**Partnership**
Canadian journal of library and information practice and research
Revue canadienne de la pratique et de la recherche en bibliothéconomie et sciences de l'information

# Early Literacy Learning for Future Library Paraprofessionals: Authentic Learning in Library Education

# L'apprentissage de l'alphabétisation en bas âge pour des futurs membres du personnel paraprofessionnel : apprentissage authentique en enseignement de la bibliothéconomie

Alvina Mardhani-Bayne et Lisa Shamchuk

Volume 17, numéro 2, 2022

URI : https://id.erudit.org/iderudit/1095269ar
DOI : https://doi.org/10.21083/partnership.v17i2.6808

Aller au sommaire du numéro

Éditeur(s)

The Partnership: The Provincial and Territorial Library Associations of Canada

ISSN

1911-9593 (numérique)

Découvrir la revue

Citer cet article

Mardhani-Bayne, A. & Shamchuk, L. (2022). Early Literacy Learning for Future Library Paraprofessionals: Authentic Learning in Library Education. *Partnership*, *17*(2), 1–20. https://doi.org/10.21083/partnership.v17i2.6808

Résumé de l'article

Cet article décrit l'apprentissage professionnel concernant l'alphabétisation en bas âge vécu par des étudiants paraprofessionnels en bibliothéconomie dans un établissement postsecondaire au Canada. Au début d'un cours sur les services de bibliothèque pour les enfants et les jeunes adultes, les étudiants ont complété un sondage afin d'évaluer leurs conceptions de l'alphabétisation en bas âge. Ces étudiants ont ensuite fait l'expérience d'éléments de cours stimulants et pratiques tels des discussions en salle de classe, des conférenciers invités et des évaluations authentiques. À la fin du cours, les étudiants ont de nouveau été sondés et ont été invités à identifier les éléments du cours qui avaient contribué à leur apprentissage. La plupart des étudiants se sont alignés à une approche de littératie émergente face à l'alphabétisation en bas âge. Bien qu'une comparaison entre les deux sondages n'ait pas révélé de différence significative en termes de conception des étudiants de l'alphabétisation en bas âge, plusieurs étudiants ont souligné que les éléments pratiques du cours ont été bénéfiques. Les chercheurs concluent que les occasions d'apprentissage professionnel authentiques renforcent la conception des étudiants concernant l'alphabétisation émergente.

P A R T N E R S H I P

The Canadian Journal of Library and Information Practice and Research
Revue canadienne de la pratique et de la recherche en bibliothéconomie et sciences de l'information

vol. 17, no. 2 (2022)
Theory and Research (peer reviewed)
DOI: https://doi.org/10.21083/partnership.v17i2.6808


# Early Literacy Learning for Future Library Paraprofessionals: Authentic Learning in Library Education

# L'apprentissage de l'alphabétisation en bas âge pour des futurs membres du personnel paraprofessionnel : Apprentissage authentique en enseignement de la bibliothéconomie

Alvina Mardhani-Bayne
Recruitment Manager
Shad Canada
alvina@shad.ca

Lisa Shamchuk
Assistant Professor
MacEwan University
shamchukl@macewan.ca

## *Abstract / Résumé*

This article describes the professional learning around early literacy experienced by library paraprofessional students at a post-secondary institution in Canada. Students completed a survey to gauge their conceptions of early literacy at the beginning of a course on library services for children and young adults. These students then experienced hands-on, engaging course elements such as in-class discussions, guest speakers, and authentic assessments. At the conclusion of the course, students were again surveyed and were asked to identify course elements that contributed to their learning. Most students aligned with an emergent literacy approach to early literacy. While a comparison between the two surveys did not reveal a significant difference in terms of students' conceptions of early literacy, multiple students identified the hands-on elements of the course as beneficial. The researchers conclude that providing authentic professional learning opportunities that include knowledge application reinforces learners' conceptions about emergent literacy.

Cet article décrit l'apprentissage professionnel concernant l'alphabétisation en bas âge vécu par des étudiants paraprofessionnels en bibliothéconomie dans un établissement postsecondaire au Canada. Au début d'un cours sur les services de bibliothèque pour les enfants et les jeunes adultes, les étudiants ont complété un sondage afin d'évaluer leurs conceptions de l'alphabétisation en bas âge. Ces étudiants ont ensuite fait l'expérience d'éléments de cours stimulants et pratiques tels des discussions en salle de classe, des conférenciers invités et des évaluations authentiques. À la fin du cours, les étudiants ont de nouveau été sondés et ont été invités à identifier les éléments du cours qui avaient contribué à leur apprentissage. La plupart des étudiants se sont alignés à une approche de littératie émergente face à l'alphabétisation en bas âge. Bien qu'une comparaison entre les deux sondages n'ait pas révélé de différence significative en termes de conception des étudiants de l'alphabétisation en bas âge, plusieurs étudiants ont souligné que les éléments pratiques du cours ont été bénéfiques. Les chercheurs concluent que les occasions d'apprentissage professionnel authentiques renforcent la conception des étudiants concernant l'alphabétisation émergente.

