rather than just academic strategies.
McCormack et al. (2018)	A program for non- English speaking youth between the ages of six to eight at a school in Australia. The	The program aimed to improve English pronunciation.	The program used songs to improve pronunciation. The youth were encouraged to hear the sounds in their head, based on Gordon's Music Learning Theory.	Five out of six youth demonstrated improvements when speaking English after the intervention. The youth's teacher noted an improvement in all youth,

	program ran for eight weeks.			and specifically observed that youth were demonstrating appropriate mannerisms.
Newcomer et al. (2021)	In-classroom approaches for supporting refugee youth.	This article describes the approaches that two teachers used to support well-being.	The teachers varied in how they built relationships with the youth, using either student-centred partnerships or nurturing teacher-student relationships. The teachers' approaches included creating space for personal disclosures, working closely with families, and contextualizing new concepts using real-world examples.	Students felt more comfortable with speaking up in class, and both approaches fostered a classroom community.
O'Donnell & Kirkner (2014)	Program for Spanish speaking, elementary school- aged children.	Academic skill building program aiming to improve social/academic success and increase family involvement.	The program provided weekly family education, yearly school staff training, and monthly family-school socials.	Families noted increased contact with schools and better relationships with teachers. After two years, the youth's work habits, grades, social skills, and test scores improved.

#### Literacy Assessment Tool Review

Our review identified three relevant literacy assessments and eight literacy assessment resources.

#### **Literacy Assessments**

Among the relevant literacy assessments, all were described in the context of the U.S. education system and were used in an in-school setting. The following is a narrative summary of each tool; more details about each tool, including access, are provided in Table 5.

#### Pearson's Test of English Language Learning (TELL)

This tool is designed for ELLs and may be used to screen, diagnose, and monitor their English development in academic and social settings. The tool can be used for Kindergarten to Grade 12. The length of the assessment can range from 20 to 50 minutes depending on the grade level.

Overall, the tool is considered very user friendly and effective in tracking language development. During development, the tool showed high reliability for ELLs in Grades 1 to 12, with moderate reliability for ELLs in Kindergarten. Although there are no published studies that examine whether TELL scores reflect real-life language ability, unpublished studies show moderate-to-high alignment with English Language Proficiency standards (Gokturk, 2018). Further, some tasks provided on the tests are similar to real life. Some notable deficiencies of the tool are that it does not provide feedback to test takers during the test and it is unclear how testing accommodations are integrated into the test. A paid license is required to access the tool.

#### **Dynamic Indicators of Basic Early Literacy Skills (DIBELS)**

DIBELS is designed to meet early literacy and reading curriculum skills for the state of Oregon, U.S. The tool can be used to evaluate the progress of youth in Kindergarten to Grade 8. Short fluency tests can be administered to youth individually and can be completed without an administrator's assistance. The tests focus on letter naming, initial sounds, nonsense words, and oral reading fluency. The reliability and validity of DIBELS is well studied; results from the test have strong predictive abilities about a test taker's English fluency level up to three years later; all youth improved their English fluency with use (Cusumano, 2007). However, youth who struggled the most with literacy showed less improvement compared to youth categorized as "low average" or "average" (Cusumano, 2007). Free materials are accessible to administer the tool in the form of a printable PDF with a scoring sheet that administrators can use. An online tool, which automatically tabulates results, can also be purchased for Kindergarten to Grade 6.

Hameray Publishing Group Oral Language Assessment

This test is designed to document the language growth of multilingual youth by identifying the vocabulary and language structure of the student at an initial assessment. The tool can be used for youth in Kindergarten to Grade 12. The assessment must be conducted by an administrator who is responsible for transcribing a student's natural interaction with peers. Administrators are also encouraged to prompt youth with questions to further look for patterns in categories of Language Type, Structure, Meaning, and Production. A rubric is provided to the administrator, however, practice in capturing and codifying oral language may be necessary to easily implement the tool. Consequently, the length of the assessment is variable and it is suggested that the tool is used consistently over time to mark language development. The reliability and validity of the tool is not provided, although the tool was found to be useful when it was used in a case study (Briceño & Klein, 2019).

#### Literacy Assessment Resources

In our informal search using the Google Search Engine, we found eight resources for literacy assessment tools. The tools have not been evaluated for their effectiveness. A list of the tools, with the corresponding URLs for access, is provided in the Appendix (Table A1).

**Table 5.** Summary of literacy assessments from the literature. The Details column includes the purpose, target age group, and length (minutes) of each tool. The Summary of Tool includes tool administration and skills assessed. Validity/reliability and ease of use of each tool is also described.

Tool (URL)	Details	Summary of Tool	Validity/Reliability	Ease of Use
Pearson's TELL ( <u>http://www.pearsontell.c</u> om/)	<ul> <li>To monitor oral, reading, and writing English language development in academic and social settings.</li> <li>K-12</li> <li>20-50 minutes</li> </ul>	<ul> <li>Administered on a tablet</li> <li>Automated scoring system (scored for accuracy, language use, and pronunciation)</li> <li>22 tasks</li> <li>Expected responses: select, short answer, oral, written</li> <li>Skills assessed: grammar, vocabulary, reading comprehension, expressiveness, fluency, pronunciation are measured based on grade level</li> </ul>	<ul> <li>Reliability: 0.79- 0.91 (high) for Grades 1 to 12; 0.70 (moderate) for Kindergartners</li> <li>Validity pros: unpublished studies show moderate to high alignment to English Language Development/Profic iency standards; writing and speaking domains less adequately represented, especially in peer settings; tasks are similar to real-life K- 12 academic tasks</li> <li>Threats to validity/reliability: speaking tests are less representative of real life; test</li> </ul>	<ul> <li>Requires access to visual, audio, and/or textual input/output</li> <li>Score reports available online immediately after test taker's responses uploaded to the system</li> <li>Test takers shown how to use test before it starts</li> <li>No proctors/administr ators are required during test taking</li> <li>Very user friendly and easy to keep track of language development</li> </ul>

			takers use a tablet however in an academic setting, they may be required to write; test tasks are sometimes presented from most to least challenging	
DIBELS ( <u>https://dibels.uoregon.ed</u> u/)	<ul> <li>To assess acquisition of early oral and reading skills.</li> <li>K-8</li> <li>Length unclear (short tasks that must be completed several times over a time period)</li> </ul>	<ul> <li>Tasks test for letter naming fluency, initial sounds fluency, nonsense word fluency, oral reading fluency</li> </ul>	<ul> <li>Results from validity and reliability tests have shown strong predictive abilities about test taker's level in three years</li> <li>All youth improved with use, however, youth that were "average" or "low average" improved the most (as opposed to struggling youth)</li> </ul>	• Unclear
Hameray Publishing Group Oral Language Assessment ( <u>https://www.hamera</u> <u>ypublishing.com/pages/or</u> <u>al-language-assessment</u> )	<ul> <li>To identify student's oral vocabulary use and language structure. To document</li> </ul>	<ul> <li>Captures student talk through paper/pen, audio/video/phone/</li> </ul>	<ul> <li>Use in case study demonstrated that this is a valuable oral assessment tool</li> </ul>	<ul> <li>Administrator should practice capturing and</li> </ul>

growth over time using an Oral Language Record. • K-12 • Length dependent on the administrator; language should be recorded consistently over time	<ul> <li>iPad/digital recorder</li> <li>Includes date, time, and the setting of assessment</li> <li>Includes teacher prompt (e.g., retell a story)</li> <li>Provides transcription of student's retelling</li> <li>Identifies patterns in Language Type, Structure, Meaning, and Production using a continuum</li> </ul>	codifying oral language
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# Discussion

In our reviews of the literature, we identified many elements of OST programming that enhance participants' learning and experiences, and identified some tools to assess literacy skills.