## *Keywords / Mots-clés*

early literacy, library education, authentic learning

alphabétisation en bas âge, enseignement de la bibliothéconomie, apprentissage authentique

## *Introduction*

Canadian public libraries have offered children's literacy programs since at least the 1980s (Graham & Gagnon, 2013). Public libraries are well suited to deliver literacy programs for children who are not yet old enough for formal schooling: they are geographically dispersed; provide free educational programming; are welcoming to infants, toddlers, and their parents; and tend to interact with parents and children together, allowing very young children to access literacy programming along with their parents (Britton, 2012; Lankes, 2012). Literacy programs are growing: A recent survey indicated that the number of educational programs per capita offered by Canadian public libraries increased between 2012 and 2016, while all other types of library service (e.g., circulation of library materials) decreased (Reid & Thompson, 2017). As such, public libraries represent a site for increasing support for early literacy.

Library paraprofessionals in these settings are increasingly expected to develop and implement early literacy programs. However, very little research has been conducted to understand and describe the education that library paraprofessionals experience to create and implement literacy programming, and little is known about how that training relates to their conceptions of early literacy (Mardhani-Bayne, 2020). Elementary and secondary school teachers have generally adhered to one of two major camps in their literacy instruction: either reading readiness (a traditional skills-based approach based on memorization) or emergent literacy (a social approach where children have a variety of language and literacy experiences) (McMahon et al., 1998). Teachers' perceptions

about literacy instruction inform many decisions that impact children, such as classroom activities and available materials (McMahon et al., 1998). Given that library paraprofessionals make similar decisions when creating literacy programs, understanding more about their ideas around literacy would then support early literacy programs of increasing quality.

Knowing more about library paraprofessionals' ideas about early literacy and how those ideas may be influenced by their post-secondary education can help identify useful pedagogical elements for both in- and pre-service library paraprofessionals and, in turn, the children they support. However, many tools that measure ideas about early literacy are designed for teachers, not library paraprofessionals. This study explores the feasibility of surveying library paraprofessionals using an instrument designed for teachers and attempts to answer the following research question: How are future library paraprofessionals' ideas about early literacy influenced by authentic learning? From this exploratory study we seek to identify a methodological approach that may be helpful to those who support literacy learning in a variety of out-of-school settings, such as daycares and libraries.

## *Literature Review*

### Changing Perceptions of Literacy Education

In this study, "literacy" is defined as the ability to make meaning from and with texts, or ways to communicate ideas in a variety of modes, such as written words or images (New London Group, 1996; Serafini & Gee, 2017). This approach to literacy assumes that a reader's relationship with a text is informed by their social and cultural contexts given the social nature of communication (New London Group, 1996). Additionally, "early literacy" is defined here as literacy learning that occurs before the age of five.

While this study defines literacy as making meaning of a variety of text types, many use the term to denote the reading and understanding of written text specifically; As such, the following section will focus on that understanding of literacy (Neuman et al., 2017). As Castles et al. (2018) explain, there has been much debate about how young children learn to read. While this debate has been characterized in different ways, one way to understand it is to view one side as advocating for "reading readiness" while the other advocates for "emergent literacy" (McMahon et al., 1998).

Reading readiness is a conception of reading that focuses on developing skills that support the decoding of written text into sounds, such as through letter-sound relationships (McMahon et al., 1998). Because this conception of reading relies on developed and developing skills, those who advocate for this approach believe in waiting until a child is at least five years old and then using direct instruction to teach reading in an objective way (McMahon et al., 1998).

While the reading readiness approach was popular in the US until the 1980s, research increasingly highlighted the importance of early reading and writing (before children had

developed the so-called prerequisite skills), leading to an alternative view of literacy called emergent literacy (McMahon et al., 1998; Teale et al., 2020). This view contends that literacy development may begin as early as birth and that exposure to print-rich environments can support children's developing literacy abilities (McMahon et al., 1998). While reading readiness approaches follow a systematic sequence in terms of literacy education, emergent literacy allows for the concurrent development of reading and writing abilities and emphasizes the role of background knowledge in deciphering texts (McMahon et al., 1998).

More current views of literacy education combine elements from both of these approaches. Research into psychological reading and writing processes demonstrates that many of the skills advocated for by reading readiness proponents (e.g., decoding the alphabet into sounds) are foundational and necessary for becoming a skilled reader (Castles et al., 2018; Teale et al., 2020). At the same time, elements such as children's background knowledge have also been linked to reading comprehension, demonstrating that multiple factors including skills, processes, and cognitive resources are all involved in skilled reading (Castles et al., 2018). Additionally, early learning frameworks such as *Flight: Alberta's early learning and care framework* advocate for socially informed literacy learning that positions children as holders of multiple "literate identities," once again pointing to a multifaceted conception of literacy education (Makovichuk et al., 2014, p. 107).

**Literacy Programming in Public Libraries**

In this study, "literacy programming" is defined as any planned program for a child, adolescent, and/or parent/guardian that is created explicitly to enhance a participant's exposure to and appreciation of written, oral, visual, spatial, and/or gestural texts.

Research on early literacy programs in public libraries has tended to focus on describing and evaluating these programs, with an emphasis on how literacy programs are avenues for literacy behaviours that act as precursors to the conventional reading and writing of printed texts (e.g., Lonigan, 2006; Valdez-Menchaca & Whitehurst, 1992; Wasik, 2010). Additionally, these studies usually examine how the staff or volunteer leader of the program conducted the programming (McKenzie & Stooke, 2007). Empirical research has demonstrated that there is indeed a relationship between the program content and children's subsequent early literacy behaviours (Campana et al., 2016). Importantly, there is little discussion of preparation for these program leaders, with most studies providing at most a list of topics covered in training.

In 2010, the Provincial and Territorial Public Library Council (PTPLC) in Canada commissioned a telephone survey of 400 public libraries across the country, designed to ascertain their early literacy programming practices. This survey found that most early literacy programs were 30- to 45-minute storytime programs, where a staff member or volunteer sang songs, read storybooks, and engaged children in a rhyme or fingerplay (McKend, 2010). Ralli & Payne (2016) recommend incorporating elements of play for age-appropriate early literacy development during storytimes.

Storytime programs currently seen in public libraries also include dad-only storytimes, storytimes developed by speech therapists (Campbell-Hicks, 2016), drag queen and other gender-diverse storytimes (Campbell Naidoo, 2018), and inclusive storytimes centered around American Sign Language for deaf and hard of hearing children (Bushman, 2020; Prendergast, 2016) to name a few, which contain the same basic building blocks as regular storytimes tweaked for particular audiences. Additionally, early literacy programs can involve connecting new parents and caregivers with child-appropriate books and literacy building strategies (Barratt-Pugh & Rohl, 2016; Hardma & Jones, 1999; Ralli & Payne, 2016).

## Paraprofessionals in Public Libraries

In the United States, the terms library assistant, library technician, library technical assistant, and/or paraprofessional are commonly used to describe a library worker other than a librarian who usually holds some level of post-secondary education, with educational requirements varying greatly by state and type of library and ranging from a high school diploma to a library technician certificate or associate degree (American Library Association, 2016).

A library paraprofessional in Canada is commonly referred to as a library technician, a position that "plays an important role on a library staff, occupying a position with a level of responsibility between that of a clerk and a librarian" (Canadian Federation of Library Associations [CFLA], 2016, para. 4). The CFLA's "Guidelines for the education of library technicians" note programs are commonly two years in length and award a diploma—the recognized (though not mandatory or accredited) credential in Canada (CFLA, 2016).

The "Guidelines for the education of library technicians" do include a relevant section on "Library Programming," stating a graduate should be competent to: organize library programs; conduct informational, instructional, outreach, recreational programs and special events; and create accompanying materials for library programs (CFLA, 2016). There are no stated competencies in these guidelines for early literacy concepts (CFLA, 2016).

Overwhelmingly, the focus of research on library staff who provide literacy instruction has been on those who act as children's librarians and hold a library-specific master's degree, such as a Master of Library and Information Studies (MLIS), from a post-secondary institution that has been accredited by organizations of library practitioners such as the American Library Association (in the US or Canada). Often, these certified children's librarians have several roles in public libraries, including designing literacy programs for young children, providing readers' advisory services to new parents, checking materials out to patrons, managing budgets for staffing and resources, and hiring and training other staff members.

Other library staff have not received the same amount of inquiry in the research literature. This is despite their prevalence in public libraries in Canada and the US—

non-librarians make up roughly 70% of library staff—and the fact that they are often called upon to conduct literacy programming for young children and their parents (Reid & Thompson, 2017; K. Turzansky, personal communication, September 18, 2016). The library literature does suggest that paraprofessionals are taking on more sophisticated roles in the workplace and are assuming a greater public service role, including providing library programming, which was previously the sole domain of the professional librarian (DeLong et al., 2015; James et al., 2015). Through these roles, library paraprofessionals are at the forefront of providing literacy programming to children. As such, understanding the theories and practices library paraprofessional post-secondary students learn in preparing for early literacy programming is key for enhancing our understanding of how they can be better supported.

## Learning in Post-Secondary Contexts

As Herrington and Herrington (2007) describe, post-secondary learning environments traditionally consist of large classes where a single subject-matter expert delivers a lecture. Rather than discussing ideas, collaborating, or otherwise actively engaging, post-secondary learners often only passively "receive" information and do not always retain these ideas beyond final exams (Herrington & Herrington, 2007).

This traditional, lecture-based approach to learning is outdated and has little relevance to professional programs; as such, many instructors have used situated cognition to inform teaching practices that are engaging, hands-on, and authentic (Herrington et al., 2014). Situated cognition views knowledge as inseparably linked to the activity, context, and culture in which it is used (Brown et al., 1989). This view considers knowledge "similar to a set of tools… [that] can only be understood through use, and using them entails both changing the user's view of the world and adopting the belief system of the culture in which they are used" (Brown et al., 1989, p. 33). This means that, rather than in passive, decontextualized settings, deep understanding actually occurs when learners use their tools authentically to echo the ways in which that knowledge is used in multiple situations (Brown et al., 1989). Because situated cognition sees learning and activity as inextricably linked, this theoretical approach is at odds with the notion that intellectual knowledge is separate from and more valuable than embodied, lived experiences (Kirshner & Whitson, 1997). Authentic learning environments include providing students with access to experts who can model skills and asking students to complete the same complex tasks that they would be asked to complete in their professional contexts—in this instance, connecting students with in-service library paraprofessionals (Herrington & Herrington, 2007).