### Best Program Design Review

We reviewed 28 articles to better understand best practices for designing OST programs for newcomers and marginalized youth. We identified elements of the program environment, pedagogical approaches, characteristics of program facilitators, program length, and the role of families within these programs.

#### **Environment Features**

Various elements of an OST program can help create a positive learning environment. The articles highlighted the positive impact of tutors/mentors on student engagement. While tutor/mentor responsibilities varied between programs, one common element was that tutors/mentors encouraged positive academic progress.

Cultural elements were also integrated into some OST programs to reinforce participants' personal identities. Role models from the same cultural community promoted representation and helped newcomers engage with academic content using their own cultural perspectives. Programs also used various activities, ranging from individual research projects to community conversations about identity, to promote critical thinking skills and empathy.

One limitation of our review is that there are various elements that contribute to an environment conducive to learning, so it is unclear whether there are particular elements that are best or necessary. However, the heterogeneity of the literature does provide many examples to draw from when creating and/or evaluating an OST program.

#### **Pedagogical Approaches**

Programs used a diverse range of pedagogical approaches to empower youth and facilitate engagement. Pedagogical approaches helped leverage/highlight the existing knowledge and experiences of youth to promote connections between oneself and the content youth were learning. For literacy skills, approaches often included formal language instruction, but there was also an emphasis on promoting deeper connections to the content in the language that youth were learning.

Since the pedagogical approaches were so varied, there does not appear to be a "best" approach. We recommend that multiple pedagogies be integrated based on the unique aim of any given OST program.

#### **Program Facilitators**

Program facilitator training was an element of some programs to ensure that the program facilitators felt supported in their role. Facilitators were also noted as an important part of programming. However, many articles did not mention and/or emphasize the qualifications or training of facilitators. While there may be existing evidence or recommendations on facilitator training for OST programming, our review may not have captured this literature as we focused more on the elements that directly affect program participants, and relevant articles focused more on describing the elements aiming to enhance learning (e.g., environmental components and pedagogical approaches).

#### **Program Length**

Program length varied depending on the scope of the program. In general, after-school programs took place for a few months at minimum, whereas summer programs ran for four to six weeks. The optimal length of each after-school or summer session is unclear as few articles reported the length of their programming. However, long-term programs may have a larger impact on participants' academic performance (Lauer et al., 2004).

#### Family Involvement

As with program facilitator details, family/parental involvement was not emphasized in many articles. However, two programs were designed with the intent to include families, suggesting that family involvement is an important component of OST programming for newcomer and marginalized youth. Programs involved families by providing resources, encouraging participation in their child's school, and giving parents an opportunity to present their cultural knowledge to youth in the OST programs.

#### Literacy Assessment Review

Three literacy assessments were identified in our search of the peer-reviewed literature, and each monitored and/or assessed various aspects of literacy. A limitation of the tools is that feedback is not immediately provided to youth while they are completing the assessment, and immediate feedback may be important to help youth learn from their mistakes. Testing accommodations were also rarely discussed, however, this may be an important consideration to ensure that tools are accessible. Finally, the tools each varied in their ease of use and would require some practice before they are implemented.

In addition to reviewing the literature, we had an informal conversation with a reading and literacy specialist who provided some helpful insights to consider when assessing literacy. The specialist expressed the importance of creating a safe community for learners when assessing literacy skills, and focusing on activities that showcase English language development rather than assessments of learning. Completing a summative activity helps learners master a skill, provides evidence that the skill has been mastered, and helps the learner feel successful. Overall, it is important to frame assessments as a celebration of success, rather than as an assessment of one's skills.

In our secondary review of non-peer-reviewed literature, we identified eight potentially helpful literacy assessment resources. Two of these resources described informal assessments for ELLs that aligned with the suggestions of the literacy specialist (Colorin Colorado, 2021; OISE, 2021). These assessments are performance-based and include oral reports, presentations, and portfolios. The assessments include processes to document growth over time and a final product, providing evidence of the learners' skills. In addition, youth can be involved in the assessment if they are encouraged to set their own goals and evaluate their progress. Playing games or leading interactive activities may help focus assessments to the learner's current English proficiency level and motivate learners.