A recent study of public library directors in the US found that respondents rated the importance of professional development for literacy programmers an average 4.03 out of 5 (Cahill et al., 2020). Additionally, directors indicated that it was more difficult to find and hire qualified personnel and to internally train programmers than it was to provide budget, facilities, and resources for such programming (Cahill et al., 2020). This demonstrates that public library directors believe that professional preparation is

important, but that the available opportunities both before and during employment are lacking.

As discussed above, library paraprofessionals are taking on increasingly sophisticated roles in their workplaces, and aspects of these roles such as literacy programming involve the integration of both theories of literacy education and skills like book selection for early literacy learners. Given this context, post-secondary learning environments for library paraprofessionals are ripe for instruction that uses ideas from situated cognition, in order to facilitate the deep, authentic learning needed for continued success in public libraries. Against this background of literature, our study seeks to explore the feasibility of using an existing survey instrument to answer the following research question: "How are future library paraprofessionals' ideas about early literacy influenced by authentic learning?"

## *Setting*

MacEwan University, located in Edmonton, Alberta, Canada, is one of the 14 post-secondary institutions across Canada that delivers a two-year library technician diploma program (Erickson & Shamchuk, 2017; MacEwan University, 2021). The participants in this study were second-year students in MacEwan University's Library and Information Technology Diploma program. The data for this study were collected at the beginning and end of INFM 208 (Library Services for Children and Young Adults) during the Winter 2021 academic term. This introductory course covers concepts such as the history, forms, and evaluation of children's and young adult literature, and the design and delivery of library programs such as storytimes, booktalks, and makerspaces. During the study, there were 35 students registered in the targeted course.

In this course, the delivery of curriculum regarding early literacy and children's library programming was informed by two key documents, selected by the instructor: "Every Child Ready to Read: The five practices and the early literacy components support each other" (n.d) and Zambo and Hansen's (2007) "Love, language, and emergent literacy".

The Every Child Ready to Read (n.d.) document advocates five early literacy practices that caregivers and children can engage in—singing, talking, reading, writing, and playing—and describes how these practices relate to early literacy "components" such as increasing vocabulary. While some of the components relate more to a reading readiness perspective (such as phonological awareness, or the awareness of how words are made up of different combinations of sounds), the overall approach in this document aligns with an emergent literacy perspective: it emphasizes children's background knowledge as an important component of early literacy, describes ways to support babies and young toddlers, and encourages contextualized language use.

The Zambo and Hansen (2007) article similarly incorporates a largely emergent literacy view with some elements that correspond to a reading readiness approach. For example, the authors provide some description of the importance of phonological awareness, but overall this article discusses how literacy development is connected to

young children's emotional development, as opposed to the objective and depersonalized approach to literacy associated with reading readiness (Zambo & Hansen, 2007). The article explains how caregivers can interact with young children in ways that support early literacy, such as reading aloud to infants (Zambo & Hansen, 2007).

In addition to these two key readings, the course also included a guest speaker with experience delivering early literacy programs within public libraries and other early learning settings, and an assignment where students were asked to create a virtual storytime program for children. Using the Every Child Ready to Read concepts, students filmed themselves performing a program that included songs, rhymes, and early literacy tips for caregivers. The guest speaker and the virtual program assignment align well with some of the characteristics of situated cognition discussed above: students were able to see how knowledge and skills are used in different contexts and were able to apply knowledge in an authentic, real-life setting (Herrington & Herrington, 2007).

## *Methodology*

### Design

This study used a pre- and post-survey design to identify and understand what changes, if any, occurred to post-secondary students' ideas about early literacy through their participation in the course (Dimitrov & Rumrill, 2003). Students in INFM 208 were invited by email to complete a survey through an online form on their first day of class in Winter 2021, after viewing an introductory video created by the researchers to explain the project. Then, at the end of the course, students were again invited by email to complete a survey. Because all students in INFM 208 were invited to participate, the researchers did not have the ability to randomly assign participants to experimental and control groups (Dimitrov & Rumrill, 2003). The researchers did not teach as part of this course, nor were they involved in any other way besides communicating about the opportunity to take part in the study. This study received approval from the MacEwan University Research Ethics Board.

### Data Sources

The survey used in this study was based on the Literacy Acquisition Perception Profile (LAPP) developed by McMahon et al. (1998). This instrument measures beliefs around early literacy and identifies which of the two major "camps" respondents fall into (reading readiness or emergent literacy). Consisting of 20 items in total, the survey has two subscales: ten items that correspond to a reading readiness approach and another ten that correspond to an emergent literacy approach. Participants rate their agreement with each item and can determine which approach they most align with.

In the initial survey, participants responded to a complete version of the original LAPP. Then, after attending INFM 208, participants completed a second survey that included both the complete LAPP and two additional open-ended questions:

> "Thinking back to what you learned about literacy programming in INFM 208, what resource(s) was most significant to you as a learner? This could be a reading, a video, an in-class discussion, or something else. List the significant resources here:
>
> Please comment on how the resource(s) was significant to your learning:"

These additional open-ended questions were designed to allow students to identify and discuss the course elements that they felt supported their learning.

Finally, participants were asked to include the third character of their postal codes (e.g., if their postal codes began with T5H, they would input the letter H) and the last two digits of their phone numbers in both surveys. Together, these would create a code for each participant so that their responses to each survey could be matched.

The survey questions are included in the appendix.

Of the 35 students enrolled in the course, 24 completed the initial survey and 18 completed the second survey. Between the two surveys, there were 13 matched responses.

## *Results*

The data from the surveys were analyzed both quantitatively and qualitatively. First, responses between the first and second surveys were reviewed and those that matched were paired. Of the 18 possible paired responses, there were 13 matches, representing 37% of the 35 students registered in the course.

The mean score for each of the subscales (reading readiness and emergent literacy) for these 13 matches was then calculated for each survey. Since participants could choose a response of 1 to 5 for each item, and each subscale had 10 items, the range of possible scores for each subscale is 10–50.

**Table 1**

*Mean subscale scores for each survey*

| | Mean Reading Readiness Score | Mean Emergent Literacy Score |
|---|---|---|
| Survey One | 34.3 | 41.7 |
| Survey Two | 33.8 | 42.7 |

Participants were generally more aligned with an emergent literacy approach than with a reading readiness approach. Additionally, between surveys one and two, the average

score of the reading readiness scale dropped, while the average score of the emergent literacy scale rose.

Next, researchers conducted t-tests to determine if the changes in means from surveys one and two were statistically significant. The results from the t-tests did not reach statistical significance, which may in part be due to the small number of participants (n=13) (Sprinthall, 2012).

Following the comparison between the two surveys, researchers focused on analyzing all responses in the second survey. Of the 18 responses received on the second survey, 14 (78%) provided comments to the two open-ended questions. When asked “what resource(s) was most significant to you as a learner?”, six of the fourteen (43%) mentioned course readings, three (21%) mentioned class discussions, two (14%) mentioned guest speakers, and one (7%) commented generally about videos and slides provided by the instructor.

Additionally, 13 (93%) participants responded to the follow-up question, “Please comment on how the resource(s) was significant to your learning.” Three participants (23% of those that answered this question) appreciated that the readings outlined core components of early literacy and gave practical ideas for how to implement the concepts in the real world. Two participants (15%) acknowledged the safe class environment, noting that being able to make and correct mistakes, confusions, and assumptions before going out into the field was important to them. One participant (8%) generally appreciated gaining knowledge and information to fill gaps in their understanding, and one (8%) appreciated being provided with extra information and the option to explore more on their own. One participant (8%) appreciated learning about other perspectives as part of the class discussions. One participant (8%) noted that a particular guest speaker’s knowledge, experience, and enthusiasm was inspiring. Additionally, one participant (8%) noted that the hands-on assignment allowed them to apply what they learned.

## *Discussion*

### Feasibility of the LAPP Survey

In reviewing responses to the LAPP survey, several patterns emerged. In general, participants’ average scores on the reading readiness scale were lower in the first survey and dropped in the second, while their average scores on the emergent literacy scale were higher on the first survey and rose on the second. This demonstrates that students are entering this particular course with some previous knowledge and/or existing beliefs about early literacy, and that students generally come into and leave the course more aligned with an emergent literacy view. This study did not determine where this prior knowledge was acquired, but it is evident that the course work reinforces these beliefs. For example, key readings in this course discuss the benefits and applications of an emergent literacy view, and 43% of participants cited these readings as being important to their learning. Additionally, class discussions (cited by 21% of participants

as the most significant resource for their learning) included opportunities for students to share their beliefs around early literacy programming and may have encouraged emergent literacy approaches. Overall, the mostly static nature of these students' ideas about early literacy reflects the cohesion of the course content: elements such as readings, class discussions, and guest speakers largely confirmed the ideas that participants had and provided them with avenues to learn more about and apply the conception of literacy with which they aligned. Additionally, this demonstrates the ability of the LAPP survey to reflect participants' existing views of and personal beliefs around early literacy.

### Elements of Authentic Learning

As discussed above, open-ended comments from some participants noted the perceived usefulness of practical and hands-on components from readings, class discussions, the guest lecture, and the virtual storytime program assignment. Elements such as these align with situated cognition as a teaching approach: providing students with opportunities to access multiple experts who can model skills and discuss context-specific issues and ideas, and then asking students to practice those same skills (Herrington & Herrington, 2007). These characteristics contribute to an authentic learning environment in which students learn about and then apply ideas, leading to long-term understanding of the nuances of those ideas (Brown et al., 1989). It should not be surprising, then, that multiple students in this course recognized the significance of these elements to their learning.

Being able to apply knowledge delivered during coursework into practice is of great benefit to future workplaces. As a result of this course, a group of future library paraprofessionals are prepared to step into the role of early literacy programmer by using their experiences of creating a storytime program to plan new programs. Additionally, having been exposed to new ideas about early literacy from a guest speaker and from one another, students are better prepared to anticipate their future work contexts. For example, hearing from the guest speaker may have alerted students to potential early literacy programming scenarios such as large groups of children who attend programs with daycare educators. Importantly, exposure to the different conceptions of early literacy (reading readiness and emergent literacy) through this course provided students with professional language for discussing early literacy approaches that reinforce or differ from their own conceptions, making them better prepared to collaborate with their future colleagues. Overall, the elements of an authentic learning environment that some students recognized as helpful are the same elements that contribute to a readiness for the workplace, both for library contexts and for other professional settings.