One limitation of our review was the lack of openly accessible and validated tools. While the use of validated assessments is ideal (e.g., Table 5), there are various resources that may be helpful for informally assessing literacy skills (Table A1).

### Moving Forward

This report sets the foundation to support Empowerment Squared in stakeholder conversations regarding their programming. The program design findings validate much of what Empowerment Squared already includes within their programming, but also provides some common language to describe the approaches being used and some potential design elements to explore further. This report also provides guidance for evaluating Empowerment Squared's literacy programming. The report identifies validated assessment tools that may be used to directly measure participants' literacy skills, and provides resources for tracking participants' progress whilst celebrating their successes.

## Conclusion

This report presented the findings of a project conducted by the McMaster Research Shop for Empowerment Squared. Through this project, we explored best practices/promising designs for OST academic programs with newcomer and marginalized youth, and identified ways to assess literacy skills.

Through a literature review on programs for newcomer and marginalized youth, we found that many programs include a tutoring/mentorship component and culturally responsive approaches, and help youth develop their self-reflection skills. Pedagogical approaches varied depending on program aims, but many approaches promoted deeper engagement with program content (i.e., connecting content to youth's prior experiences, encouraging co-creation of content) to improve participants' academic skills. The findings also highlighted the importance and impact of program facilitators, as well as families, on participants' academic success.

Through a literature review on literacy assessments, we found a few examples of literacy assessments that had varied levels of evidence to support their use. One limitation of this component of the report was the lack of validated, openly accessible literacy assessments.

This project is also limited in the lack of literature on best practices for OST programs with newcomer and marginalized youth specifically. However, this report provides many promising examples of effective program design elements and literacy assessments to help Empowerment Squared in the design and/or evaluation of their existing programming.

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# Appendix

 Table A1. Brief description of literacy assessment tools/resources.

Resource Name and Link Purpose; Age/Grade Level		Notes (if applicable)	
Phonological Awareness Test	<ul> <li>Assess phonological awareness, phoneme-grapheme correspondence, and phonemic decoding skills</li> </ul>	<ul> <li>Cost to use the tool applies</li> </ul>	
	• For youth aged 5-9		
Comprehensive Test of	Evaluates phonological processing ability	Cost to use the tool applies	
Phonological Processing	• For youth aged 4-24		
<u>Test of Word Reading</u> <u>Efficiency</u>	<ul> <li>Measures youth ability to pronounce printed words and phonemically regular nonwords</li> </ul>	Cost to use the tool applies	
	• For youth aged 6-24		
Gray Oral Reading Test	<ul> <li>Measure oral reading fluency and comprehension</li> </ul>	Cost to use the tool applies	
	• For youth aged 6-23		
Reading Assessment Database	<ul><li>A database of early reading assessments</li><li>For youth in grades K-2</li></ul>	<ul> <li>The cost varies depending on the tool; some tools are free</li> </ul>	
		<ul> <li>The resource outlines the specific skills assessed by each tool</li> </ul>	

Free Literacy Assessments	A list of free literacy assessments	All listed tools are free to use
	<ul> <li>For youth in grades K-8 (the specific age/grade level varies for each test)</li> </ul>	
Learn Alberta's Language Proficiency Assessment Tools and Strategies	<ul> <li>A list of literacy assessments (oral, reading, writing)</li> </ul>	This is a Canadian resource
<u></u>	• For youth in grades K-12	
Steps to English Proficiency Initial Assessment	<ul> <li>An initial assessment to determine the baseline English proficiency and literacy development for an ELL</li> </ul>	<ul> <li>This is a resource meant to align with the 2007 Ontario Kindergarten, elementary, and secondary school policies and procedures</li> </ul>
	• For grades K-12	