For those who are current library practitioners and are tasked with supporting library paraprofessionals in developing early literacy programming, this study demonstrates that cohesion across different authentic learning elements (such as readings and discussions) supports learning. Rather than providing an idea through a single mode, those who deliver in-service professional learning can support a multifaceted

understanding of important ideas by ensuring that they are discussed through multiple sources, more than once. In addition, the importance of hands-on elements to the participants here indicates that in-service library paraprofessionals may benefit from a gradual release of responsibility model in which they are asked to use their skills with increasing independence (Pearson & Gallagher, 1983). For example, those who are new to the library could first observe a storytime program, then use models to design their own program for an audience of peers, and then move to delivering their own program independently. This would require considerable time but would align with what the students in this study identified as significant to their learning.

## *Limitations*

The small sample size of this study contributed to the lack of statistically significant results. Additionally, the post-survey was delivered shortly before and open during final exam week for this course, which may have contributed to the small drop in participation over the course of the term as student stress levels and obligations grew in intensity.

Another limitation was the pivot to online learning due to COVID-19. It is possible a visit from the researchers, including in-person encouragement to participate in the surveys and the ability to ask questions about the project during an in-person session, would have improved participation rates. The method used to keep the pre- and post-surveys anonymous may have been unclear, and students may have forgotten they had completed/not completed the pre-survey before completing the post-survey. An anonymous method of reminding only students who completed the pre-survey may have mitigated this small drop in response rate. No instruction was given for what to do if the student's phone number and/or postal code had changed between the pre- and post-survey: Including this instruction in the future could resolve this potential discrepancy which might have affected the response rate. A few students did not fill out the survey appropriately, which may be attributed to lack of attention paid by the student to instructions, the lack of in-person instructions, or faults with the survey questions or instructions.

Additionally, the aforementioned virtual storytime program assignment had to be submitted as a filmed video, due to COVID-19 restrictions. Prior to these restrictions, this assignment may have been filmed, presented during class time to classmates, or delivered in collaboration with Early Learning at MacEwan (ELM), which is MacEwan University's childcare centre. The move to virtual practice of learned concepts may have affected students' perceived knowledge. It is also unclear how the online learning format of the entire course may have affected students' ability to access the content and their perceptions of their learning.

## *Future Research*

As this study surveyed only a small group of participants, additional research to implement the same survey over multiple sections and years of INFM 208 could provide statistically significant information in the form of longitudinal data. Additionally, future

research could be conducted to determine the effectiveness of targeted authentic pedagogical strategies, such as various forms of hands-on assignments, appropriate readings, and/or the inclusion of additional content experts as guest speakers.

As students identified they already had previous knowledge and beliefs about early literacy concepts before taking the course, future research is needed to determine if this existing thinking was obtained from prior experiences (such as previous employment or family situation) or from previous education (whether part of their Library and Information Technology program or other formal schooling). It may be helpful to identify how ideas around early literacy are generally communicated as an avenue for supporting parents through library programs; After all, parents also come into programming contexts with existing ideas, and a deeper understanding therein could enable library paraprofessionals to better prepare and respond to those ideas. Future research could also determine the effectiveness of particular pedagogical strategies in disseminating ideas around early literacy. Given that the LAPP survey enabled us to highlight this previous knowledge, it may be useful to employ such a survey with other groups who support early literacy in out-of-school settings. For example, our approach may be a model for ascertaining the existing understandings and beliefs of daycare workers who may be called upon to provide similar literacy-promoting activities.

While COVID-19 remains a global concern, future research with this particular course and educational concepts could also be completed to study the effectiveness of a variety of modes of hands-on practice completed by students, to add to the body of knowledge regarding similarities and differences of educational outcomes in both online and in classroom post-secondary settings.

## *Conclusion*

Though the results were not statistically significant, this study of a small group of library paraprofessional post-secondary students showed an increase in the perceived knowledge and applicability of emergent literacy concepts over the course of an academic term that provided curriculum and authentic pedagogical experiences about early literacy. Furthermore, this student group identified the practical, hands-on experiences as elements that also increased their perceived knowledge and applicability of literacy and library programming concepts to their future workplace responsibilities.

It is our hope that this research will benefit students, in that it will provide them with an opportunity not only to articulate their thinking around early literacy but also identify elements from post-secondary coursework that can support their future work. Overall, the experience may provide added confidence in their early literacy programming in the workplace. As this student group will go on to become information professionals, this project will also allow students to learn and be involved in the research cycle, allowing them to connect the research process with their engagement with academic writing and literature as well as their existing knowledge of information literacy principles. The results of this research will be of interest to post-secondary instructors and librarians

who deliver early literacy instruction in library education settings, at both the library technician diploma and librarian graduate degree levels. Additionally, the identification of authentic post-secondary coursework elements that support deepening understandings of early literacy will also be of interest to instructors of early childhood education, who can use these results to inform their teaching of pre-service educators, or to educators who provide training and professional development opportunities to paraprofessionals in a variety of settings. Ultimately, though more research is needed on the specifics of pedagogical practice, this study provides educators with evidence regarding effective and successful strategies for teaching others about early literacy.

## *References*

American Library Association (ALA). (2016). *Library assistants and technicians*. ALA.

Barratt-Pugh, C., & Rohl, M. (2016). Evaluation of family literacy programs: A case study of better beginnings, a library-initiated family literacy bookgifting program in Western Australia. *Library Trends, 65*(1), 19–39.

Britton, L. (2012). The makings of maker spaces. *Library Journal*, *137*(16), 20–23.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational researcher*, 18(1), 32–42.

Bushman, B. (2020). Every? child ready to read: A model of successful programming for deaf children. *Children & Libraries: The Journal of the Association for Library Service to Children*, *18*(3), 11–36.

Cahill, M., Joo, S., Howard, M., Ingraham Dwyer, J., King-Oaks, K., & Yates, B. (2020). What is storytime good for and what makes storytime good? A survey of public library directors. *Journal of Librarianship and Information Science, 52*(4), 1000–1014.

Campana, K., Mills, J. E., Capps, J. L., Dresang, E. T., Carlyle, A., Metoyer, C. A., Urban, I. B., Feldman, E. N., Brouwer, M., Burnett, K., & Kotrla, B. (2016). Early literacy in library storytimes: A study of measures of effectiveness. *The Library Quarterly, 86*(4), 369–388.

Campbell-Hicks, R. (2016). Early literacy programmes in public libraries: Best practice. *The Australian Library Journal*, *65*(2), 121–129.

Campbell Naidoo, J. (2018). A rainbow of creativity: Exploring drag queen storytimes and gender creative programming in public libraries. *Children & Libraries: The Journal of the Association for Library Service to Children*, *16*(4), 12–20.

Canadian Federation of Library Associations (CFLA) (2016). *Guidelines for the education of library technicians*. CFLA.

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest, 19*(1), 5–51.

DeLong, K., Sorensen, M., & Williamson, V. (2015). *8Rs redux: CARL libraries human resources study*. Canadian Association of Research Libraries.

Dimitrov, D. M., & Rumrill Jr, P. D. (2003). Pretest-posttest designs and measurement of change. *Work, 20*(2), 159–165.

Erickson, N. & Shamchuk, L. (2017). Paraprofessional library education in Canada: An environmental scan. *Canadian Journal of Library and Information Studies*, *41*(1/2), 18–41.

Every Child Ready to Read. (n.d.) The five practices and the early literacy components support each other [chart]. www.earlylit.net.

Graham, S., & Gagnon, A. (2013). A quasi-experimental evaluation of an early literacy program at the Regina Public Library/Évaluation quasi-expérimentale d'un programme d'alphabétisation des jeunes enfants à la Bibliothèque Publique de Regina. *Canadian Journal of Information and Library Science*, *37*(2), 103–121.

Hardma, M., & Jones, L. (1999). Sharing books with babies: Evaluation of an early literacy intervention. *Educational Review, 51*(3), 221–229.

Herrington, A. J. & Herrington, J. A. (2007). What is an authentic learning environment?. In L. A. Tomei (Ed.), *Online and distance learning: Concepts, methodologies, tools, and applications* (pp. 68–77). Information Science Reference.

Herrington J., Reeves T.C., & Oliver R. (2014). Authentic learning environments. In J. Spector, M. Merrill, J. Elen., & M. Bishop (Eds.) *Handbook of research on educational communications and Technology* (pp. 401-412). Springer.

James, N., Shamchuk, L. & Koch, K. (2015). Changing roles of librarians and library technicians. *Partnership: The Canadian Journal of Library and Information Practice and Research*. *10*(2), 1–29.

Kirshner, D., & Whitson, J. A. (1997). Editors' introduction to situated cognition: Social, semiotic, and psychological perspectives. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: social, semiotic, and psychological perspectives* (pp. 1–16). Lawrence Erlbaum Associates.

Lankes, R. D. (2012). Expect more: Demanding better libraries for today's complex world. R. David Lankes.

Lonigan, C. (2006). Development, assessment, and promotion of preliteracy skills. *Early Education and Development, 17*(1), 91–114.

MacEwan University. (2021). Library and information technology. MacEwan University.

Makovichuk, L., Hewes, J., Lirette, P., & Thomas, N. (2014). *Flight: Alberta's early learning and care framework*.

Mardhani-Bayne, A. A. (2020). Early childhood literacy training for library assistants in public libraries: An exploratory case study [Doctoral dissertation, Syracuse University]. Syracuse University Libraries Surface.

McKend, H. (2010). *Early literacy storytimes for preschoolers in public libraries*.

McKenzie, P. J., & Stooke, R. K. (2007). Producing storytime: A collectivist analysis of work in a complex communicative space. *The Library Quarterly, 77*(1), 3–20.

McMahon, R., Richmond, M. G., & Reeves-Kazelskis, C. (1998). Relationships between kindergarten teachers' perceptions of literacy acquisition and children's literacy involvement and classroom materials. *The Journal of Educational Research*, *91*(3), 173–182.

Neuman, S. B., Moland, N., & Celano, D. (2017). *Bringing literacy home: An evaluation of the Every Child Ready to Read program*. American Library Association.

New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, *66*(1), 60–92.

Pearson, P.D., & Gallagher, M. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, *8*(3), 317–344.

Prendergast, T. (2016). Seeking early literacy for all: An investigation of children's librarians and parents of young children with disabilities' experiences at the public library. *Library Trends*, *65*(1), 65–91.

Ralli, J., & Payne, R. G. (2016). Let's play at the library: Creating innovative play experiences for babies and toddlers. *Library Trends, 65*(1), 41–63.

Reid, I., & Thompson, C. (2017). The 2017 public library data service report: Characteristics and trends. *Public Libraries Online*, *56*(5), 20–30.

Serafini, F., & Gee, E. (2017). Introduction. In Serafini, F., & Gee, E. (Eds.), *Remixing multiliteracies: Theory and practice from New London to new times* (pp. 1–18). Teachers College Press.

Sprinthall, R. C. (2012). *Basic statistical analysis,* 9th Edition. Pearson Education.

Teale, W. H., Whittingham, C. E., & Hoffman, E. B. (2020). Early literacy research, 2006–2015: A decade of measured progress. *Journal of Early Childhood Literacy*, *20*(2), 169–222.

Valdez-Menchaca, M.C., & Whitehurst, G.J. (1992). Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Developmental Psychology, 28*(6), 1106–1114.

Wasik, B. A. (2010). What teachers can do to promote preschoolers' vocabulary development: Strategies from an effective language and literacy professional development coaching model. *The Reading Teacher, 63*(8), 621–633.

Zambo, D., & Hansen, C. C. (2007). Love, language, and emergent literacy: Pathways to emotional development of the very young. *YC Young Children, 62*(3), 32–37.

## *Appendix*

Survey Questions

Introduction:
The purpose of this instrument is to determine your perceptions of children's literacy acquisition. There are no right or wrong reactions to the statements.

Directions:
Please read each item carefully. Identify the response (from Strongly Disagree to Strongly Agree) that best represents your feelings about children's literacy acquisition. Choose the number that corresponds to your response.

| | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|---|---|---|---|---|---|
| In order to learn to read, a child needs to know the letters of the alphabet and the corresponding letter sounds. | 1 | 2 | 3 | 4 | 5 |
| Becoming literate is a continuous, developmental process that begins very early in life. | 1 | 2 | 3 | 4 | 5 |
| Beginning reading and writing practices exhibited by young children result from direct instruction | 1 | 2 | 3 | 4 | 5 |
| Meaning, rather than phonic cues, should be emphasized during children's early experiences with print. | 1 | 2 | 3 | 4 | 5 |
| Beginning reading and writing practices appear naturally in young children with exposure to environmental print. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| In order to become literate, young children must be provided with numerous and varied opportunities to read and write. | 1 | 2 | 3 | 4 | 5 |
| Oral reading mistakes should be corrected immediately. | 1 | 2 | 3 | 4 | 5 |
| Repetition of new words will guarantee their inclusion in a child's sight vocabulary. | 1 | 2 | 3 | 4 | 5 |
| It is the teacher's responsibility to control the child's development in becoming a literate individual. | 1 | 2 | 3 | 4 | 5 |
| Learning to read is a social process often influenced by children's search for meaning. | 1 | 2 | 3 | 4 | 5 |
| Learning to read and write involves taking risks. | 1 | 2 | 3 | 4 | 5 |
| Opportunities for children to engage in reading and writing activities should be provided throughout the day in all areas of the | 1 | 2 | 3 | 4 | 5 |
| Play is one of the best ways for young children to learn about written language. | 1 | 2 | 3 | 4 | 5 |
| Proficiency in the basic reading subskills has to be acquired before one can act in a literate way. | 1 | 2 | 3 | 4 | 5 |
| Reading is essentially the mechanical skill of decoding, or turning printed symbols into sounds that are language. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| The teaching of literacy must be systematic and sequential in operation. | 1 | 2 | 3 | 4 | 5 |
| When presented with an unknown word, children should be taught to sound it out. | 1 | 2 | 3 | 4 | 5 |
| Root words should be taught to beginning readers prior to inflectional endings. | 1 | 2 | 3 | 4 | 5 |
| Children acquire valuable information regarding written language when engaged in voluntary, spontaneous play. | 1 | 2 | 3 | 4 | 5 |
| Children acquire literacy as a response to printed language in their social environment. | 1 | 2 | 3 | 4 | 5 |

So that we are able to match your responses from this survey to the future survey, please respond to the following questions. Please note that this information cannot be used to identify you or link you to any responses. Instead it is simply a way for the researchers to match surveys.

What is the third character of your postal code? For example, my postal code is T5J 4S2, so the third characters is J:

What are the last two digits of your phone number?:

*Additional questions for Survey Two:*
Thinking back to what you learned about literacy programming in INFM 208, what resource(s) was most significant to you as a learner? This could be a reading, a video, an in-class discussion, or something else. List the significant resources here:

Please comment on how the resource(s) was significant to your learning: