The Effectiveness of Academic Literacy Courses in a Higher Learning Institution in Ontario

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Dedication

To my support system: my beloved husband Robert and three angels: Clara, Sara and Victoria. Without your support, cheering me along the way and sacrificing so much this would have never been possible. To my parents Steve (1923-2011) and Donna Zathy who instilled in me the importance of education and seeking knowledge – and “getting that ticket”.

Abstract

Background: academic literacy classes in higher learning institutions are vital in advancing students' literacy skills, thus, enabling students' capacity to endure and prevail in advanced education. However, lowered literacy levels were an issue for many students who entered or attended postsecondary studies. Institutions note that some students need to meet the demands of postsecondary education as they lack basic knowledge and literacy skills.

In postsecondary academic programs, students are expected to possess skills before beginning their studies and are expected to develop specific skills while completing their academic programs. However, students feel underprepared and unable to meet the academic literacy demands of Higher Education Institutions (HEI). Academic institutions in Ontario mandate that students attend and complete specific academic literacy courses to support student needs and provide students with the necessary literacy tools to cope with the academic requirements of higher learning programs. In response to this and to ensure student success, academic literacy courses were created to assist students in developing the literacy skills needed to participate in college and university programs. This study investigated a sizeable postsecondary institution in Ontario. It examined the structure of a fourteen-week academic literacy course held during the first semester through the lens of its students and an examination of its course content.

The study focused on these courses, identifying gaps and developing a theoretical method of evaluating course effectiveness. Moreover, recommendations made to improve courses were established throughout this study and the examination of data collected. The first part of the study involved examining data collected from students through an online survey followed by a semi-structured interview. The second part involved examining the academic course content by investigating the course outlines. The third part of this study produced a theoretical measurement matrix, repurposing the measured academic skills of university students: a diagnostic assessment (MASUS) model to apply an evaluation method to future academic writing courses within the Ontario HEI.

Aims: This study assessed the effectiveness of academic writing courses through the lens of students and examined why students in the Ontario HEI continued to struggle even after completing corrective studies.

Method: the mixed-method approach was applied in the present study. Thirty-eight participants completed the online survey portion of the study. The online survey gathered data on basic demographics and prompted identifying specific features of academic literacy courses as the context for responding to the subsequent 15 surveyed questions. The study's second phase involved ten questions and allowed participants to expand on their responses. Participants from the online portion of the study could volunteer to continue to the semi-structured interview portion. Information gathered from both phases contributed to examining course content using course outlines. These phases were used to develop a theoretical evaluation tool to examine the quality and effectiveness of academic literacy courses in the Ontario higher education institution examined in this study.

Findings**:** The findings showed that academic courses within the Ontario institution were ineffective in providing adequate literacy skills to students entering postsecondary institutions. This was consistent with the data and findings from other studies discussed in the literature review. These findings also provided insight into the inadequacies of course content and student aptitude and brought instructor teaching skills into question. Further, a thematic analysis of the semi-structured interviews uncovered three themes. The themes included *inadequacy, lack of skill acquisition and under-preparedness*. The outcome of this study provided an opportunity to explore remedies and solutions to develop and improve academic literacy courses within the Ontario HEI.

Conclusion: According to participants, academic literacy courses within the Ontario HEI could have been more effective. The Ontario HEI provided an environment to observe academic literacy courses, examine the gaps and provide viable solutions to improve these courses to support and prepare students to complete their academic studies.

Keywords: academic literacy, effective writing, intervention strategies, first year literacy strategies, foundational strategies

Word Count: 59,902

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ABBREVIATIONS

MASUS: Measuring the Academic Skills of University Students and Higher Education Institutions

UNESCO: United Nations Educational, Scientific and Cultural Organization

OECD: Organisation for Economic Co-operation and Development

HEQCO: Higher Education Quality Council of Ontario

HEI: Higher Education Institution

OCOLC: Office of the Commissioner of Official Languages of Canadian

IALS: International Adult Literacy Survey

VPREC: Virtual Programme Research Ethics Committee

Chapter 1 - Introduction

1.1 Introduction

According to Preto-Bay (2004) and Fisher and Hoth (2010), academic literacy classes in higher learning institutions are expected to advance students' academic literacy and, thus, their capacity to endure and prevail in advanced education and their professional career paths. Postsecondary institutions in Ontario initiated a response to provide students with academic literacy courses at the start of their academic programs. These courses are intended to assist students with academic literacy skills (Jobling & Moni, 2004). This study examined the quality and effectiveness of these courses and surveyed how successful the courses were in improving students' academic literacy skills. Consequently, this introductory chapter presents this study's purposes and discusses improving postsecondary students' academic literacy levels. This chapter introduced the reader to the academic literacy inadequacies in postsecondary institutions in Ontario. It included a brief account of the development of Ontario postsecondary institutions and academic literacy courses, as well as a discussion of the issues surrounding academic literacy and the development of academic literacy courses.

1.1.1 Defining higher learning institutional types and levels

Throughout this thesis, academic institutions providing students with academic literacy courses have been referred to as higher learning institutions, post-secondary institutions or higher educational institutions. The main reason for applying these titles is because the examined institution has established a unique position among colleges and universities in Ontario, Canada. Notably, provincial governments decide the type of educational program offered and indirectly determine if an institution will be deemed a higher education institution or a post-secondary

institution. The examined institution has various educational programs, including applied education, diploma, undergraduate degree and graduate degree programs. Therefore, it can be defined in terms of higher education or higher learning institution and post-secondary institution interchangeably. Trotter and Mitchell (2018), in their paper discussing the structure of post-secondary institutions in British Colombia and Ontario, Canada, also use terms such as post-secondary and higher-education institutions interchangeably. The paper explains why certain institutions in Canada have maintained specific characteristics of a post-secondary institution while also morphing into an institution with features commonly associated with higher learning and higher education institutions, all directly relating to government legislation and policy directives. The paper delves into the blurred distinction between these two types of academic institutions in Canada and the costs associated with this. This thesis examines an Ontario institution with features of both a post-secondary institution and a higher learning institution. Therefore, these terms are used interchangeably throughout this thesis as well. This blurred distinction also affects the sample size being examined in this study. The sample varies, and although students primarily attend diploma programs offered by this institution, the academic literacy courses mandated by the institution are not limited to applied or diploma program students or programs. Instead, academic literacy courses are mandated for all students across programs, disciplines and degrees at this institution.

1.1.2 Academic literacy inadequacies among Ontario postsecondary students

Understanding information from written works, locating knowledge, and problem-solving skills are necessary to meet the postsecondary level's academic demands. According to OECD and

Statistics Canada (2011), these skills are directly related to adult literacy levels (all) and define literacy skills among adult students.

According to Kerr (2011), these skills were crucial to the learning process and allowed students to engage successfully in the learning process. However, some students in Ontario institutions were experiencing difficulties and needed more basic literacy skills to meet the demands of postsecondary programmes, ultimately experiencing challenges and needing to perform adequately.

Friesen (2018) contended that students graduating from Canadian postsecondary institutions struggled with lowered literacy, with a quarter of graduates needing more basic literacy skills. The Higher Education Quality Council of Ontario (HEQCO) examined academic literacy skills among postsecondary institutions. This organisation concluded that students completing postsecondary studies did not have adequate literacy skills (Grayson et al., 2019; Weingarten & Hicks, 2018). It was clear from these sources that there was a severe gap in the academic literacy skills of postsecondary students in Ontario. Incoming student cohorts were measured prior to the semester and identified as possessing inadequate academic literacy skills. (Fisher & Hoth, 2010; Grayson et al., 2019).

Students who struggled with academic literacy faced many issues when enrolling and participating in educational programmes at the postsecondary level. Some students found the demands set by content courses and copious reading and writing tasks difficult due to existing literacy issues and did not improve throughout their studies (Paulson & Armstrong, 2011). Students entering postsecondary studies may experience poor grades and need more confidence in their academic capabilities (Grayson et al., 2019; Paulson & Armstrong, 2010). Perin and

Holschuch (2019) and, most recently, Reed et al. (2022) concluded that Ontario students needed to prepare to meet the challenges of postsecondary studies.

Many studies attempted to identify the causes, and the general conclusion was that these literacy skills were lacking among most students (Fisher & Hoth, 2010; Grayson et al., 2019; Perin, 2013; Perin & Holschuch, 2019; Reed et al., 2022). A quarter of students attending postsecondary programmes fail to meet the literacy demands necessary to complete higher learning programmes (Fisher & Hoth, 2010; Grayson et al., 2019; Perin, 2013; Perin & Holschuch, 2019). Many academic institutions attempted to address the literacy weaknesses of their students by mandating academic literacy courses and providing students with various other academic supports. Underprepared students entering postsecondary studies attend academic writing courses to improve academic literacy skills. However, these courses frequently need to improve and provide students with the necessary skills to complete courses and programmes (Perin & Holschuh, 2019). Previous studies explored many aspects of literacy. However, limited research about developing a method of improving and evaluating the effectiveness of academic writing courses creates challenges (Grayson et al., 2019; Perin & Holschuh, 2019).

Studies identified several key considerations. First, students entering higher learning institutions and programmes with inferior literacy skills continued to exhibit poor literacy skills upon graduation, which led to concerns regarding literacy instruction provided by postsecondary institutions (Grayson et al., 2019; Scott-Clayton & Rodriguez, 2012). Second, based on the evidence provided, the quality and forms of literacy instruction, including academic support to assist underprepared students, were examined (Bailey et al., 2016; Carlson, 2011; Edgecombe, 2011). Third, regarding Perin (2013), institutions identified ongoing literacy issues. However, they

needed help to secure a viable solution to improve students' literacy skills, provide quality instruction, and produce quality-level graduates prepared to meet labour market demands.

1.1.3 A historical account of the development of postsecondary studies in Canada

An account of the history and development of the current Canadian postsecondary system is essential to understanding the current education system. This short subsection provided insights into how Canadian institutions perform and the development of academic literacy issues in Canadian postsecondary institutions. Canada has undergone many pivotal periods leading to its institutions' literacy instruction. One significant historical point was in 1955 when the World Literacy of Canada organisation granted a federal charter to encourage literacy skill development (Draper, 2014). This was a vital shift towards acknowledging the importance of literacy in Canada.

The current structure of postsecondary institutions was heavily influenced by the conflict between sectarianism and federalism, ultimately shifting colleges and universities away from religious influence (Lang, 2005). Canada, a bilingual country, also faced issues connected to language instruction. For example, during Confederation, Francophones (French-speaking Canadians) were concerned that Anglophones (English-speaking Canadians), who controlled a more significant portion of parliament, would influence or control the French-speaking Catholic schools. As a multilingual country with two official languages, Canada was compelled to provide instruction in higher learning institutions in both languages. According to the OCOLC (2020), French-speaking citizens in the province of Ontario accounted for only 4.7% of the population. This is down somewhat (- 0.1%) since 2011. From the 2016 census, it was found that around 8,902,320 individuals were English-speaking Canadians, while only 490,715 were French-

speaking Canadians in Ontario (Statistics Canada, 2016). The Francophones in Ontario are on the ascent. However, the extent of Francophones against the whole populace of the province has fallen later than in 1986. It remains a tiny percentage in the province of Ontario. At the same time, postsecondary institutions continue to provide French language instruction, as it remains the second official language of the province and country. The report further showed that around 21,300 students were enrolled in French-language postsecondary programs in 2015. Postsecondary institutions offered French-based programs on specific campuses to accommodate the French-speaking community while maintaining English language instruction in Ontario (Wesche, 2000).

Federalism assigned provinces to take on the education system as a provincial financial and administrative responsibility. Federalism is a crucial component in understanding the establishment of the postsecondary education system in Canada and, specifically, Ontario's educational structures. Federalism directly influenced the development of literacy instruction and programming throughout postsecondary institutions in Ontario and Canada. This also led to the primary language of instruction in Ontario education institutions being English. The most significant influencing factor was evident in the 1900s when the provincial government funding and resource allocation was inconsistent and caused uncertainty for educational institutions and their programmes (Fisher et al., 2006; Usher, 2011).

According to Jones (2004 in Fisher et al., 2006), higher learning institutions in Canada needed a solid governing body and relied on the ongoing cooperation between the province and the federal government. Unlike other countries, higher learning institutions were national organisations with foundation governing bodies to secure funding and the inception of policies. In addition, this was a period of instability, and while it led to growth, it also resulted in various challenges within HEI.

During the First World War, the Royal Military College was created as a postsecondary institution that identified the need for basic literacy among young men and women sent to fight in the war. This was the only example of a federally funded postsecondary intervention which differed from the provincially funded school policies (Bennet, 1969).

After the First World War, literacy became essential in education as it was evident that young people returning from the war lacked adequate literacy skills (Usher, 2018). However, only some can attend school and learn the necessary literacy skills. Those Canadian youth who did attend public schools took part in English language classes as part of the curriculum and other subjects, and the Canadian government controlled the language content (Fisher, 2011).

In 1956, the National Conference of Canadian Universities held a conference and insisted that the federal government provide financial support. It was estimated that more funds would be needed to educate the people born post-World War II. Provinces were responsible for funding universities, while federal government funding was distributed to supplement provincial funds, tuition, and additional private donations (Usher, 2018). From 1959 to 1973, Canada experienced a higher learning era when universities grew and invested resources and time in research and education (Fisher et al., 2006).

In Ontario, colleges and technical trade schools ensured that graduates of college diploma programmes provided a constant supply of technically skilled people for the labour market (Taylor, 2019). Nonetheless, Canada, specifically Ontario, underwent a revolutionary period that increased enrolment. Unfortunately, in 1973, the oil crisis placed a strain on the country and resulted in higher taxation, which led to a restriction of funding for higher learning institutions. Currently, educational financing is governed by enrolment-based formulas (Li, 2010; Pollanen,2016). In addition, the government of Ontario began strictly regulating and monitoring higher education

institutions. Nonetheless, the provincial–federal cost-sharing relationships continued and were an essential factor in the sustainability of most postsecondary institutions (Fisher et al., 2006). The federal government provided financial support but labelled them differently and streamed the funds through tax points and other channels to the province, but they no longer issued direct payments (Fisher, 2011; Rouf, 2019).

In 1974, Canada underwent an economic crisis. Unemployment was very high, even reaching levels of up to 10%. Scholars examined how the changes and downward turns of the economy would affect postsecondary institutions. Several concerns arose. Scholars were concerned about the fiscal viability due to a decline in enrolment, with supplementary government funding based on registration tuition income.

Further, grants would also affect the overall fiscal health of these institutions. Faculty layoffs were imminent, and research and student support departments were downsizing. However, even more, alarming was the shortage of qualified labour, as fewer graduates would complete degrees and training programmes (Foot & Pervin, 1983; Kirby, 2007). However, during this period, the government attempted to remedy the issue and incurred a great deal of debt, including postsecondary funding (Rouf, 2019). This did not deter students; notwithstanding Foot and Pervin's (1983) foreshadowing, enrolment doubled. The Canadian government distributed funds to existing universities to accommodate the increase in enrolment, and some colleges or polytechnics to universities like Ryerson in 1993 (Usher, 2018).

Provincial governments experienced a great deal of financial and economic strain beginning in the 1990s, and upholding low student tuition meant budget cuts elsewhere. Job cuts were expected at postsecondary institutions, and faculty unions were established during this time to protect faculty. Nonetheless, fiscal accountability was a priority during this period, vastly

different from the endless stream of financial government support during the 1960s (Usher, 2018). By 1990, the economic recession created turmoil, and the federal and provincial governments struggled financially; postsecondary education was no longer a priority. The only way to ensure higher learning institutions would continue to exist was to increase tuition fees and remove the tuition fee freezes that had previously been upheld for over 30 years (Usher, 2018).

The next phase of postsecondary education in Canada and Ontario was between 1994 and 2003. During this time, enrolment stopped increasing as a reaction to increases in tuition and Canadian student aid programmes were stripped for the first time. Student grants were replaced with loans, and student debt quickly rose (Wellen et al., 2012). When financial stability was regained in 1997, the government created the Canadian Foundation for Innovation, issuing $1 billion, which indirectly fed funds back into the educational economy of Canada (Usher, 2018). Many more scholarships, grants, and educational funding sources were founded after 1997, and the federal government set various tax credits. By 2000, the provincial government had also experienced a budget improvement. Previously, due to the salary and hiring freeze, faculty moved to other parts of the world, especially to the United States. Many funds were allotted to research at this time, and professors were accommodated with reduced teaching loads to encourage and facilitate their research due to the financial incentives, including grants and funds provided to research studies hosted by postsecondary institutions (Usher, 2018). Structurally, the higher learning institutions in Canada became too large to change so drastically. Teaching became important as faculty and educational programmes were directly related to enrolment. Canada, at the time, followed the Australian model and opened enrolment to international students for financial reasons.

By 2008, when the economy experienced an economic downturn, the postsecondary institutions were unaffected as the government continued to spend and incorporate the construction industry with higher learning. Universities found themselves reaching towards a more creative solution rather than increasing the already expensive tuition rates. International students' fees, which were significantly higher than domestic students' fees, would cover the shortfall felt by the reduced government funding (Usher, 2018). Nonetheless, the continued growth of postsecondary institutions in Ontario was also part of the provincial government's platform with more affordability and accessibility for low-income families. This model is relatively close to the current structure of Canadian universities and colleges.

The postsecondary education programme in Canada, specifically Ontario, remains accessible for students wishing to attend. In 2017, the provincial government announced a reform to loans and financial support, which would lead to tuition costs being wholly covered for families earning less than $50,000 and, later in 2019, a reduction in tuition fees. The changes intended to provide access to low-income and high-risk students and enlarge the province's skilled labour market (Rouf, 2019). Although well-intended, this postsecondary accessibility initiative was soon revoked by the change in government. A Progressive Conservative government replaced the Liberal party that held office until this point and initiated changes. The newly elected government faced the challenges of repairing a deficit left by the previous government. This led to many social programmes being revoked as a cost-saving measure, including cuts to postsecondary institutions (Joosse, 2009).

The overall financial, economic and political health of the Canadian government played a significant role in the accessibility of Canadian and, in particular, Ontario academic institutions. A relationship between educational accessibility and enrolment numbers was also the inception of

issues surrounding academic literacy skill capacity among students. In summary, students identified as ill-equipped to meet the academic demands of postsecondary studies made up over 44% of students enrolled in additional or corrective courses. At the same time, over 60% were identified as underprepared for postsecondary studies (McClenney, 2009; Perin et al., 2015). Hence, it is concluded that the government has been a vital participant in higher learning throughout history up to the present day. The federal and provincial government has played an essential role in developing the current state of higher education institutions in Canada and created the infrastructure and financial architecture of higher learning institutions in Canada.

1.1.4 Academic Literacy: Inadequate Literacy Skills in Postsecondary Institutions in Ontario

Scholars attempted to determine why students, having spent approximately four years attending secondary school and who presumably are being provided language classes and instructions, are underprepared to meet the literacy demands of college and university (Grayson et al., 2019; Lalonde, 2015; McKenna & Penner, 2013; Reid, 2010). A suggestion made by Perin et al. (2015) attributed the low literacy skills among postsecondary students to the accessibility of educational programmes and minimum admission requirements. Perin et al. (2015) suggested that student literacy skills are not the issue but are due to the openness of the admission process.

Higher learning institutions no longer filter out students with inadequate literacy skills. Therefore, the overall student population accounted for students who would not attend postsecondary under different circumstances. In addition, minimal prerequisites or requirements combined with the accessibility of educational programmes may have led to a poorly equipped student population entering postsecondary programmes, thus lowering the overall aggregate literacy levels.

Although lowered requirements and standards for entry of students with lower academic literacy levels in postsecondary institutions resulted in higher enrolment, Barrow, Brock & Rouse (2013) showed that policymakers pushed universities to bring down the expense per graduate. This initiative accepted the responsibility to keep schools from impetuses, confine access (and skim off the top students) or lower their entry requirements and standards. On the other hand, as per Azman (2016), postsecondary institutions should refrain from settling for lower requirements because the lower proficiency levels prompt more critical issues of students battling with academic literacy. Moreover, Azman (2016) featured that such activities could prompt adverse results for students beginning their degree/diploma without the basic knowledge required and lead to future issues for students as their degree headways. Besides, Derek & Ramoroka (2015) demonstrated that the higher education system needed to guarantee that their admission procedure was fair and put students as a priority. Lowered entry requirements delayed issues and resulted in a few students needing more basic knowledge after higher education or in a future professional career. Changes in higher education and changes in entry requirements or standards of postsecondary institutions will adjust in the short term. However, lowering standards might adversely impact students in the long run since they lack basic literacy skills.

1.1.5 Funding Issues Leading to Changes in Academic Requirements

According to Brownlee (2015), academic institutions in Canada have approached enrolment from a business perspective and measured the success of HEI based on government funding, which was strictly based on enrolment numbers (Dziwak, 2014). Brownless (2015) indicated that abandoning the recruitment of high-quality students to attend HEI to concentrate on the recruitment of many students regardless of quality is an example of how HEI have shifted their

focus from education to business. Some institutions have identified a niche education market. Educational institutions have capitalised on the volume of students, government funding, and tuition fees while understanding that these students may struggle with academic literacy. Institutions have also pinpointed the intellectual demands of this specific population of students with no other educational resources to obtain a postsecondary credential (Brownlee, 2015). Moreover, there is no guarantee or commitment that students who graduate from these programmes and institutions are prepared for the labour market or can develop and improve their literacy skills (Brownlee, 2015; Grayson et al., 2019; Perin, 2015).

According to Spooner (2019), institutions have placed more weight on enrolment numbers and other bureaucratic concerns rather than the quality of instruction to secure precarious funding. Interestingly, Spooner (2019) supported this financing model and suggested that obtaining funding through high enrolment numbers will lead to quality education as the institutions can focus more on the rate rather than on seeking funding. However, this model has not necessarily improved the quality of education or students' literacy in higher learning institutions (Perin & Holschuh, 2019).

The current funding models, which depend on tuition and government funding, have drastically altered the quality of education. However, the alternative funding model, depending mainly on tuition, limits the accessibility of education and financial resources, as witnessed in past economic disasters when government funding was limited (Perin et al., 2015; Rouf, 2019). Open accessibility, however, should not be a barrier to improved literacy skills among students. Instead, institutions providing students with corrective courses and support are trying to remedy low literacy skills, regardless of the cause of these low aggregate levels.

1.1.6. Academic Literacy: Reading and Writing Instruction

To fully understand the importance of an academic literacy course, it is crucial to explore how literacy – explicitly reading and writing – is taught at the postsecondary level. According to Perin et al. (2015), academic literacy in postsecondary institutions in Ontario is that reading and writing skills must be considered and examined. Students entering postsecondary programmes are stricken with challenges in reading and writing that are not exclusive to one another. Those who cannot read and comprehend text face a grim academic future and need effective literacy instruction. Studies dated many years have supported the relationships between reading and writing (Flower & Hayes, 1980; Grabe & Zhang, 2016). Some studies have supported the strong correlation between reading and writing as co-existing skills necessary for students to complete academic tasks (Perin et al., 2015; Schoonen, 2019).

Although some educational practitioners have taught reading and writing separately (Cox et al., 2001), the strong relationship between the two skills has led other practitioners to evaluate the benefits of joining both skills as part of one instruction method. There have been many strategies have been used to improve literacy instruction. Perin et al. (2015) attempted to identify and categorise the instructional approaches to literacy instruction at the postsecondary level. Primary methods of literacy instruction included 'skills-based' and 'constructivist', as well as 'discrete skills' and 'meaning-making', as Schoonen (2019) coined.

Discrete skills refer to extracting and dissecting reading materials and texts to gain meaning, acquire vocabulary, and develop writing skills through sentences and paragraphs (Perin, 2015). The meaning-making model attempted to marry reading and writing and incorporated critical and reflective thinking. This method aimed to achieve a more in-depth learning experience for the student and a higher cognitive level of learning. According to MacArthur & Philippakos

(2012), the meaning-making model concentrates on direct instructions in a given task while using cognitive cues to assist comprehension.

As per Shelton (2006), students who exhibited more vital reading skills also demonstrated more robust comprehension and better academic performance. Moreover, proficient reading skills and text comprehension lead students to paraphrase rather than copy text like their lower literacy counterparts. Several other studies strongly supported the link between reading and academic success (Cox, Friesner & Khayum, 2003; Horbec, 2012; Magliano, Higgs Santuzzi et al., 2020; Nozari & Siamain, 2015). Reading and reading comprehension refers to fluently reading a text and understanding the meaning without stress. The ability to fluently read any given text is also referred to as recognising rather than decoding words. Readers still at the stage of decoding text fell short and lost significant meaning. Punctuation and other structural components were also essential in understanding written texts' importance (Rasinski, 2003). Given that reading is the skill to derive and extract meaning from a written text, lack of comprehension was directly tied to the inability to extract that meaning. Therefore, reading without understanding referred to fluency and failure to graduate from the written text's structural component to move on to in-depth fluency and meaning extraction (Akyol & Boyaci-Altinay, 2019).

Regarding Akyol & Boyaci-Altinay (2019), fluency in reading or reading comprehension begins early. When literacy skills do not reach maturity, the student's grasp as a young adult or an adult suffers, leading to inferior reading comprehension skills. Poor literacy skills have led researchers to understand why postsecondary students suffer from poor literacy, namely poor reading comprehension and poor writing skills (Uysal et al., 2019). The importance of fluency and reading comprehension have been strongly linked to overall personal and professional success, particularly within academia (Akyol & Boyaci-Altinay, 2019). According to Perin (2013), many

studies have investigated literacy skills and how the public education system can improve students' literacy skills. However, students continue to need better literacy skills well into higher education studies and adulthood, with only a quarter of students leaving secondary studies prepared to meet the challenges of postsecondary studies.

A superior literacy instruction and modelling method provided an explanation followed by the opportunity for students to apply instructions independently. According to some scholars, students were given an ideal amount of instruction and an opportunity to apply it, reinforcing that the instruction given was the most efficient form of literacy instruction. In contrast, excessive instruction with little opportunity to strengthen the concepts has minimalised literacy skills (Holschuh, 2014).

The above discussion showed the significance of reading and writing among students entering postsecondary institutions to meet educational needs. Further, students beginning HEI already needing more literacy skills may be harder to reach and provide academic and literacy training and instructions. Therefore, the failure of past foundational education may be responsible for students needing more literacy skills at the HEI level. In this regard, Rasinski and Padak (2005) contend against the oversimplified assurance of struggling literacy learners' issues. The authors argued that, in general, lower performance in reading is linked to comprehension at the middle, intermediate and secondary levels. The vocabulary of teachers and readers may strive because of lacking reading skills from prior stages in reading development in secondary education, integrating word unravelling and reading fluency.

Moreover, as per Merga (2020), instructors counted various school and system factors as adding to the obstacles experienced by struggling literacy learners in postsecondary education, especially emphasising school resourcing issues. Merga (2020) further contended that students'

earlier school learning or scarcity in secondary education results from education failures due to constraints of the educational plan and the absence of supportive school culture for reading. Under-resourcing raised as a significant concern may be connected with the under-diagnosis of learning hardships and incapacities in secondary education. Instructors noticed that schools do not meet all requirements for funding either because they have never been identified or because their learning issues do not draw in funding (Merga, 2020).

1.1.7 Academic Literacy Courses and Supports

Preparatory academic literacy courses intended to prepare students to participate with the necessary literacy skills continue to fall entirely short and need more content and instruction for their intended purpose (Perin & Holschuh, 2019). According to Ari (2015), although various instruction methods have been developed and used, studies have shown that success levels were insignificant concerning reading comprehension, although students' reading speeds improved. Additional studies have also attempted to apply methods of instruction to postsecondary students in an attempt to rectify the shortcomings with which students are entering higher learning institutions. Some methods have shown promising results, with improvements resulting from short instruction periods in orthographies (Atkinson, 2016), while basic writing instruction improved the students' overall literacy skills (Curry, 2004). Many academic institutions have attempted to address the literacy weaknesses of their students by mandating academic writing courses and various other academic corrective supports. However, frequently, these courses underperform and do not provide students with the necessary skills to complete courses and programmes. These conclusions also aligned with studies that concluded that when students are provided with the necessary tools, namely the mechanics of the English language, they can read and write with

purpose, clarity, and understanding (Hochman & Wexler, 2017; Ari, 2015). Further, teacher modelling is a critical component of effective literacy instruction and provides a meaningful learning experience for students (Perin & Holschuh, 2019).

As noted by several studies, teacher modelling suggests that students can absorb instruction and apply it effectively when the instructor provides examples (Hochman & Wexler, 2017; Perin & Holschuh, 2019). However, it disrupts the learning process when teachers must be more adequately prepared to model and demonstrate adequate literacy skills or provide misinformation. As a result, the students need to receive accurate instructions, which leads to a lack of improvement, poor language mechanics, and an inability to exhibit good writing and reading comprehension skills (Hochman & Wexler, 2017; Perin & Holschuh, 2019).

1.1.8 The Institution in View and the Academic Literacy Courses within Ontario

1.1.8.1 The Nature of Examined Institution in the Ontario Post-secondary Landscape

In the province of Ontario, there are 24 post-secondary institutions of a similar structure to the institution examined in this study. The institution offers a wide range of programs, including degree-granting privileges. Institutions also hold a wide variety of students with various levels of education, with mature students returning to post-secondary studies for retraining and upgrading. Although many students are returning to post-secondary studies, the primary source of the student remains the secondary schools in Ontario. Students attending these Ontario institutions may have been redirected to attend preparatory classes, and programs as a pathway to higher learning programs also offered within the institution (Parsons, 2020).

As this institution shares both structure and funding sources within the province of Ontario, many of the characteristics of its Ontario post-secondary institutional counterparts are comparable.

1.1.8.2 The Nature and Characteristics of Academic Literacy Courses within Ontario

Academic literacy courses mandated by post-secondary institutions in the province of Ontario were designed to address concerns related to academic readiness as students embarked on post-secondary studies. According to Fisher and Hoth (2010), only 58% of Canadian adults demonstrated adequate literacy skills. Such percentages do not vary significantly from their American counterparts, also an English-speaking country, with 56% of post-secondary students noting poor literacy skills prior to attending college and university and 35% explicitly noting issues with writing skills (Achieve, 2005, p.4 in Fisher and Hoth, 2010). Although noted across multiple studies, poor literacy skills are not solely an American higher learning issue (Fisher & Hoth, 2010). Instead, poor academic literacy among post-secondary students is also prevalent in Canada. According to Payne (1999), 41% of students entering post-secondary studies in Ontario alone were assessed below functional levels. Fisher and Hoth (2010) also referenced studies indicating that when students completed remedial studies, namely academic literacy courses, to support and provide additional instruction, student retention and overall performance improved (Fisher and Engemann, 2009 in Fisher and Hoth, 2010).

Academic literacy courses, therefore, appear, based on previous studies focusing on Ontario institutions, to assist students and improve their academic performance. However, Fisher and Hoth (201) note that an "exiting" test that would measure students after completing these academic literacy courses was not common practice across all Ontario institutions. Therefore the

success of academic literacy courses and the data collected need to be more comprehensive and demonstrate the true success of these courses. Dziwak (2014) examines the inadequate literacy and numeracy of students attending post-secondary institutions in Ontario. Therefore, students attending post-secondary studies and having completed the mandated academic literacy courses were determined by Dziwak (2014), Alphonso (2013) and Dion and Maldonado (2013b) to lack the expected basic academic literacy skills. Another concern arises. According to Dziwak (2014), institutions ensure that students complete programs through retention, graduation, and credential allocation but are focused on something other than literacy skill acquisition. Dziwak (2014) openly notes that Ontario post-secondary institutions need to fill in where goals of students acquiring the necessary skills and have acquired said goals.

Like remedial courses and supports offered throughout North America and other English-speaking countries, academic literacy courses were designed to address rising concerns throughout higher learning institutions surrounding students' lack of academic literacy skills. Specifically in Ontario, Fisher and Hoth (2010) studied literacy rates among Ontario post-secondary students. They examined the assessment process that institutions used to determine the level of academic literacy students were entering post-studies with. Some students who performed exceptionally low on the assessment are required to attend additional literacy Level 1 course in addition to the mandated Level 2 courses that all students are required to attend. To address the outcome of these assessments, institutions throughout the province deemed it necessary to offer students remediation support, including mandating academic literacy courses during the first year of their studies. These courses were incorporated within the curriculum and included as mandatory credit courses that students must complete to complete their studies (Dziwak, 2014).

A significant component in determining the quality of academic literacy courses is the funding post-secondary institutions were willing to invest in these courses. Ultimately, the funding model used for these courses was based on the funding model for all courses. Tuition-based with government subsidies driven by enrollment, government grants were issued to institutions within Ontario based on several students who attended these courses. It was, therefore, favourable for institutions to mandate these courses as additional support to assist students would not be funded. The enrollment-driven funding model also can be credited to institutions focusing on retention, which may have affected the commitment to quality. New funding models from the Ontario government have emerged in the last several decades focusing on performance rather than just enrollment numbers. However, as noted by Dziwak (2014), this model also has flaws. Particularly in terms of the quality of academic literacy courses, this funding model depends on key performance indicators that may not adequately capture the institution's funding needs to ensure the quality of courses, such as graduation and graduate employment rates. These key indicators are not directly related to graduate literacy skills identified as weak and inadequate by scholars (Sheorey & Mokhtari, 1994; Dziwak, 2014).

Regardless of the funding model applied by the government, according to Dziwak (2014), institutions need to be incentivised to support students demonstrating poor academic literacy skills. Higher learning institutions cannot be deemed productive based on a substantial number of graduates who possess poor skills, ultimately entering the highly competitive labour market. Instead, a return on investment model, further discussed in the conclusion of this thesis, may be a favourable option in ensuring the quality of academic literacy courses and the overall quality of education students receive while attending post-secondary studies at Ontario universities and colleges.

1.1.8.3 The Structure of Academic Literacy Courses in Ontario

Few studies have been published to describe and investigate the structure of academic literacy courses in Ontario. The primary source of information related specifically to Ontario and academic literacy courses discussed the literacy skills of Ontario students while only briefly discussing the intervention strategies applied within Ontario post-secondary intuitions. Dziwak (2014) compares the Ontario post-secondary remedial interventions to strategies employed by the United States. While referencing Fisher and Hoth (2010), Dziwak (2014) and Dion and Maldonado (2013a) noted that foundational courses, namely academic literacy courses, would ensure students were adequately prepared to meet the challenges set by Ontario post-secondary institutions. Dziwak (2014), Fisher and Hoth (2010) and Dion and Maldonado (2013a) are three primary sources for examining the literacy skills of Ontario post-secondary studies and examining literacy skills. However, these publications need to delve into the examination of the course structure and design. These scholars do, however, recognise the importance of supporting students and that students need more academic literacy skills, raising questions about the effectiveness of these courses (Dziwak, 2014). Dion and Maldonado (2013a) suggest that although Fisher and Hoth (2010) have provided the foundational information related to Ontario's assessment process, additional research may be favourable. By examining academic literacy courses and student performance, discovering ways to improve retention and overall academic achievement may emerge.

A study by Parsons (2020) most closely resembles an evaluation of courses through the investigation of academic success courses. *Academic success courses* are a series offered by Ontario colleges that attempt to provide students with a broad complement of academic skills such as note-taking, studying, and test-taking. This study examines course outlines to determine

and qualitatively categorise student development using academic success course outline documents across Ontario. Parsons (2020) examines Ontario post-secondary institutions and, although it focuses on academic success courses, demonstrates an understanding of how these preparatory courses can provide students with the necessary skills to overcome the challenges that students who are underprepared for higher learning studies face in Ontario.

Although not an examination of academic literacy courses, Dion and Maldonado (2013a) note that university students, who have completed a substantial amount of writing exercises, mainly in the form of research assignments, continue to exhibit low levels of literacy, with 21% of graduates noted as possessing inadequate literacy skills upon graduating post-secondary studies. According to Dion and Maldonado (2013a), these percentages are expected to increase by 2031, indicating that all the remedial supports, including academic literacy courses offered by Ontario institutions, will not provide students now and in the future with the necessary literacy skills to perform at appropriate levels.

As there are no research papers documenting the structure of Ontario academic literacy courses and examining the content and design, this paper will attempt to fill this gap through the examination and lens of one large-sized Ontario post-secondary institution.

1.2 Statement of the problem

Most of the literature on students' academic effectiveness frequently needs to address more knowledge and the usage of the resolutions and anticipations of academic literacy courses (Lillis & Scott, 2007; Ivanic & Lea, 2006; Krause, 2001; Leki & Carson, 1997). Various scholars like Ivanic & Lea (2006) and Spooner (2019) recognise a disappointing discrepancy in academic literacy between what students are prepared for and what postsecondary institutions demand.

Assuming they are prepared to meet the demands of university and college studies, students soon after entering their programs realise they need more literacy skills for postsecondary studies.

The skills and knowledge demonstrated by a postsecondary degree enable students to maintain the pace in a progressively intricate and competitive world. However, disappointment in achieving a postsecondary degree through academy literacy courses translates into disappointment in meeting the minor qualifications for substantial job opportunities, disappointment in positioning oneself for professional development, and misfortune of earning potential, leading towards the novel issue of lower literacy (Gardner, 2003; Hernandez, 2000; Miller, Groccia & Miller, 2001).

Kenton (2016); Viczko, Lorusso, & McKechnie (2019); and Marshall et al. (2012) found that the degree of lack of basic literacy skills has gradually increased, and postsecondary institutions are alarmed with lower levels of academic literacy abilities amongst students as well as graduates. In addition, these inadequate literacy levels are weakening the graduate quality from postsecondary institutions granting degrees in Ontario. As a result, students are not gaining an advantage from the learning outcomes in content courses where they cannot wholly understand concepts due to reduced reading and writing skills. Essentially, students pay tuition fees for a degree instead of the knowledge acquisition and skills required in the labour market. This additionally can trigger implications for the entire human capital in Ontario, with educational institutions generating not-so-adequately equipped students and underperforming impediment employees (Marshall et al., 2012).

Having recognised that students are incompetent to fulfil academic literacy needs, institutions created postsecondary literacy courses to bring students up to satisfactory literacy levels (Paulson, 2014; Perin & Holschuh, 2019). Be that as it may, another novel issue identified

regarding the literacy levels among students in postsecondary institutions, according to Holschuh (2019), is that the students keep battling, driving faculty to make replacements to assist students with flaws while never tending to or rectifying the issue. Eventually, different choices proposed to students seemed to do little to further develop their unfortunate literacy abilities, prompting progressing literacy issues and ineffectively pre-arranged alums entering the labour market (Holschuh, 2019). Holschuh (2019) further contended that students experience reading comprehension issues after finishing literacy and academic writing courses. This is an extreme issue as college students cannot push ahead and pursue professional degrees that lack vital literacy skills (Holschuh, 2019).

1.3 The rationale of the study

The primary rationale for performing the present study is to assess extra information on the effectiveness of academic literary courses to assist unpractised students in becoming effective and successful academic students. Albeit elucidating, researchers like (Viczko, Lorusso, & McKechnie, 2019) have distinguished the abilities and information students with lower literacy need. However, only some intercession studies have been directed to meet these students' educational necessities (Grayson et al., 2019). Thus, this study adds to the literature on conceivable educational intercessions regarding academic literacy courses in postsecondary institutions.

Past investigations have investigated numerous parts of literacy. Nevertheless, there has been restricted research regarding fostering a strategy for improving and assessing the efficacy of academic courses (Perin & Holschuh, 2019). Therefore, the existing literature has provided a solid basis for this study. Furthermore, although there has been much research on academic literacy, a limited number of studies have focused on particular academic literacy courses, especially ones in

Ontario, Canada (Grayson et al., 2019) and (Perin & Holschuh, 2019). Hence, another rationale for performing this study is that the literature search extended beyond Ontario and encompassed English language postsecondary education systems in North America and the UK Commonwealth nations.

1.4 Research Aim

This study aims to assess the efficacy of academic writing courses as a form of corrective literacy instruction and examine why students in *Ontario* continue to have poor literacy skills even after completing corrective studies and graduating from postsecondary programmes. This study will also develop a suitable theoretical evaluation method for examining the effectiveness of academic literacy courses among students in *Ontario*.

1.5 Research Objectives

The current study discusses the following objective to accomplish the research aim:

- To explore why students in *Ontario* have lower levels of literacy.
- To ascertain how many academic courses are effective in postsecondary institutions in Ontario.
- To explore the benefits of academic literacy courses in augmenting students' knowledge and skills in postsecondary institutions.
- To determine the factors impacting academic literacy course students' sense of belonging.
- To provide recommendations for improving the literacy levels of students within postsecondary institutions.

1.6 Research Questions

The primary question that the present study has covered in an overall dissertation is as follows:

Q1. How effective and successful is the academic literacy course for postsecondary institutions in Ontario?

1.6.1 Subsidiary questions

Q1. *Why do postsecondary students in Ontario have low levels of adult literacy?*

Q2. What are the goals of the literacy instruction provided to students in Ontario?

Q3. What factors impact these students' sense of belonging in academic literacy courses?

Q4. How can the literacy levels of students within HEI be improved in future?

1.6.2 Development of the study's focus

The content of the HEI curriculum in educational institutions changed drastically throughout the decade. From the start, progressive-minded, liberal instructors emphasised favouring a students' enthusiastic, physical, and mental turn of events. However, this was to the detriment of fundamental abilities such as literacy. This worldwide institutional and social change made ready for the hyper-extension of higher education.

This change in the curriculum of higher education impacts the issues of literacy. As per the 2017 report by UNESCO, literacy data shows that over the last 70 years, the literacy rate of adults at the world level has expanded by 5%. Every ten years, the literacy rate increased from 55.7% in 1950 to 86.2% in 2015. Nonetheless, for quite a long time, the populace development was fast to

such an extent that the number of individuals with lower literacy levels continued expanding, ascending from 700 million every 1950 to 878 million in 1990. From that point forward, the number fell uniquely to 745 million in 2015, even though it stays higher than in 1950, regardless of many years of universal educational policies, literacy intercessions, and the dispersal of print material and information and communication technology (ICT). These patterns have been a long way from uniform across locales.

Postsecondary institutions, particularly universities and specialised educational foundations, offer academic literacy courses to help students improve their abilities (Bamber et al., 2006). Students are expected to finish explicit academic literacy courses simultaneously with their program coursework during the first year or semester (George Brown College in Collaboration with Academica Group, 2011). Given proof from specialists, students interested in academic literacy courses keep battling education and must meet the prerequisites set by instructive foundations (Grayson et al., 2019).

Nonetheless, it needs to be clarified why these courses do not address students' shortcomings or inadequacies. Hence this study is of significance since its findings will analyse the structure of the academic literacy courses, distinguish gaps, plan an assessment strategy to furnish organisations confronting a comparative issue with an appraisal tool and cure the issue of low students' education in higher learning within postsecondary institutions.

The findings of this study further assist in utilising assessment techniques to analyse students' advancement and the viability of academic literacy courses, which can assist in deciding the ideal design of academic programmes (Kerr, 2011; Donohue et al., 2007). Since most existing exploration on upgrading course content and projects depends on students' assessments of course content and teachers' performance, the findings of this study will also help assess students'

proficiency, helping instructors plan programs, course content, and learning materials. This study is also of utmost importance since it can ascertain students' requirements, allowing teachers to establish a focused learning environment that works with gainful learning. The findings of this study also help recognise areas of shortcomings and plan course content to address students' inadequacies that prompt more successful guidance (Street et al., 2015).

Moreover, the study is critical since the present study's findings design an assessment technique to ensure that academic literacy courses are hands-on and enhance literacy skills amongst students in postsecondary institutes struggling to have better literacy levels. Besides, the present study's findings further seek evidence-based propositions beneficial to students and improve their language literacy skills. Additionally, the results and findings analysed through the present study and the progression of an evaluation matrix might embolden different higher learning institutions to implement this approach to assess academic literacy courses. This would also encourage institutions to foster these courses with a suitable theoretical framework that assists in enhancing the English language along with literacy learning.

1.7 Professional role and positionality of the researcher

As Savin-Baden and Major (2013) described that a researcher's positionality is the position a researcher has applied and embedded into a research study. While this is a general concept related to positionality, Nearly's (2014) sentiments include how researchers see themselves within their employment environment. Fitzgerald (2020) further elaborates on the professional environment and includes concepts related to performance, professional knowledge and functions, values and ethics. As Savin-Baden & Major (2013) recommended, the researcher of this study has consciously examined their position and role in the HEI being examined and how their personal characteristics,

perspectives and experiences have inspired and shaped the study's design. The following section discusses the researcher's positionality using the interpretations of positionality noted by scholars (Savin-Baden & Major, 2013; Nearly, 2014; Fitzgerald, 2020). The discussion will include reflexivity and will address how the researcher attempted to produce trustworthy and valuable conclusions.

Personal and professional experiences have inspired this doctoral dissertation. As a first-generation Canadian educated in the Canadian education system from primary school to undergraduate studies, followed by graduate level and doctoral studies within the United Kingdom, the researcher has been exposed to the English speaking educational system which have influenced this study.

As a young child, the researcher was not exposed to language mechanics and did not receive phonetic instruction when learning to read rather, the researcher was taught to read by word recognition and memorization, which drastically altered the literacy abilities throughout primary school and required remediation to cope at higher literacy levels. Coping mechanisms were developed to camouflage any shortcomings were quickly adapted along with a keen interest in literacy and how literacy can be leveraged to express oneself and apply in school work and academics. Formal writing and critical reading comprehension were introduced near the end of secondary studies to prepare students for postsecondary studies. The late introduction of literacy to secondary students noted in research by Perin et al. (2019) and Grayson et al. (2019), mirrored the researcher's own secondary school experiences.

When attending postsecondary studies and completing undergraduate degree, the researcher developed a unique unstructured understanding of the English language, academic literacy and language mechanics. Attempts made by the secondary education system were

insufficient to prepare the researcher for university-level academic literacy demands. Instead, the researcher's academic literacy learning process was based on a trial-and-error method, which would develop a writing style acceptable at the postsecondary level. This experience, spanning nearly 15 years, from early childhood to adulthood and attending HEIs, has formed the researcher's positionality and passion towards academic literacy and the need for developing solid and meaningful training opportunities for students who enter postsecondary studies with insufficient academic literacy knowledge.

Before embarking on a career as an academic, the researcher spent 17 years working in employment and social welfare services as a social service worker for the City of Toronto in Canada. Through this experience, the researcher developed a keen understanding of how critical literacy and communication skills are to compete and succeed in the labour market in Ontario, Canada while directly involved in literacy assessments and evaluation processes. This process involved assessing those clients who had not completed secondary school, those who had completed secondary school but had not been involved in the educational system for five or more years, and those newcomer clients whose first language was not English. Many clients in the newcomer client group arrived in Canada as foreign-trained professionals applied for postsecondary studies to continue their profession or trade in Canada. This experience led to the incorporation of the New Work Order Theory, which is discussed further and embedded in the theoretical framework of this thesis.

At the time of this research study, the researcher held an adjunct teaching position at the HEI being examined in this study. The researcher's employment as an adjunct professor with the HEI being examined in this study played an integral part in the study's design. As a faculty member, preliminary and informal observations were made about students' academic literacy

skills. The researcher read and evaluated written work produced by students at various academic levels at the start, during and nearing the final semester of academic programs. The researcher noticed a significant gap in students' academic literacy skills. The researcher's teaching assignments extended across programs and disciplines where the same gaps in academic literacy skills were observed. Based on informal observations, the gap in academic literacy skills extending beyond one institution, which Fisher and Hoth (2010) echoed with their examination of academic literacy skills across several Ontario HEIs. The information observations made by the researcher and supported by scholars such as Fisher and Hoth (2010) impacted the researcher's perspective and personal positionality.

During the preliminary stages of this study, the researcher experienced several challenges and was required to make alterations and amendments to the design and data collection methods applied to this study to obtain approval from the Research Ethics Board and executive administration of the HEI being examined in this study. As an adjunct faculty member, the researcher had limited access to many resources, with full-time tenured faculty being afforded greater access to resources, data and students. One such instance and challenge faced by the researcher was access to the HEI student email directory. As an adjunct faculty member, the researcher requested access to student email addresses through the HEI directory to send online questionnaire links. However, this request was denied. Full-time faculty however, were permitted to access the HEI student email directory. The researcher sought permission and exceptions to access the HEI student email directory but failed to gain access to the directory. The researcher initially intended to access the HEI student email directory to ensure that those students participating in the study were, in fact, students of the HEI, as only students are issued the HEI email addresses. However, access to the directory was not permitted, and the researcher altered

how to reach students attending the HEI and recruit them to participate in the study. The challenges that the researcher faced throughout the preliminary process required the researcher to amend several features of the study's design.

However, the researcher did make all efforts to maintain the integrity of the study and ensure that the information collected, while adhering to the requirements set by the REB, would be helpful and produce meaningful results. The changes made to adhere to the requirements set by the REB are further discussed in the Methodology chapter and the Results chapter of this dissertation.

1.8 Structure of the thesis

The present study is divided into five chapters, each of individual significance. According to Hyland (2004), it is imperative to structure the dissertation so that ideas flow through the research. In addition, the flow of ideas, if adequately structured through different sections, assists the reader, and navigating the concepts.

Chapter one is the introductory chapter. It briefly introduces the research aims and objectives and the development of academic literacy courses within an Ontario postsecondary institution. It includes the main issues resulting in this dissertation's writing, along with the primary intention to perform this study. Lastly, the significance of the study findings has also been discussed.

Chapter two provides a review of the literature. This chapter will situate this study in the context of previous research on academic literacy and present a critical synthesis of empirical literature according to a set of themes. This chapter will also examine gaps or problems found

within the existing literature, which will also outline the conceptual framework of this study. The literature review will present information demonstrating literacy issues among postsecondary students, explaining the importance of academic literacy skills and current corrective academic writing courses and support. The literature review will also present theoretical models and concepts, including the MASUS procedure, the Adult Literacy Theory, and New Work Order Theory.

Chapter three is the methodological section of the dissertation. The methodological section will discuss techniques and approaches to carry out the present study and the suitable justification for choosing these approaches. The chapter will further discuss the settings and sample utilised for data collection and analysis of the current study.

Chapter four will present the study's findings using chosen approaches and techniques. Within this chapter, the approach to visual representation obtained through data analysis will be demonstrated, which adds to the value of the current study. Furthermore, chapter five provides a discussion supporting the current study results. This discussion will be carried through empirical evidence and previous studies to ensure that the present study's findings are valid. Finally, it introduces the newly designed matrix intended to provide an efficient design of academic writing courses based on the collected data and evaluation of the existing course designs.

Chapter five offers the insight into the study's results and the theoretical and practical implications and opportunities for future strategies.

Chapter 6 provides an overall concise summary of the dissertation and discusses the limitations of the present study, along with suitable recommendations and implications for future research. In addition, this chapter also provides insight into the personal and professional development of the researcher.

1.9 Summary

This chapter concludes that the present study examines the effectiveness of academic literacy courses in Postsecondary Institutions. Besides, the chapter discusses that disappointment in achieving a postsecondary degree through academy literacy courses translates into disappointment in meeting minor qualifications for substantial job opportunities, disappointment in positioning oneself for professional development, and misfortune of earning potential, leading towards the novel issue of lower literacy. This acts as the primary rationale for performing the present study. Moreover, the chapter also concludes that although there has been much research on academic literacy, a limited number of studies have focused on particular academic literacy courses in Ontario, Canada. This indicates the study's significance as the findings of this study further assist in utilising assessment techniques to analyse students' advancement and the viability of academic literacy courses, which can then assist with deciding the ideal design of academic programmes. Moreover, the chapter emphasises the academic inadequacies in postsecondary institutions in Ontario, along with a brief account of the development of Ontario postsecondary institutions and academic literacy courses in Ontario and a discussion of the issues surrounding academic literacy and the development of academic literacy courses.

Chapter 02 – Literature Review

2.1 Introduction

This literature review aims to demonstrate and discuss the current literature on the effectiveness of academic literacy courses in post-secondary institutions and will develop an understanding of this thesis. Hence, initially, the review explains academic literacy since it is the central component of the dissertation. Further, the literature review deliberates on the lower literacy levels experienced by students in post-secondary institutions and, accordingly, various approaches for students' instructional development. Moreover, it further discusses the relationship between inadequate academic literacy and corrective literacy courses and reviews the programme evaluation method (i.e. MASUS) used to determine the effectiveness of these literacy courses in post-secondary institutions. Another theme in the literature review is improving students' literacy levels through academic courses.

Besides the theoretical comprehension of academic literacy, new order theory and adult literacy theory, this section helps identify ways academically underprepared students in HEI might be provided learning opportunities through academic literacy courses (Grayson et al., 2019; Perin et al., 2015). Too few studies have focused on academic literacy, courses, and corrective support, specifically in Ontario, Canada. A few sources based in Ontario were used and are noted in this study, while sources outside Ontario were also used to develop a full breadth of information.

2.2 Defining Academic literacy

Defining academic literacy has been a challenge among researchers as the criteria and definition of what academic literacy is has changed over time. The definition of academic literacy

is, is dependent on the theoretical perspective of the researcher. According to Weideman (2013), academic literacy has shifted away from the behaviourist perspective, where listening, speaking, reading and writing were once considered integral components of academic literacy. Weideman (2013) suggests that how post-secondary instruction has shifted away from a behaviourist approach, meaning students being supplied notes and various learning materials, the shift in what academic literacy means has also changed. This new way of learning or cognitive processing is simply listening, which according to Weideman (2013), has led to students having a diminished academic literacy experience when attending content courses. Students need to gain the practice of writing and, therefore, also need to gain the experience of language functions such as explaining using the written word, describing and concluding thoughts. Further, according to Weideman (2013), the comprehensive definition of academic literacy includes considering writing, gathering academic information, processing information and analysing it, producing new information in writing and encompassing and collaborating with various views. The functional form of academic literacy, which once defined academic literacy, focusing on grammar, language, functional composition and practice reading skills, has now been transformed to encompass critical thinking skills, as Weideman (2013) noted.

This new definition, shared by Butler (2007) and Pot (2013), is not without merit. However, it is contradicted by other scholars who suggest that although critical thinking skills are necessary, particularly at the post-secondary level, basic language structure and function have yet to be addressed. In turn, students cannot effectively demonstrate their thoughts in writing (Pineteh, 2014; Saengboon, 2017). Saengboon (2017) supports language instruction programs, noting that communicative competence and the composition techniques noted by Weideman (2013) are only established once a solid grammar and language mechanics foundation has been established.

Saengboon (2017) concluded this after evaluating a group of students and noting how important grammar knowledge was for students to communicate in written form and formal speech. Students may possess critical and reflective thoughts but may only be able to demonstrate or communicate these thoughts with the necessary writing and language skills, as noted by Saengboon (2017), which Weideman (2013) appears to dismiss. Defining academic literacy is a complex task.

For this study, academic literacy will be defined using Weideman's (2013) understanding of complex and critical thinking skills without dismissing the foundational literacy skills noted by Saengboon (2017). Further, the work of Lea and Street (1998) best suits academic literacy as "understanding, interpreting and organising knowledge", which includes practices of reading, writing and a multidimensional approach to understanding and defining academic literacy. Lea and Street also note issues with student writing and the importance of features of effective writing, including grammar, spelling, and the 'New Literacy Studies' (Lea & Street, 1998), which align with the research surrounding functional linguistics. This has become a concern as student writing has led to issues with the overemphasis on critical thinking skills and meaning, as noted by Weideman (2013), while processes of meaning-making have been met with resistance around meaning than as skills or deficits.

As per Van Dyk and Van de Poel (2013), students need to acquire their degrees as efficiently and effectively as possible while concluding their studies with more knowledge than at the start of their educational programme. Basic et al. (2021) argues that students entering post-secondary studies possess varied abilities that need to be further developed with the guidance of an educator and hold a solid opinion that students must be provided access to an educator who will motivate the learning process. It is, therefore, the educator's role in providing, through instruction, students with the necessary learning opportunity to gain academic literacy skills, not

just providing the student with mandated classes but without the skilled educator to provide adequate instructions.

Carstens (2012) suggests that being academically literate is about being multiliterate and amalgamating various conductive skills for making connotations and facilitating and exchanging knowledge. Jefferies et al. (2018) suggested that academic literacy skills and knowledge are needed to interact and work efficiently in various academic communities and accomplish distinct academic aims. Moreover, regarding Nausa (2019), academic literacy comprises students' skills to manage their respective identities as language, graphical, statistical, information, and computational originators in numerous digital, textual or oral models. In contrast, Imbrenda (2018) indicated that academic literacy has a social (exchange of information), cognitive (comprehending, arranging, and purpose regarding information), and linguistic (language) dimension.

According to Holschuh (2019), academic literacy is comprehending and contextualising the academic vocabulary needed in post-secondary institutions. In contrast, Morrell & Duncan-Andrade (2005) contended that academic literacy practices are utilised in classrooms and might necessitate students to dissect, review, contrast, and incorporate thoughts and associated data from various sources. On the other hand, regarding Lum, Alqazli, & Englander (2018), academic literacy alludes to writing and reading on scholarly subjects. Green (2020) investigated that the use of academic literacy skills adds to student progress and contributions to discussions and is beneficial to the overall learning experience.

Moreover, Van Dyk and Van de Poel (2013) asserted that academic literacy, subsequently, must be perceived considering the close interconnection of what is composed and read, who writes and reads, and when, how, and where it is carried out. On the contrary, Peters &

Cadieux (2019) showed that knowledge-making and knowledge-sending processes are foremost to academic accomplishment as they establish the characterising centre of the cultural and social acts of the academic society itself. Besides, Ramjan et al. (2018) discussed that academic literacy has an incredible influence over how individuals communicate and present themselves in an academic atmosphere. In this regard, Aiken (2021) argued that the tools to peruse, compose and critically think are abilities that assist an individual in the academic environment and personal disclosure. As per Wingate (2018), exposure to academic literacy allows individuals to work on their writing and critical skills; they also embrace learning about their skills and therefore become confident in their academic performance.

According to scholars (Lichtinger, 2018; Lv & Chen, 2010; Peters & Cadieux, 2019; Stadler & Gordon Conyers, 2020), academic literacy primarily focuses on writing, reading, referencing, and composition-related areas. Published studies have identified the importance of these skills when examining academic literacy (Fisher & Hoth, 2010; Grayston et al., 2019; Halpern, 2001; Lalonde, 2015; McKenna & Penner, 2013; Newell & Bain, 2020; Perin et al., 2015; Peters & Cadieux, 2019; Reid, 2010; White & Lay, 2019). According to McKenna & Penner (2013), these skills are collectively identified as components of academic literacy and essential to post-secondary success.

According to Glew et al. (2019), being academically literate should incorporate the capacity to recognise the benefits of restricting perspectives. This may include utilising non-academic information sources prudently and assessing this information to give informed, nuanced perspectives on research subjects. In contrast, Lichtinger (2018) indicated that students inadequately equipped with these skills face challenges in their post-secondary studies and have been allowed to attend academic literacy instruction courses and access corrective support. This

supports the significance of taking academic literacy courses to gain sufficient knowledge in post-secondary institutions. Although possessing and exercising academic literacy in an educational environment can support and enhance the learning process, the academic literacy courses and corrective supports designed to assist students in developing their academic literacy skills continue to fail. They ultimately hinder the student's ability to participate fully and gain a more meaningful learning experience.

2.3 Literature Gap

Within the field of academic literacy and, specifically, investigations relating to academic literacy courses in post-secondary institutions, there appears to be a limited amount of research conducted within Canadian or Ontarian higher learning institutions. Although noted by several scholars, academic literacy skills have been noted as an issue among students attending colleges and universities in Ontario, throughout North America, and many other English-speaking countries (Abbate-Vaughn, 2007; Armstrong, 2019; Bellamy, 2017; Chai et al., 2021; Denchuk, 2011; Doninger, 2019; Drennan, 2022; Dziwak, 2014; Fisher & Hot, 2010; Fouché et al., 2017; Holschuh, 2019; Kaoropthai, 2019; Kennett & Reed, 2009; Lannon,2016; Lea, 2004; Lea, 2008; Lea & Street, 1998; Lea & Street, 2009; Lloyd, 2018; Lum, 2015; Lum et al., 2018; Marshall et al., 2012; Mhlongo, 2014; Mitchell et.al, 2022; Olivier, 2016; Penner, 2016; Quesenberry et.al, 2016; Singleton-Jackson, 2003; Stock, 2010; Vaccaro, 2012; White, 1989). Academic literacy issues have been examined and investigated. However, a common issue among students completing secondary studies and entering post-secondary studies within higher learning institutions, very little research has been done within Canada and, more specifically, in the province of Ontario. Over several decades, only a few studies have focused on the literacy of post-

secondary students in Ontario post-secondary institutions. Fisher and Hoth (2010) investigated academic literacy skills across several Ontario colleges, while Dziwak (2014) investigated how enrollment-based funding may have harmed the quality of education, leading students to suffer from low academic literacy skills. Grayson et al., 2019 discuss the academic skill deficiencies in four Ontario universities and notes specifics related to academic literacy and numeracy. This study provides an enormous amount of insight into the under-preparedness of students to meet the academic demand of higher learning institutions, as mentioned in Perin & Holschuh (2019), who describe the American system, Grayson et al. (2019) identify a gap in fostering strategies for improving and assessing the efficacy of academic courses. Grayson et al. (2019) suggest that poor academic literacy skills can be attributed to systemic issues and *credentialism*, which suggests that students, ultimately members of the labour force, can only be trained through formal education. Grayson et al. (2019) boldly contend that a direct path to the labour force could eliminate those who would otherwise not attend higher learning from attending universities and colleges in Ontario. This is a possible consideration of poor academic literacy skills, which aligns with the changes in the Ontario higher learning system and the open accessibility of educational programs after World War II (Usher, 2018). However, it does not explain why remedial programs such as academic literacy courses are not successful in providing adequate literacy training and instructions to students attending post-secondary institutions. It cannot be assumed that Grayson et al. (2019) are suggesting that students, who otherwise would not be attending university if a direct route to the labour market was accessible, are incapable of learning basic literacy concepts. Moreover, suggesting that vocational trades and other professions not entirely dependent on the university and higher learning system do not require literacy is refuted by Parkinson and McKay (2016). According to a study of vocational trade students, literacy practices of trades training,

commonly associated with the most direct path to the labour market, held unexpected literacy demands from its students. In fact, according to Parkinson and Mckay (2016), the literacy demands were far more pressing than recognized and were reflective of the labour market demands.

There appears to be a gap in the literature relating to the Ontario higher learning education system and its approach to managing the noted low academic literacy skills among its students. However, a comprehensive investigation of academic literacy courses needs to be included in the current literature. Within Canada, however, only one study has examined academic literacy courses. The study held within a Canadian university in the province of Manitoba is by far the closest study that attempts to evaluate academic literacy courses. The study based its conclusions on student surveys and writing samples. This study provides significant insight into the academic literacy courses within Canada.

However, it should be noted that this particular university, the Canadian Mennonite University is a private university. This indicates that the funding system of a private university is far different from the public higher learning institutions being examined in this research study held in an Ontario publicly funded institution. Also, it should be noted that the study conducted by Penner (2016) within the Canadian Mennonite University is a valuable source of information, which must be included in this literature review. The information may not be directly applicable to understanding the current Ontario publically funded higher learning system, the course design, resource allocation and the common characteristics as noted by Dziwak's (2014) investigation of public enrollment-based funding institutions. Penner (2016) does note an improvement in students' academic literacy skills once having completed the remedial literacy instructions. However, as mentioned, due to the funding model of the university and the varied class sizes, as private universities often have smaller class sizes, the conclusions made by Penner (2016) and specific to

a private university. Also, Dziwak (2014) describes and investigates the Ontarian higher education institution model, while Penner (2016) investigates not only a private institution but one in a different province.

Fisher and Hoth (2010) provided a picture of the practices across 24 colleges in Ontario as they related to language proficiency and academic literacy. The study noted that students identified as "at-risk" and seeking additional support performed better than those who did not seek or attend additional literacy support. Much like Grayson et al. (2019), Fisher and Hoth's (2010) study, conducted almost a decade earlier, notes improvements in academic literacy when supports such as remedial instruction are provided to students. However, Bradshaw, J. (2011, May 9 in Grayson et al., 2019) describes graduates completing their studies and entering the labour market with insufficient employable skills such as literacy.

Unlike Ontario or Canada, several studies across the United States and throughout English-speaking countries, including the United Kingdom and specifically South Africa, a great deal of attention has been applied to the study of academic literacy and academic literacy courses within higher learning institutions (Abbate-Vaughn, 2007; Armstrong, 2019; Bellamy, 2017; Chai et al., 2021; Denchuk, 2011; Doninger, 2019; Drennan, 2022; Dziwak, 2014; Fisher & Hot, 2010; Fouché et al., 2017; Holschuh, 2019; Kaoropthai, 2019; Kennett & Reed, 2009; Lannon,2016; Lea, 2004; Lea, 2008; Lea & Street, 1998; Lea & Street, 2009; Lloyd, 2018; Lum, 2015; Lum et al., 2018; Marshall et al., 2012; Mhlongo, 2014; Mitchell et al., 2022; Olivier, 2016; Penner, 2016; Quesenberry et al., 2016; Singleton-Jackson, 2003; Stock, 2010; Vaccaro, 2012; White, 1989). Many studies have been conducted worldwide examining academic literacy courses and determining that a gap in academic literacy courses may impede students from developing the necessary literacy skills. Although studies across the United States, United Kingdom, Australia,

New Zealand and South Africa provide invaluable information, it should be noted that several variables like cultural, institutional political and economic variations may influence and alter the ability to compare and consider the conclusions made by some studies (Smith, 2006).

One study closely related to the examination of academic literacy courses examines academic literacy interventions and attempts to determine if these academic literacy courses or interventions are supporting university students and filling in the literacy gaps. This study gives insight, however, into the South African post-secondary education system rather than the Ontario education system (Mhlongo, 2014). Kaoropthai et al. (2019) also examine the first-year academic literacy courses and the effectiveness of these courses as an intervention strategy to improve university students' academic literacy skills. This study indicated that when students were provided instructor-led literacy training and expected to perform some self-study tasks, 68% of students were able to pass administered tests successfully. However, this study took place in a Thai, English-speaking university.

Moreover, many other studies being conducted worldwide have a great deal of importance and provide meaningful information into the development of understanding academic literacy. However, many of these countries, where English may be the second language acquired with another language acquired as a primary language, can also contribute to the acquisition of English and the development of academic literacy skills. According to Durgunoglu and Verhoeven (2013), multilingual learners can acquire literacy skills faster than those whose primary and only language is English. Many studies that have focused on the development of academic literacy courses have taken place in countries where English is not necessarily the primary language. However, to offset this particular consideration, Ontario's higher learning institutions are very diverse, with students from various ethnic backgrounds.

Therefore, the information presented in many studies, notwithstanding the country of origin, can be meaningful in some aspects of the discussion in this particular study (Hicks et al., 2013). However, as previously mentioned by Smith (2006), some comparisons cannot be made. Therefore a gap may exist in the understanding and developing of academic literacy courses in Ontario higher education institutions.

Table 2.0, Gap in Academic Literacy Courses Literature

Author	**Aim**	**Methods**	**Analysis**	**Existing Gap**
Merga. (2020)	Analyse teachers' perceptions of barriers faced by struggling literacy learners in secondary school	Mixed-method approach	The authors found high agreement with diverse individual and group level barriers, and diverse learner barriers were negatively associated with perceived adequacy of time to meet the needs of struggling early literacy learners in primary school.	The authors have focused on literacy levels of primary school students rather than postsecondary education.

Grayson et al. (2019)	Analyse Academic Skill Deficiencies in Four Ontario Universities	Quantitative (surveys)	It finds a surprisingly low level of literacy and numeracy among a sizable proportion of Canadians with degrees.	Restricted research regarding fostering a strategy for improving and assessing the efficacy of academic courses
Perin & Holschuh (2019)	The study discusses approaches to the teaching of academically underprepared postsecondary students and how teaching might be changed to improve student outcomes	Qualitative (systematic review)	A wide variety of approaches is reported study, including the teaching of discrete skills, providing strategy instruction, incorporating new and multiple literacies, employing disciplinary and contextualised approaches, using	The study has yet to develop a clear theoretical framework or body of literature pointing to how teaching in this area might improve the academic literacy skills at the post-secondary level.

			digital technology, and integrating reading and writing instruction.	

The current study has covered this literature gap by analysing *the academic literacy courses'* structure, distinguishing gaps, planning an assessment strategy to furnish organisations confronting a comparative issue with an appraisal tool, and curing the issue of students' education in higher learning within postsecondary institutions. The gap is further filled as the study looks to design an assessment technique to ensure that academic literacy courses are hands-on and enhance literacy skills amongst students in postsecondary institutes struggling to have better literacy levels.

2.4 Theoretical Understandings of Academic Literacy

According to Lea (2008), "academic literacy" offers a way to comprehend students' writing that addresses the association between learning and language in post-secondary institutions. It draws upon applied linguistics and social anthropology for its theoretical underpinning and coordination towards post-secondary institutions' cultural, social, and contextualised nature of learning and literacy skills. In contrast, as per Van Dyk and Van de Poel (2013), the study of academic literacy has developed several meaningful and theoretical perspectives. According to Lea and Street (2006), these theories have attempted to bring meaning to the various aspects of academic literacy, including reading comprehension and writing composition. However, these theories are commonly rooted in epistemology rather than skill acquisition. Nevertheless,

theoretical perspectives in academic literacy could be meaningful to studying skill acquisition in conjunction with other perspectives.

Regarding Aiken (2021), academic literacies have had importance throughout the globe in enunciating the problems faced by students in post-secondary institutions. However, it has offered a crucial frame to assist theorise students' literacy (skills acquisition) and the tactics in which post-secondary institutions uphold the progression of students' literacy skills. Conversely, Wingate & Tribble (2012) invoked the role of academic literacies theory in comprehending students' literacy skills. These novel considerations are additionally pertinent to a comprehensive Higher Education landscape focusing on students' gratification and client compliance concepts. Moreover, Fernsten and Reda (2011) depicted that the client-led policies that endure moulding Higher Education learning prompt new inquiries regarding how students may come to language and learning and how they may apprehend literacy skills in a higher-stakes sector.

In contrast, as per Spektor-Levy et al. (2013), education professionals agree that a stable approach to literacy is the utmost efficient method to teach students how to improve their literacy skills, while Handsfield (2015) focuses on how academic literacy has a profound place in scientific and social research.

Van Dyk and Van de Poel (2013) contended that, at present, the Academic Literacies movement is nothing more than criticism directed by postmodern reasoning. In contrast, Smolová (2020) showed that postmodern literature is regarded as a literary movement that avoids entire connotations and focuses on fragmentation, metafiction, and intertextuality. On the other hand, according to Hemphill (2001), postmodernist theories are often used to categorise concepts related to literacy and adult education and incorporate notions of societal fragmentation, such as socioeconomic issues and racism. Although these are significant issues, the focus of this particular

dissertation is academic literacy skill acquisition. According to Garvis & Manning (2017), postmodernism suggests that everything, including the academic environment, has been constructed in an idealistic sense, which is not realistic to the education environment that experiences imperfections and continued evolution. This is also true of academic literacy courses that need constant development and ongoing improvements to meet the changing needs of incoming cohorts, as each cohort brings new and different skills when entering post-secondary studies.

Nevertheless, as per Levy-Feldman (2018), postmodernist methods of knowing must not be perceived as objective. Thus, the postmodernist practitioner should continuously be particularly mindful of their prior bodies of knowledge, methods of knowing, restrictions, and objectives to comprehend any practice in students learning thoroughly. Then again, although postmodernism is valuable, other theoretical perspectives may be better suited for this study.

2.4.1 New Work Order Theory

Literacy issues in the workplace or labour market have gained much attention, particularly in higher education institutions. According to Folinsbee (2001), workers struggling with literacy, no matter the industry, will require additional training and upgrading to meet specific standards set in the Canadian labour market. According to the International Adult Literacy Survey and data collected by Statistics Canada, almost half of Canadians (48%) were assessed and measured poorly (Folinsbee, 2001).

The result of this survey has led Canadian businesses, as well as the Canadian government, to focus on literacy. It has now been deemed a crucial part of employment preparation and a key component in public education.

According to various scholars, academic literacy training within post-secondary programmes has become very complex (Irwin, 2021; Mancuso, 2014). According to Mancuso (2014), skill acquisition, particularly academic literacy skills, is essential for entry into the labour market upon graduation, yet some studies have concluded that students need to prepare to enter the workforce (Irwin, 2021; Mancuso, 2014). Castello and Donahue (2012) examine New Order theories as they relate to academic literacies, while Mancuso (2014) suggests that New Orders theory is a radical idea directly connected to literacy.

According to Gee, Hull, & Lankshear (2018), the new work order theory has a meaningful relationship with acquiring academic literacy. Nevertheless, Livingstone's (2011) and Holland et al.'s (1998) studies focus on the new work order theory and its role in improving the quality of labour within the workforce by increasing adult literacy. On the other hand, as per English (2016), the primary goal of adult literacy programmes that adhere to this theoretical viewpoint is to ensure that students develop literacy skills tailored to the necessities of the labour market. Moreover, Vargas Franco (2020) demonstrated that this theory encourages ongoing development as the labour market continually changes, and students' skills should evolve. However, regarding Cullgan (2005), student motivation is a significant element of this theoretical standpoint, and those who are not enthused will not develop strong literacy skills utilising this approach. Hence, they will also need help to deal with the varying requirements of the labour market.

Furthermore, Saharkhiz, Valizadeh & Salamat (2016) assert that information technology literacy and the evolution of technology in academics as altered the educational environment.

Conversely, as per Beltran (2018), adult literacy and incorporating instruction on information technology encourage ongoing development, and reluctance to implement change can substantially impede professional development and literacy skills. Besides, this theory is pertinent to adult literacy in post-secondary institutions as the programmes these schools provide are aimed at preparing graduates for the labour market. Therefore, explicit adult literacy instruction directed towards the workplace would be constructive.

On the contrary, Nylund & Rosvall (2016) indicated that the additional organisational alteration in the New Work Order that has been of utmost significance for the literacy and language of students in post-secondary institutions had been the concept of working in collaboration on projects. This conclusion also notes that literacy improvement among students was present during collaboration activities instead of hierarchical forms of organisation that merely pass directives down a chain of command. In contrast, Robinson-Pant & Street (2012) hold a different perspective and suggest that New Work Order and New Communicative Order are an amalgamation that offers a modern approach to literacy and a potential solution to eliminating literacy issues among post-secondary students.

2.4.2 Adult Literacy Theory

Adult literacy theory focuses on and measures adults' literacy skills. According to Benavot (2015), this domain of adult education in post-secondary institutions has been emphasised for several years as the International Adult Literacy Survey (IALS) was performed all through 22 nations (including Canada) from 1994 to 1998 (OECD, 2000). Various nations surveyed had substantial proportions of their populaces at a "below functional" level of literacy skill (OECD,

2000). However, these results contradict prior ideas that adult reading, writing, and literacy skills were not required for enhancement in developed first-world nations. Although previously disregarded, scholars did not believe students in developed countries like Canada struggled with low literacy skills; thus, measuring literacy skills was unnecessary. Hull (2000) as well as Culligan (2005) argued against this assumption that developed countries like Canada are not vulnerable to literacy issues and argued that measuring literacy skills is necessary for academic literacy instruction development. One facet of adult education is based on adult literacy. An essential piece of this dissertation is academic literacy skills acquisition and measuring the effectiveness of courses designed to provide an effective means of acquiring these skills. Therefore, the adult literacy theory application is appropriate to this study.

On the contrary, Lonsdale and McCurry (2004) and Cullgan (2005) also supported the need for measuring student skills and defined three models, including a cognitive individual-based model, economics-driven model, and sociocultural model for understanding adult literacy. The first two appear to be appropriate with Hull's (2000) perspective of the two renowned comprehending of literacy. On the other hand, Lonsdale and McCurry (2004) also uphold the third conceptualisation of literacy, the third model. As per Au (2013), the sociocultural model alluded that its contribution within social practices moulds literacy, and hence, there are various differing literacy types, escorting to the term 'literacies'.

Regarding the adult literacy theory, Allatt & Tett (2019) contended that the growth and heritage approach to literacy emphasises understanding meaning rather than the technical facet suggested by the functional perspective. On the other hand, Reder, Gauly, & Lechner (2020) indicated that in adult literacy theory the literacy acquisition is perceived as a social procedure, where the focus is on the association amid connotation, the literacy objects (i.e. texts) and the

social context, as contrasting with merely the text while Kedra (2018) supports that writing and reading activities are linked the student's level of comprehension, which is a crucial part of academic literacy.

According to Oliveira and Araujo (2021), adult literacy theory also relates to developing the comprehension of literacy issues by dissecting social and cultural factors; however, this study will focus on the assessment component of this theory rather than the social and cultural factors, which are implemented to establish tactics and policies. Social and cultural factors should be contemplated when designing a tool to assess and enhance literacy programmes and curricula, as these factors are vital for learners (Benavot, 2015). However, as this study will focus on measuring skill acquisition, adult literacy theory's social and cultural aspects will not be included.

2.5 Skills-based and constructivist approaches to academic literacy instructional development

Perin's (2013) work concentrates on both the skills-based and constructivist approaches and provides insight into teaching strategies directly related to academic literacy, which are discussed throughout the literature. According to Wiggins & O'Hare (2018), the skills-based approach, associated with researchers that commonly lean towards developing tailored literacy programming for each subject or discipline, is a perspective that can provide a great deal of support to students who are in particular academic programmes. However, Skalka & Drlík (2018) indicated that this approach is commonly applied to science or engineering programmes associated with a specific language. On the other hand, Skinner & Mort (2009) showed that the skills-based approach had achieved positive results, notwithstanding the scepticism with which it is regarded.

Conversely, regarding the skills-based approach, Irwin (2021) suggested that literacy instruction be categorised under professional development post-higher learning education, which would also be strongly skewed towards skills-based content.

Contrary to the skills-based approach, the constructivist approach is discussed in various studies and is the basis of the development of current academic literacy courses offered at HEI in Ontario (Bencze & Hodson, 1999; Lynch et al., 2006; Atkins et al.). According to Kiili et al. (2013), the constructivist approach provides a clearer understanding of literacy development and teaching strategies. In contrast, Roald et al. (2020) showed that the constructivist approach helps improve literacy instruction in post-secondary academic literacy courses while focussing on developing meaning and critical thinking while connecting the content to students on a personal level. Moreover, according to Aziz & Dewi (2019), connecting concepts personally can be an effective tool in the learning process, including academic literacy. Besides, meaningful learning can be powerful even when considering sentence structure and mechanics.

Furthermore, Scholtz (2016) found that a skills-based approach is only partially removed from the constructivist approach, as both attempt to apply meaning to academic literacy instruction. However, Zaman (2021) indicated that in the skills-based approach, the primary purpose is to link the content to the subject, while the constructivist approach intends to link it to the student personally. Nevertheless, both methods have received positive results and are directly related to the design and development of academic literacy courses. (Aziz & Dewi, 2019; Skinner & Mort, 2009). Specifically, Skinner and Mort (2009) contribute to understanding how integrating additional support and training in academic literacy can prove beneficial to students who may need additional academic literacy instruction when attending higher learning institutions. This study faced criticism as the sample population was comprised of engineering students who traditionally

do not rely heavily on academic literacy skills such as essay composition but rather depend on mathematical computation and abstract thinking skills. This paper demonstrates the importance of academic literacy skills across all disciplines and areas of study.

The relationships between the constructivist and skills-based approaches are meaningful to understanding the structure of the academic literacy courses and designing a practical and meaningful learning experience for students at the HEI level struggling with literacy. This becomes an ongoing debate about which approach best suits academic literacy instruction. Applying the skills-based approach, as Zaman (2021) suggests, the student will learn academic literacy skills based on simply learning to apply concepts and then perfect the skill itself. In the context of academic literacy, this method would require students to continuously practice and receive adequate feedback to improve their literacy skills. The constructivist approach relates the learning process to the student personally, such as diary writing (Kriz, 2010). Although both methods are far removed from each other, together can create a meaningful learning experience. To adequately determine which method can be used and the effectiveness of any instruction methods of academic literacy, a suitable measurement or evaluation approach is necessary, such as the MASUS Model.

2.6 The Measuring the Academic Skills of University Students (MASUS Model): A Diagnostic Assessment

The MASUS model, developed at the University of Sydney as a part of an initiative to address concerns surrounding academic literacy, was designed for first-year students but had multiple applications and measures students' academic literacy. The model measures the level of academic literacy and measures the level of academic literacy continuously throughout the learning

experience to identify and address weaknesses. The creators of this model, Bonanno and Jones (2007), developed this unique measurement method following a specific set of criteria while approaching the issues of low academic literacy skills through a holistic and student-centred approach (Bonanno & Jones, 2007). According to Van Rooij et al. (2018), this method is helpful for students entering post-secondary studies. Although a helpful model, it was criticised by Read (2015), who suggested that using the MASUS model to measure academic literacy does not automatically allow students to develop literacy skills; instead, students should be provided support like detailed literacy instruction.

In contrast, Read (2015) attributed many of his conclusions to the work of Street (1984) and Read (2015). Read (2015) relies on Street's (1984) autonomous and ideological models of literacy, where assumptions are made that a student will possess basic academic skills applied to general academic literacy; and that, from an ideological view, the practice of literacy will connect with the student's social and cultural environment. However, based on these two valuable concepts extracted from Street's work (Street, 1984), Read (2015) focuses on academic literacy being heavily influenced by the student's surroundings and the overall meaning that the student extracts from academic literacy instruction.

On the other hand, the MASUS model focuses on assessment measurements of skill acquisition over a semester and provides students with direct feedback to improve student skill sets (Keinänen, Ursin, & Nissinen, 2018). However, Street (1984) contended that the MASUS model does not focus its efforts on the meaningful content discussed by Perin and Holschuch (2017) or by Read (2015). The MASUS model holds merit and can aid in developing other measurement models.

2.7 Ontario Post-secondary students experiencing low literacy levels

Higher education offers the potential to support academic development on a large global scale and a smaller local and provincial scale. Chankseliani et al. (2021) suggest that academics' views on higher education and literacy support development are an innovative framework, especially considering the global development missions of HEI and the expansion of distance learning education and opening programmes globally. Examining academic literacy courses on a global scale is far too large. Therefore, this work's primary purpose and focus will be one HEI in Ontario.

This study will focus on post-secondary education students with below-level academic literacy skills, as determined by Ontario post-secondary institutions (Fisher & Hoth, 2010) and the academic literacy courses that attempt to correct these inadequacies. Many observers have stated that students with poor academic literacy skills struggle with their academic studies even after completing academic literacy courses (Dana, Hancock & Phillips, 2011; Lalonde, 2015; McKenna & Penner, 2013; Perin et al., 2017; Reid, 2010). Although academic literacy continues to be discussed in academic circles, the 2017 report by UNESCO states that worldwide adult literacy rates have improved from 55.7% in 1950 to 86.2% in 2015. Nonetheless, for quite a long time, the populace development was fast to such an extent that the number of individuals with lower literacy levels adults continued expanding, ascending from 700 million every 1950 to 878 million in 1990. However, from that point forward, the number fell uniquely to 745 million in 2015, even though it stays higher than in 1950 regardless of many years of universal educational policies, literacy intercessions, and the disperse of print material and information and communication technology (ICT).

Moreover, Grayson et al. (2019) indicated the outcomes of a survey of 2016 through 1300 faculty members from various Canadian universities, commissioned a widely accepted publication in Canada. In addition, Grayson et al. (2019) showed that only 32% of students have adequate academic literacy skills at the post-secondary level. However, merely 23% of students have writing skills while entering post-secondary institutions. On the other hand, the survey results further demonstrated that 41% of students were good at numerical literacy skills. Nevertheless, only 34% of students can work independently, indicating that 34% of post-secondary institutions need more literacy skills to succeed academically.

In contrast, Reave (2019) examined the quality of education in 28-top rated Canadian universities utilising courses and determined that students continued developing their writing skills while attending post-secondary programs, implying that most students do not enter higher learning institutions with the necessary literacy skills. However, Reave (2019) found that one in four university-educated students in Canada and one in two college students need adequate advanced literacy skills to succeed in the upcoming labour market and post-secondary institutions. Reave (2019) further contended that in 20 Ontario institutions and over 7,500 volunteer students, one in four graduates did not score at a satisfactory literacy level (below Level 3). However, less than a third of Ontario's post-secondary institutions' students scored at advanced levels (4 and 5).

Mancuso & Desmarais (2014) determined that Canadian post-secondary students need help meeting the academic demands of academic programmes. Some studies find that these same graduates also miss more than literacy skills (McKenna & Penner, 2013; Reid, 2010). Mancuso & Desmarais (2014) contended that soft skills like leadership and interpersonal and problem-solving skills are considered absent from graduates, while practical literacy skills still need to be improved, leading to the need for this study. Grayson et al. (2019) showed that the mean score of writing

deficiency in Canadian students was 13% for the functional group; however, 39% were at-risk of writing deficiency.

Moreover, for the dysfunctional group, the deficiency score is 81%. The situation of Canada's nearest neighbour is equally challenging. Irwin, the Director of the Centre for Global Assessment at Educational Testing Service, claims that one in five American graduates holding a Bachelor's degree needs more literacy (2021).

However, Irwin suggests providing individuals holding undergraduate degrees with professional development training to fine-tune their literacy skills once they are already in the workforce. Lang (2021) shared this unconventional idea, who suggested that people in the workforce could gain literacy knowledge without committing to extensive academic programmes by attending additional training while being gainfully employed. Besides, as per Irwin (2021), this would also remove the onus on higher education institutions while placing them in the hands of the federal government. Nevertheless, Lang (2021) indicated that this would pose many challenges. The main one is that it would not address the problems endemic in students entering post-secondary institutions and would only cover graduates or established workers who have completed their studies many years before.

2.8 Socioeconomic and Political Issues lead to lower literacy skills

According to Friesen (2018), teachers are concerned about a lack of basic literacy skills for most students joining post-secondary education in Ontario. It has led advocacy groups to seek answers to policy and school reform. However, some scholars, such as Luke (2018) and Feely (2010), contend that more than policy reform is needed to resolve weak literacy skills. Instead, it

is necessary to address access and inclusion issues. Moreover, Comber (2015) links low socioeconomic status with poor literacy, arguing that literacy skills suffer when opportunities for impoverished young people to attend school are limited.

Anisef et al. (2011) contend that a student's decision to study post-secondary education is associated with socioeconomic status and cultural background. In Canada, 75% of individuals between 25 and 44 have been receptive to attending post-secondary studies, notwithstanding socioeconomic or cultural backgrounds. Remarkably, 46% of students in Ontario attend university, and 36% attend colleges almost instantaneously after completing secondary school. This pattern exemplifies the convenience of post-secondary education in Ontario and Canada (Rae, 2018). However, even though post-secondary education is accessible, socioeconomic status and social inequality issues impact whether students develop the skills necessary to pursue post-secondary education; many struggle with poor literacy skills.

Furthermore, according to Rootman and Ronson (2005), while evaluating the literacy levels of at-risk populations in Canada, the authors determined that literacy and equality are interrelated ideas. They found that at-risk Canadian youth needed help reading introductory texts. Lovett et al. (2017) suggested that educators emphasise the learning process, the emotional components of learning, the student environment, support, and extrinsic and intrinsic motivations. This ties directly with the constructivist approach Aziz & Dewi (2019) recommended and enhanced the learning experience of academic literacy courses. Rootman and Ronson (2005) also contended that a lack of literacy skills at the post-secondary level might stem from poor learning care that students suffered from during their primary school years. Thus, identifying students' feelings and emotions can drastically influence academic success.

Hemmerechts, Agirdag, and Kavadias (2017) believe that socioeconomic status impacts accessibility, particularly in areas where poverty limits young people's educational opportunities. Patten (2019) contended that although socioeconomic status varies in Ontario, access to education seems insignificant since all young people have access to public education in Ontario. Although post-secondary education is not accessible in Canada, people can access it with the help of loans, grants, and scholarships provided by the government and educational institutions, so long as they can meet the minimum requirements of entry into higher learning programmes (Finnie 2002; Looker & Lowe, 2001; Axelrod et al., 2011).

In 2017, the previous Liberal provincial government introduced free tuition to students whose household income was below a certain amount and diminished tuition fees for others (Moreau, 2018). Although the new Progressive Conservative provincial government overturned this law, education is still accessible, and most students will turn to previously established sources of financial support (Postmedia Network Inc., 2019). Then again, Moreau (2018) further indicated that other educational practitioners had condemned the concept of free and accessible education, suggesting that it burdens taxpayers. However, Harden (2017) indicated that accessibility is continually included in discussions of education reform and policy changes; literacy also remains a constant concern.

2.9 Corrective Academic Literacy Courses

Perin & Holschuh (2019) state that poor academic literacy skills have yet to be fully remediated. However, Newell & Bain (2020) contended that education institutions have attempted to design practical corrective courses to address academic literacy weaknesses among their

students. Nevertheless, Newell & Bain (2020) further indicated that students experience challenges. In this regard, some studies have indicated specific markers that explain why students continue to struggle, pointing to ineffective academic literacy courses and academic supports (Newell & Bain, 2020; Schneider, Zammit & Armstrong-Roper, 2017; Wingate & Dreiss, 2009; White & Lay, 2019). On the contrary, Gunn et al. (2011) identify specific features of practical academic literacy courses and supports, such as the self-paced, student-centred presence of technology, applying theoretical perspectives in course design, engagement and in-person instruction.

In this regard, many academic institutions have attempted to address the literacy weaknesses of their students by mandating academic writing courses and various other corrective supports. However, although these courses are well intended, scholars have identified specific gaps, leaving students unprepared even after completing the courses (Atkinson, 2016; Ari, 2015). Other scholars showed the significance of cognitive training in the literacy skills levels of students (Wingate, 2018; Flowerdew, 2020; Shrestha & Parry, 2019). According to Ben-Eliyahu et al. (2015), cognitive training is a significant consideration when examining academic literacy among post-secondary students. Versaevel (2014) believes that cognitive training must be embedded in Canadian post-secondary institutions to improve literacy skills among post-secondary institutions since the training enhances the capability to perform daily tasks and improve self-esteem. Moreover, Wexler et al. (2016) contended that cognitive training enables students to follow conversations and process info more than twice as rapidly as before cognitive training.

Wingate (2015) contends that cognitive training issues are one possible explanation for why students are completing academic literacy courses yet still experiencing academic literacy challenges. On the other hand, Shrestha & Parry (2019) depicted that students may need to be more

familiar with the necessary cognitive training for simply practising concepts, or courses are not designed to provide students with the activities and exercises to understand academic literacy concepts. However, Wingate (2018) contended that by improving the design of the academic literacy course to incorporate appropriate exercises, students might become better acquainted with concepts and be better able to apply them to subject matter courses.

Further, Harden (2017) asserted that another vital consideration is the effectiveness of academic literacy courses in their content and placement in the overall curriculum structure. Various scholars argued that according to the MASUS method, academic literacy instruction should be embedded into the core content courses, leading qualified faculty to provide appropriate instructions (Reed et al., 2007; Snow, 2005). In addition to content courses holding a substantial role in academic literacy development, Wingate (2018) contended that it is essential to determine student literacy weaknesses. Besides, regarding Holschuh (2019), although incorporating academic literacy instruction within content courses does prove valuable and effective in evaluation and results, incorporating literacy instruction into a content course does pose some issues.

On the contrary, Bain (2012) showed the ineffectiveness of academic literacy courses and contended that they might not be practical as faculty providing academic literacy instruction may need to be adequately equipped to provide students with information and direction related to academic literacy. However, Smagorinsky et al. (2014) suggested that academic literacy courses are taught by faculty trained in English literature but not necessarily in language mechanics and other aspects of academic literacy. In contrast, according to Pulec (1994), one of the most common misconceptions is that subject matter faculty are equipped to provide instructions on language mechanics, grammar, effective writing, adequate reading comprehension, critical thinking, and

referencing. Instead, Alaka (2010) noted that many subject matter professionals need to be stronger in areas relating to academic literacy.

Moreover, Brasley (2008) showed that faculty teaching subject matter courses or content courses unprepared to incorporate academic literacy concepts are generally provided institutional support. Although it provided various support, there are several reasons why incorporating academic literacy instruction can be challenging. In this regard, Crossman (2018) showed that one of the most common challenges that faculty face in incorporating literacy instruction into subject matter courses is the time constraint. In contrast, Tang (2012) indicated that subject matter and academic literacy courses are confined to a fourteen-week semester with most post-secondary programmes. However, time limitations can make incorporating academic literacy instruction into the content courses challenging; but it is quite effective. Further, as per Abasi & Graves (2008), literacy instruction incorporated into the content course has proved valuable. It has allowed the student to gain further meaning to the subject area studied through extensive readings.

However, Flowerdew (2020) highlighted a conflict (dualism) between literacy and content instruction that appears prevalent. Although reasoning, learning, and communicating have been closely related to content and literacy learning, some scholars have supported that no actual conflict exists (Draper et al., 2005; Urquhart & McIver, 2005). Instead, as per Gillis (2014), literacy instruction can be harmoniously adapted to content courses. Although these authors support dualism and incorporate literacy instruction into content courses, their focus is mainly on literacy's writing component and does not discuss the reading or other facets of literacy, such as referencing and critical thinking. Additionally, Wingate (2018) argued that the dualism argument, which incorporates literacy instruction into a content course, may face issues related to adapting

study management skills, thus ensuring consistency of literacy instruction across courses and a comprehensive revision of corrective classes and supports.

On the contrary, Jenkins & Wingate (2015) showed that professors teaching specific subject matter might not feel equipped with the necessary knowledge to provide adequate literacy training. Therefore, rather than placing the entire responsibility on the shoulders of subject matter faculty, literacy instruction experts should provide literacy instruction to students (Jenkins & Wingate, 2015). However, various scholars contended that this model – where English language experts offer literacy instruction – also faces challenges leading to students struggling with academic literacy skills (Dziwak, 2014; Perin, 2013; Wingate, 2018).

2.10 Academic Supports such as Writing Centres Face Numerous Challenges

As per Reave (2019), practitioners and theorists have recognised the worth of the writing centre's role in helping students direct the murky waters of academic discourse. Besides, Lewanika and Archer (2011), Simpson (2011), Dowse and Van Rensburg (2011) present the concept of modifying the lens from students to consultants in a reflective exploration of the writing centre as a community of practice that works towards influencing and even makeover the academic identities of consultants.

On the contrary, according to Bell and Hotson (2021), writing centres were established to assist students with writing composition in improving their literacy writing skills in post-secondary institutions. However, Bell et al. (2021) further contended that students had experienced challenges due to funding and questions surrounding their usefulness. On the other hand, regarding Cheng & Fox (2008), university students whose first language was not English were always encouraged to

access academic writing centres to write assignments and essays in Canada. Furthermore, Bell and Hotson (2021) also indicated that writing centres' value for students struggling with academic literacy, specifically academic writing, is in question and a strong determinant of institutional resource allocation.

In contrast, Thomas and Dyches (2019) noted that educational institutions and the academic writing culture within the post-secondary institution strongly influence how assessable and equipped corrective supports and writing centres are. Therefore, funding or resource allocation will likely be assigned to academic literacy initiatives like writing centres when the institution supports developing or maintaining a solid academic literacy culture. This idea of academic literacy culture is also discussed by Reave (2019), where high-ranking universities in Canada were examined based on their academic writing culture. In addition, Reave (2019) examined the academic literacy courses offered by 15 of the top-rated universities in Canada. It was determined that the quality of education students receive directly related to academic literacy courses and instruction and the academic literacy culture, a term coined by Thomas and Dyches (2019). The noted cultural influence set by institutional administration directly impacts the quality of education and, ultimately, the quality of graduates leaving post-secondary institutions (Reave, 2019; Thomas & Dyches, 2019).

Furthermore, Reave (2019) also indicated that academic writing centres and other corrective supports, supplementary to academic literacy courses offered by post-secondary institutions, are not the primary source of academic literacy instruction. Instead, with appropriate resource allocation and a solid academic literacy culture within the institution, such support can assist in the efforts made by academic literacy courses and student success. On the other hand, Archer and Parker (2016) showed that one of the significant challenges for writing centres is

offering access to academic and disciplinary courses which can provide additional instruction in academic literacy.

2.11 Academic Literacy Instruction Improvement

Lipka et al. (2019) state that academic literacy courses provide underprepared students enrolled in post-secondary programmes. However, Perin & Holschuh (2019) indicated that these courses could have been more effective as students struggle with academic literacy skills. Many reasons for these unfavourable outcomes have been identified, leading to many suggestions to address them. Irwin'sIrwin's (2021) work suggests educators providing literacy instruction may need to be sufficiently equipped, and evidence-based instructional strategies could be a valuable tool to apply to academic literacy courses. However, this also ties into professional development courses for instructors to provide the necessary skills to improve the delivery of literacy concepts (Irwin, 2021). Moreover, Reave (2019), additional training in language mechanics and various facets of academic literacy might be valuable as part of the professional development process.

Although research studies have identified several areas of improvement, key areas remain the partnering of reading and writing previously offered through separate courses (Bickerstaff & Raufman, 2017; Perin & Holschuh, 2019). Courses integrating reading and writing provided several benefits to developing literacy skills. According to Paulson (2014), reading offers students the opportunity to develop cognitive skills and knowledge of linguistics while developing key reading competencies. However, Raufman (2017) depicted that writing alone allows students to understand the written language, composition, syntax, and mechanics of writing. Besides, regarding Perin & Holschuh (2019), integrating reading and writing provides

students with natural language development and understanding of language structure and mechanics, thus creating an organic learning experience. In contrast, Granville & Dison (2005) asserted that the primary purpose of academic literacy courses is to improve the overall literacy proficiency – reading and writing – of underprepared post-secondary students.

Furthermore, regarding Armstrong et al. (2015), curriculum evaluations are also an effective method of ensuring the effectiveness and quality of courses. However, Perin (2013) showed that this is useful in determining whether the course content met the students' needs. Examining course content also allowed the educational practitioner to ensure that the academic literacy course has adapted meaningful content to connect the student within the studied discipline. On the contrary, Aiken (2021) showed that by providing this meaningful content, students could develop their knowledge in both the content and literacy instruction. Further, this is an essential component of Phase 2 of this study which will examine the course objectives of academic literacy courses.

Smagorinsky, Wilson & Moore (2011) contended that developing meaningful content within the subject matter courses is difficult for many academic literacy instructors who may need to be equipped to integrate meaning from the subject area. However, Grayson et al. (2019) asserted that it becomes challenging for subject matter faculty to reach into language instruction and provide adequate academic literacy instruction. Nevertheless, in addition to creating meaningful content, Ostergaard & Allan (2016) have also ascertained that it was favourable to make ongoing changes to the writing curriculum in reaction to varying demands in other curricula and the labour markets of numerous fields of study. Then again, altering the curriculum to highlight students' necessities on an ongoing basis seems vain, as one cohort of students might have different academic necessities from another (Ostergaard & Allan, 2016).

While Ostergaard & Allan, 2016 support tailored course content for each cohort needs to be considered in favour of developing practical corrective academic literacy courses. Gunn et al. (2011) indicated that teaching approaches and digital technology are essential to consider and integrate into academic literacy courses. However, as per Harris et al. (2017), educators provide students with basic skills through subtle strategies without linking the learning experience to meaningful content. However, being used as a primary method to introduce students to the structured concept can be helpful. Conversely, Perin & Holschuh (2019) contended that instructional modelling is also beneficial to monitoring development and progression with scaffolding methods. Walker (2012), modelling was shown to be very effective and helpful in students' ability to recognise text and recall techniques and application of literacy skills, indicating an effective method of literacy instruction. Besides, Linderholm et al. (2014) concluded that comprehension was lower when students were given an excessive amount of literacy instruction compared to other students given limited instructions. At the same time, Lavonier (2016) indicated that detailed instructions are essential, resulting in improved student literacy performance; however, with all strategies, there are limitations.

Besides, various literacy approaches have been developed and presented to simplify corrective academic literacy course design and the instructional process to improve literacy skills levels in students. Various methods of literacy learning or instruction have been developed to simplify reading and writing for students.

For instance, Tremmel (2011) indicated that unsophisticated methods such as five-paragraph essay structures and step-by-step methods had been introduced to help students perform academic literacy tasks. In addition, according to Lam (2019), writing argumentative essays with a "*for* and *against*" structure has been determined to be quite valuable. Moreover,

according to Tremmel (2011) and Lam (2019), this structured method of argumentative essay writing provided students with a systematic way of writing and producing valuable work while eliminating the need for exceptional academic literacy skills. However, while these methods create a structured process that students can use easily, Perin and Holschuh (2019) argue that these methods need more cognitive and critical thinking, a crucial component.

Besides, it is further argued by Perin and Holschuh (2019) that these methods remove any creativity and limit the student in developing solid academic literacy skills outside of the set structured method. However, Lam (2019) supports structured writing composition, concluding that students using these templates can use them as tools and overcome literacy insecurities due to a lack of experience and academic literacy knowledge. Although Perin et al. (2019) suggest that this is a valuable technique, as it allows students to develop interests and reduce assessment stresses, by eliminating literacy skills development, aspects of academic literacy are not being exercised. Students will need more academic literacy. Using a format or template form of writing can be helpful to those uncomfortable with writing composition, which is linked to Vygotsky's scaffolding (Smagorinsky, 2018). Smagorinsky (2018) notes that Vygotsky's concept of *scaffolding* is linked to instructional scaffolding or a method of teaching to provide students assistance and gradually remove the assistance to establish students' independence in the learning process. Although not considered an official form of educational pedagogy, this method has limitations in corrective academic literacy courses. According to Smagorinsky, this method can lead to educators providing corrective literacy instruction focusing on short-term gains to appease the HEI administrative pressures to demonstrate academic success. This is particularly important since the results of corrective instruction need to have long-term, permanent results.

Furthermore, various authors inferred that strategy training programmes and frameworks applied to reading comprehension practices successfully aided students in information processing, cognitive synthesis, and improved academic performance (Neumann et al., 2020; Perfetti, 2007; Brailsford et al., 1984). On the other hand, Lee & Wesche (2017) contended that although assistive structured methods and approaches are helpful, they do not guarantee student academic literacy development or transfer academic literacy skills from one course to another or from academia to academia, the workforce. Besides, Mancuso (2014) also concluded that students graduating from post-secondary programmes have not developed academic literacy skills while attending their studies and have been found to lack basic literacy skills when entering the workforce.

2.12 Summary

This literature review aims to demonstrate and discuss the current literature on the effectiveness of academic literacy courses in postsecondary institutions and will develop an understanding of the foundation of this thesis. This chapter discusses the theoretical concepts, such as New Work Order and Adult Literacy Theory, used to develop the research questions, the relationship between inadequate academic literacy and corrective literacy courses, and review programme evaluation methods. Precise definitions of academic literacy as well as constructs of corrective educational programmes. Literature gaps have been identified throughout this chapter and focus on academic literacy courses, providing corrective literacy instruction to students in postsecondary institutes struggling to have better literacy levels. The literature on skills-based and constructivist approaches to instructional design was also examined. The MASUS model has also been investigated. This chapter has also included a full review of literature that examined HEI

students experiencing academic literacy challenges in Ontario, a Canadian province. This literature review also discussed socioeconomic and political issues that impede literacy skills among Canadian HEI students and the corrective courses developed to address literacy issues. The research noted in the literature review concentrated on Canadian postsecondary and the students' experiencing issues with meeting the academic demands of academic programmes. The significance of cognitive training in the literacy skills levels of students was also discussed. It was also concluded that writing centres were established to assist students with writing composition and improve their literacy writing skills in postsecondary institutions. It was further concluded that students graduating from postsecondary programmes had not developed mature or seasoned academic literacy skills.

Chapter 3 – Methodology

3.1 Introduction

This chapter presents the methods used, including descriptions of the design, setting, sample population, data collection methods and analysis of data collected. This chapter concludes with a summary. The main focus of this study was to investigate the effectiveness of academic literacy courses in a large Ontario HEI. The study investigated academic literacy courses within this institution and attempted to identify inconsistencies across course objectives, content and student acquisition of academic literacy skills. To fully complete this chapter, it is necessary to outline the steps taken, challenges and problem-solving methods used to overcome the challenges faced throughout this process. Further, as I have a relationship with the institution being examined in this research study, I must recognise this relationship and my ethical obligations to ensure that all ethical practices have been upheld. This research study will employ several forms of data collection, including an online questionnaire, a semi-structured interview and an analysis of documents. The information collected will be examined and compared, and the results will be discussed in the result chapter following chapter.

3.1.1 Applying Research Paradigms in Educational Contexts and Academic Literacy Courses of an Ontario HEI

Scholars have trusted the use of paradigms in their research. Kivunja and Kuyini (2017) suggest that the concept of research paradigms is one that students often need help understanding. According to Lincoln and Guba (1985 in Kivunja & Kuyini (2017), a paradigm

consists of epistemology (knowing), ontology (assumptions), methodology (procedures) and axiology(ethics).

Husén (1988) indicates that due to the evolution of research and the study of education, developments lead to the creation and implementation of research paradigms in education. The use of various methods of data collection, such as surveys and collection of both quantitative and qualitative data, meant a structured research methods approach and the incorporation of research paradigms. The research paradigm applied in this study was intended to reflect the researcher's perspective through the abstract views and interpretations of the academic HEI environment. According to Kivunja and Kuyini (2017), the research paradigm refers to the research lens which may influence the researcher's selection of research methodologies, data analysis methods and the direction of the research investigation. According to Denzin and Lincoln (2000 in Kivunja & Kuyini, 2017), the paradigm is the researcher's imprint on their study. In determining the paradigm of this research study, the researcher examined their research environment and underwent a self-examination related to the research objectives and purpose.

Many considerations were made in the design and determining what paradigm would be evident throughout this research study. Although many paradigms are well established in academic and educational study research, including the positivist, pragmatic and critical approaches, interpretivism was most applicable to this study (Kivunja & Kuyini, 2017) as it was based on the assumption that the participants' opinions may be subjective. Each participant's experiences may be different from each other, shaped by the individual historical and social perspective. The application of this paradigm emerged throughout the study and, in particular, through the semi-structured interview, which provided insight into the various perspectives of the participants who engaged in the academic literacy courses being examined in their study, as

interpretive approaches are generally related to qualitative data collection methods such as semi-structured interviews and is based on questions and observations to develop and gain an in-depth understanding of the participant's views and opinions which closely relates to this study's structure and data collection methods.

The positivist paradigm approach, originally considered for this study and initially postulated by Comte in 1856 (Kivunja & Kuyini, 2017), described a method of research which focused on human behaviour and was commonly used to explore and develop conclusions. According to Fadhel (2002 in Kivunja & Kuyini, 2017), the positivist approach attempt to interpret gathered information in term of measurable values. Moreover, this method attempts to provide explanations and allows the researcher to make predictions. This paradigm also applies to research environments with inductive inferences and reaching generalisations about the world. This research study intends to examine one highly established HEI in Ontario and develop some understanding of the effectiveness of academic literacy courses within the institution being examined. However, the researcher hopes that the result of this study may be helpful in the examination of other HEI around the world and their respective academic literacy courses.

The primary objective of this study is to examine the students' experience when completing academic literacy courses within the HEI and, therefore, the human experience (Guba & Lincoln, 1989 in Kivunja & Kuyini, 2017). The semi-structured interviews, which take on an essential role within the study through the thematic analysis of the interview's data and responses, attempt to interpret the subject's viewpoints as they relate to their relationships with academic literacy and the courses within the HEI being examined. Further, the primary purpose of the interpretivism paradigm is to understand the participant and their understanding of a specific environment. According to Kivunja and Kuyini (2017), this paradigm suggests that the

epistemology or knowing is subjective, the ontology or assumptions depend on various factors, the methodology or procedure applied to the study is naturalist, and the axiology or ethics applied are reasonably balanced.

The epistemology, or knowing, is heavily based on the researcher weaving their thinking and understanding of the participants into the study. As an adjunct faculty, the researcher has embedded their experience and knowledge of the population being examined into the structure and design of the study, including the type of questions asked in both the online survey and the semi-structured interview. According to Punch (2005 in Kivunja & Kuyini, 2017), the researcher will include personal experience within the investigation. With the researcher's personal and professional experiences and the interaction of the researcher and the participants, they intermingle and record research data, such as through semi-structured interviews (Kivunja & Kuyini, 2017). The assumption of ontology is based on the possibility of multiple perspectives, which was heavily laden throughout the study. Each participant was considered to have a different perspective and relationship to academic literacy skills and the courses offered by the HEI being examined. The researcher utilised data gathered through semi-interviews, discourses and reflective sessions, which is a clear indication of interpretivism methodology and structure. A balanced axiology or application of ethics reflected the values of the researcher, which are clearly identified throughout the study and outlined in the ethics section in chapter three. Based on all of the above-noted components of epistemology (knowing), ontology (assumptions), methodology (procedures) and axiology(ethics), this study has followed an interpretive paradigm approach.

To ensure that applying this paradigm would provide valid results, the researcher applied the criteria noted in (Kivunja & Kuyini, 2017). The study considered the importance of the

credibility of the researcher and the literature used to establish a meaningful foundation of knowledge for this thesis. The study also ensured that the dependability and confirmability of the results would be trustworthy. Further, another critical element to ensuring the validity of this study was to establish the transferability of the study's results (Kivunja & Kuyini, 2017).

3.2 Research Objectives

The study's objective and the methodologies used in this study concentrated on the sample selection, the collection and monitoring of the data collected, the comparison of the data collected, and the examination of the academic literacy course within the Ontario HEI being examined. The research methods used intended to identify the gaps between the academic literacy courses of the Ontario HEI, the student's knowledge acquisition of academic literacy skills and identify how to improve the existing academic literacy courses to address the gaps and students' self-identified literacy weaknesses. Further, the study aimed to develop a means of effectively measuring the effectiveness of academic literacy courses.

3.2 Research Objectives

The study's objective and the methodologies used in this study concentrated on collecting, monitoring, comparing and examining the data collected from the data collection methods applied within the Ontario HEI being examined. The research methods intended to identify the gaps between the academic literacy courses and the student's literacy knowledge acquisition. Further, the study's goal was to identify ways to improve the existing academic literacy courses and address the gaps and students' self-identified literacy weaknesses. Further, the study aimed to develop a means of measuring the effectiveness of academic literacy courses.

3.3 Research design

The purpose of this study was to understand the student's experience as it relates to academic literacy and the structure and content of academic literacy courses in a large Ontario post-secondary institution. The study draws on the responses from participants who have experienced these courses and compares their experiences with the structure and design of the courses, thereby determining if the course does address the participants' self-identified academic literacy weaknesses. The design of this study was heavily based on three types of examinations: conclusive, exploratory, and descriptive (Akhtar, 2016).

The definitive structure provides an opportunity to examine the cause-and-effect association between academic literacy courses and the acquisition of literacy skills (Ørngreen et al., 2017). Penrose (2002) investigated university students at an American university and their perception of academic development and educational goals, particularly related to academic literacy. The approach in Penrose's (2002) study successfully collected valuable information and compared categorical responses and demographic data. The sample size in Penrose (2002) was made up of first-year students, similar to the sample size of this dissertation research study.

The experimental research design was also considered and incorporated as it would provide some conclusions to determine if academic literacy courses are, in fact, practical within this institution (Mohajan et al., 2018). This is a critical feature of the research design as it assisted in fostering ideas and theories regarding improving students' literacy skills through academic literacy courses in this particular post-secondary institution in Ontario. The research design methods allow participants to explore their reflective thoughts by responding to the online survey and the semi-structured interview process, directly tied to experiential phenomenology and

associated with the descriptive responses provided during the interview phase of the study (Moustakas, 1994; Husserl, 1965; Leland, 1979).

Incorporating participants' reflective thoughts and responses laid the foundation for understanding where participants have identified their weaknesses, leading to a cross-comparison analysis between survey and interview responses and course content. It, therefore, allowed the study to explore existing gaps within the course content, curriculum and design. This chapter includes the research questions, a discussion of the research paradigm, the approaches used throughout this study, the data analysis, ethics and the role of the principal researcher.

3.3.1 The Use and Value of Surveys as a Quantitative Data Collection Method

Using surveys and questionnaires in research studies has been described as an efficient method of collecting information from a large sample size. Surveys and questionnaires applied in studies provide researchers with information, easily measured and evaluated. Data collected from questionnaires can be analysed, and numerical or statistical values can be taken to evaluate and reach conclusions (Burcu, 2000; Vaughn & Turner, 2016).

The themes and data collected from the online questionnaires in phase 1 were intended to lead to the semi-structured interviews and the design of the questions. This method, described by Vaughn and Turner (2016), was intended; however, due to limitations and requirements set by the institution, the gain permission, the researcher was required to provide all interview questions in advance and prior to the administration of the survey and the collection of the online questionnaire data. However, some expected themes in the survey were included in the semi-structured interview questions, and therefore, continuity was established between both data collection sets.

3.3.2 The Use and Value of Semi-structure Interviews as a Qualitative Data Collection Method

Using qualitative data allows the researcher to capture complex information and gain a deeper understanding of the examined participants (Vaughn & Turner, 2016). According to Begay, Lee, Martin & Ray (2004 in Vaughn & Turner, 2016), qualitative data collection methods can provide researchers with information that can complement quantitative data and divulge participants' perceptions and feelings. Although some challenges exist when applying qualitative data collection methods, decoding and extracting meaning from the qualitative data collected is the most significant challenge. In particular, when conducting semi-structured interviews, the data collected provides insight into participants' experiences but does pose challenges to managing and organising data. As such, coding and decoding methods have been developed to practical extract meaning. However, as noted by Neuendorf (2018), there are a minimum of 50 types of qualitative data analysis methods to consider. Some methods, such as content analysis, interpretative phenomenological analysis and conversational analysis all practical ways of reducing, displaying and making conclusions about the collected data (Neuendorf, 2018).

3.4 Setting and Research Context

The present research study is based on academic literacy courses in a post-secondary institution in Ontario, Canada. The academic courses examined in this study are held during the first semester of a student's program. Participants attending this Ontario institution within the Faculty of Community and Social Services vary in age and general demographics (Buskard, 2019). The typical age of students is 18 to 24, with approximately 40% of the students attending Ontario post-secondary institutions older than 25 (Mather & Sarkans, 2018). Participants were also asked questions about the geographic location and municipality in which they attended a secondary

school which is directly linked to the quality of secondary school education and resource allocation of educational funding (Ostrander, 2015).

The institution has several campuses throughout Ontario. However, the study will only examine participants attending one campus. The most southern campus hosts various programs and disciplines, most notably, the Faculty of Social and Community Studies. The participants for this study were canvased from this particular campus. However, all students across the institution and regardless of campus or program, must complete the academic literacy courses. These courses are also mandated across other Ontario institutions, establishing the meaningfulness of these courses throughout the institution and the province (Fisher & Hoth, 2010).

The primary justification for explicitly choosing this post-secondary institution is that it devotes much time and resources to developing academic literacy courses. Also, the researcher has developed a professional relationship at this institution which has made access to participants favourable.

3.4.1 The Researcher's Role within the Institution

At the time of this research study, the researcher held an adjunct teaching position for six years at the institution being examined. The researcher gained knowledge of the institution and its systems, including the protocols exercised when conducting research studies. This included accessing information and obtaining permission to conduct the study from the institution's Research Ethics Board. Also, the researcher was familiar with the programs, the academic literacy courses being examined in this study, and the students attending this institution, who would serve as participants. The researcher developed a strong understanding of students' academic literacy

skills by evaluating written works submitted through content courses. Much like Grayson et al. (2019), the researcher observed academic literacy challenges that students' experienced when academic literacy skills were tested. The researcher began to question why students continued to struggle with academic literacy even after having complete the academic literacy courses that were mandated by the institution.

Anecdotal evidence experienced by the researcher and fellow faculty, mirrored by Grayson et al. (2019), describes students' struggles and the reactions of professors at Ontario universities that students entering universities lack skills for academic success, including academic literacy skills. The motivation for this study is not solely in the examination of students entering post-secondary education with poor literacy skills but in why students who have completed their studies and graduated from the institution continue to struggle with academic literacy (Grayson et al., 2019). Students completing their studies, according to Daniel Munro, Skills and Higher Education in Canada (Statistics Canada, 2014 in Grayson et al., 2019) as graduates, would only be capable of managing short pieces of written work.

Throughout this chapter, additional information is presented to address various changes the researcher has made to the study's design to accommodate the needs and requirements of the institution being investigated. This will provide insight into the researcher's positionality to the decisions made throughout the research process.

3.5 Participants and Sampling

This study took place on one of three campuses of an oversized public HEI in Ontario during a 14-week semester. Students attending this institution completed an academic literacy placement exam to determine if their literacy skills were adequate. Students who did not earn a specific

score would be required to attend mandated academic literacy courses. Although randomly selected, students who participated in the study attended the academic literacy course, completed the course before participating or were in the process of completing the course at the time of the study. Participants were recruited to participate during the fall semester. The academic literacy courses consist of two sections, part 1 and part 2, usually taken consecutively, with part 1 taken in the fall term and part 2 taken in the winter term. The participants of the newly admitted cohort, first-year students, were either attending the academic literacy course or participating in the study. In contrast, students who are attending their second year or third year of studies either completed the first part of the academic literacy courses or attended the second part. Most of the students participating in the study had some exposure to academic literacy courses and provided valuable information and experiences.

The Ontario HEI being examined hosted diverse students, including those whose first language may not be English. Several HEI in Canada has welcomed many students to provide learning opportunities for domestic and international students. It should be noted, however, that in the current post-secondary system, Canadian universities and HEI were required to possess some working understanding of the English language. According to Andrade (2006), English proficiency is a significant component of achievement and academic success. However, Andrade (2006) does compare the learning outcomes of international and domestic students and concludes that when international students were provided with positive learning experiences, they worked harder and succeeded more than domestic students and, even when faced with negative experiences, responded with constructive behaviours linked to higher achievement outcomes. As such, students for whom English is not their first language are not separated for this study.

The academic literacy courses examined in this study focus on several components, integrating writing composition, critical reading and referencing. Students must read cases and articles and respond in reflective papers and essays. The number of sections offered each semester is based on the enrolment size. The first part of this academic literacy course series is commonly offered during the fall term to prepare students to attend content courses in upcoming semesters. The academic literacy course takes place over a 14-week semester.

Students meet once a week for a 2-hour and 45-minute session. Enrolment in each section consists of approximately 30 students. However, some sections may be as small as 12 students, the minimum number of students for a course to take place.

3.5.1 Sampling Technique

The present study examined many forms of sampling since systematically selecting an adequate number of participants directly tied to the academic literacy courses within the Ontario institution would take much work and secure participants who would also participate in the semi-structured interviews. From a sample size of 83000 students enrolled at this Ontario institution in 2014, 8,373 students attended the HEI discussed in this study. The subset sample of participants taken from this population represents students who have completed or were attending academic literacy courses. The recruitment process took place in the fall semester. Initially, the researcher intended to request access to students expected to attend the academic literacy courses for the upcoming fall term. The researcher intended to administer a pre and post-course survey and a pre and post-semi-structured interview to investigate students' understanding of academic literacy courses before and after completing the courses. This sample's pre and post-examination, as demonstrated by Brandt et al. (2021), could have provided valuable information and insight.

During the proposal stage, the institution preferred to provide the researcher with student enrollment information. The researcher was advised that student enrollment or personal information would not be accessible to the researcher. The researcher adjusted the recruitment method and posted advertisement posters throughout the common areas on campus. The posters noted a link that students could access if they wished to participate in the study.

Students were asked to participate voluntarily, provided with an online link, and asked to contribute by answering questions online. The students who replied to this announcement or advertisement and who had either completed or were in the process of completing the academic literacy courses made up the subset of participants examined. It was only possible to examine some students attending this post-secondary institution. Further, the main point of interest remained students who experienced academic literacy courses, and students needed to possess this experience to provide meaningful data for this study.

3.5.2 Application of Mix-Methods Approach & Comparative Analysis of Course Syllabi

Due to the nature of this study, and the expected limited nature of data collected, a mixed-method approach was taken. The limited data collected encouraged the research to take on a mixed-method approach rather than an experiential, phenomenological approach. Although noted by Lincoln and Guba (1985 in Flynn & Korcuska, 2018), the collection and analysis of data within phenomenological research can take place in the administration of comprehensive semi-structured interviews. Still, this study relies on the application of a mixed-method approach.

Further, several considerations were made in examining the most reliable and effective to be used in this study. As this study's goal was to uncover the gaps between the academic literacy courses of one HEI and the actual academic literacy skill acquisition based on the student's self-

assessment, it was essential to consider if specific research perspectives would apply and would not.For example, in designing this study, ontological and epistemological positions were considered but deemed not applicable to this particular study. Modern phenomenological approaches aiming to investigate, in this case, the student's past academic experiences, would peripherally emerge but would not be the primary focus or position taken. Other approaches, such as ontological or epistemological positions, could emerge in passing but would not be the main focus or intention of this study, as neither would interpretivism, an examination and explanation of human reality, a subcategory of the phenomenological approach.

Overall, the phenomenological research method will examine, in this study, the participant's experience and academic experiences and put aside the examination of academic literacy skills and the acquisition of these skills at present. Although Flynn and Korcuska (2018) contend that the phenomenological approach is well suited for methods such as semi-structured interviews and appropriate coding methods, including thematic analysis, when discerning qualitative data, the approach still needed to align or be deemed appropriate for this study. It was therefore determined that a phenomenological approach would not be a suitable position for this particular study.

In determining which approach or perspective would best suit this study and the research design, Rodgers et al. (2013) served as an example of how well a mixed-method approach could be applied when examining academic courses. Rodgers et al. (2013) focused on a similar premise that by administering suitable assessment methods, adjustments can be made to improve student learning. Although Rodgers et al. (2013) did not focus on academic literacy courses, the ideology was similar to that of this study in that improvement of assessments, leading to improvement of courses, can lead to the improvement of student learning and therefore improved skill acquisition.

Rodgers et al. (2013) approached the examination of investigating variables that can lead to improvements within academic assessments using a meta-assessment method. This process included a mixed-method approach of quantitative and qualitative data collection.

Rodgers et al. (2013) collected the primary quantitative data through rated assessment reports using a 14-item rubric. Each item in the rubric was specific to a category being examined. The data collected during the quantitative data collection served as the basis for the following semi-structured interview. The initial assessment report, the quantitative data collection phase, also provided the participant pool for the following semi-structured interviews. The semi-structured interview was recorded, and a thematic analysis was completed.

Adopting a similar approach to Rodgers et al. (2013), additional considerations leading to examining learning outcomes, content and overall Curriculum mapping and course outlines were determined to be a valuable exercise for this study.

By comparing the result of the data collection against the content of the course outlines, the intention was to determine if any discrepancies exist. Examining learning objectives is shared with other studies like Lam and Tsui (2016), who adopted this practice when examining courses in higher learning. According to Biggs and Tang (2011 in Lam & Tsui, 2016), examining course outlines and learning objectives is critical in determining if students or learners have gained the intended knowledge and demonstrated 'constructive alignment'. The examination of course outlines or syllabi was embedded into this study as well. Lam and Tsui (2016) state that this deliberative examination outline can also be deemed a problem-solving technique. Course outlines were considered a valuable tool in determining if inconsistencies in the content of instruction were present. The objective of this study was to determine if students were experiencing inconsistencies or where gaps may exist. Therefore, the examination of course outlines, particularly examining

them against the data collected through the online survey and semi-structured interviews, could provide some insight into the possible gaps.

3.5.3 Participants for quantitative data

The incoming cohort for each program is approximately 120 students, and the faculty hosts 16 academic programs. Moreover, participation was voluntary, and students were asked to participate in an online questionnaire. Besides flyers posted throughout the campus faculty buildings, participants were provided with a link to access the online questionnaire. However, only first and second-year students were recruited to ensure that those participants studying or directly involved with academic literacy courses would be included. Thus, 38 participants were selected and completed the online survey.

3.5.4 Participants for qualitative data

In contrast, students wishing to participate in the study's second phase were invited to complete a semi-structured interview. Thus, from 38 recruited participants, ten opted to respond to interviews.

3.6 Data collection

Research methods have undergone many changes. These changes involve the growing acceptance of technology and the use of technology when gathering information from participants. Many studies have used this technology and telephone and online surveys to collect data. These changes have been fueled by the growing technology field, which has made it

possible through smartphones, the Internet and computers (Fowler, 2014). Technology has made sample populations and participation in research studies accessible. Integrating information technology systems to collect data was done by administering the student questionnaire online. The benefits of online surveys include reducing possible research biases (Ball, 2019).

The data collection took place in two phases. The quantitative data was collected through an online survey. Participants from the online survey who wished to continue to the study's second phase then participated in semi-structured interviews conducted over the phone.

The purpose of the online survey was to collect students' perceptions of academic literacy courses, including the course content and instruction. The online survey provided information regarding academic literacy courses, and the semi-structured interviews provided additional and meaningful information on the foundational information gathered through the online survey.

3.6.1 Phase One, Online Questionnaire Survey

In this study, in place of the traditional paper-based survey, an online survey is better suited and allows for a larger sample size due to the advantages of online questionnaires, mainly accessibility, as indicated by (Lefever, Dal & Matthíasdóttir, 2007). As previously noted, applying technology in the form of an online survey seems to be common practice (Fowler, 2019). However, unlike Lefever, Dal, and Matthíasdóttir's (2007) study involving online research study questionnaires, this study did not involve gathering participants using email or an email directory. Instead, the participants were gathered using advertisements and notices posted around the school's campus, particularly in common areas. The rationale for collecting quantitative data through an online survey is accessibility and to provide the participants with a true sense of

anonymity. Further, the application of online surveys has been widely accepted throughout the research world (Bell, 2019).

Due to accessibility issues expressed by the institution during the proposal stage of this study and previously noted in this chapter, the researcher's ability to obtain contact information such as emails or enrolment lists were limited by the institution. As such, the researcher was required to recruit students using alternative means, such as posting flyers and making public announcements throughout the common areas of the campus and announcement boards. However, this did not diminish the process and the researcher was able to recruit a sufficient number of participants.

Further, in order to recruit participants while satisfying the restrictions placed by the institution as well as financial constraints, it was essential to employ creative techniques. By leveraging public spaces and online technologies, the researcher could recruit an acceptable sample size (Joseph et al., 2016). Postering in everyday and public campus spaces was the most reasonable method of recruiting participants. Although, the researcher risked recruiting participants who may not in fact be students of the HEI being examined, the majority of individuals frequenting the common campus spaces are students

The link to the online questionnaire was provided in the posted announcement. The online questionnaire began with an informed consent process required to introduce the participants to the study and ensure that participants provided consent. Once informed consent was established, participants proceeded to the online questionnaire (Bell, 2019). The online questionnaire was administered using Survey Monkey software. Participants had 14 days to respond to the questionnaire. In contrast, the set 14-day time frame was open to adjustments.

Once the data was collected through online surveys, the responses were stored on the researcher's computer (password protected) and kept for no more than five years upon completion of this study and destroyed. Furthermore, data collected from the online Survey Monkey was secured in a password-protected device. All information collected through the online questionnaire and the semi-structured interview remained confidential and only assessable by the researcher. The collected data did not involve individual identifiers, and all responses were anonymous. To ensure that the participants of the study are in fact students, the researcher trusted that the questions would be answered honestly. There were several questions within the online survey which would lead the researcher to believe that the participants were in fact students of the HEI.

The survey questions were designed to focus on the participant's perception of their academic literacy skills and experiences while attending the academic literacy courses at the institution. Specifically, participants were asked questions relating to their overall perception of literacy skills, how the current academic literacy courses have or have not met their needs and how the institution has assisted them in further developing their literacy skills through supports to facilitate and support academic literacy skills. These questions were designed using an ordinal scale and then examined and analysed. Students were prompted to disclose their opinions on instructional approaches and the extent to which the academic literacy course professor taught about specific academic literacy content. This data collection method was also present in a similar study by Armstrong, Stahl, and Kantner (2015), which also applied online questionnaire surveys utilising Survey Monkey and later examined these results with information collected from course outlines and materials (Armstrong, Stahl, & Kantner, 2015). Unlike Armstrong, Stahl and Kantner (2015), this study used an online survey that led to a semi-structured interview phase. Armstrong,

Stahl and Kantner (2015) conducted focus group interviews rather than one-on-one semi-structured interviews.

The questionnaire questions were designed and vetted several times before its publication on Survey Monkey. The online questionnaire, in addition to including an introduction explaining the purpose of the research and researcher contact information, participants provided consent to participate in this study. Further, to ensure all ethical standards were upheld, confirmation of ethical approvals by the University of Liverpool and approval by the examined institution were provided to participants (Bell, 2019). Before beginning the online survey, participants were informed during the consent process that their participation was voluntary and that they could exit the survey at any time.

The wording used to design and compose the questions was guided by research and focused on ensuring that all language used was clear and concise and provided participants with a wide range of options (Bell, 2019).

The online survey design also considered the validity and reliability of results and ensured that the survey produced meaningful results. The questions were posed to target specific concepts the researcher attempted to examine or discover without leading participants or skewing responses.

3.6.1.1 Application of Quantitative Data Analysis Methods

Online questionnaires have been used frequently in education as a means of collecting quantitative data (Limone et al., 2022). The data was collected using an online survey platform (Survey Monkey) which also provided a summary of the data collected.

In designing the questions within the questionnaire, the platform provided various options for collecting responses. When creating the online questionnaire, the options included using the Likert

scale, considered by Boone and Boone (2012) and, more recently, Alistair and Zhang (2020) as a favourable data collection method. The platform automatically provided descriptive statistics based on the data collected, including means, modes, medians, standard deviations and frequencies.

3.6.2 Phase One, The Semi-Structured Interview

In contrast to online questionnaires, a semi-structured interview was conducted with participants willing to share their opinions openly. The justification for conducting semi-structured interviews was to fully explore the participants' perceptions and other common themes identified during the online questionnaire survey. The use of semi-structured interviews is considered a powerful tool for collecting data from respondents. Semi-structured interviews allow participants to express their feelings and thoughts and allow the researcher to capture meaning otherwise missed in surveys and questionnaires. As such, semi-structured interviews were used in this study (Rabionet, 2011).

In contrast to surveys, the summary of responses was read back to the participant to review the content responses and amend if necessary. Moreover, another justification for conducting the semi-structured interview is that this process allowed the researcher to ask follow-up questions to clarify their opinions on their academic literacy aptitude, expectations of the academic literacy course, and instructional practices. Students were also allowed to express their thoughts on how prepared they felt to tackle literacy tasks within subject matter courses after completing the academic literacy courses.

However, during the online questionnaire, participants discretely provided their phone numbers which would be permanently destroyed once the data collection phase was completed.

Participants were assured that their phone numbers would be used only once for the semi-structured interview. Participants also provided a time convenient to participate in the interview process, and the researcher would call each participant during the selected time. The semi-structured interviews varied, although each was approximately 10 to 15 minutes. Ten of the 38 online survey participants participated in the semi-structured interview.

As a qualitative approach, the semi-structured interviews were conducted using a set of ten standardized questions. The same questions were used for all semi-structured interview participants to ensure consistency and organize and guide the conversation while allowing participants to expand on their responses as needed (Ahlin, 2019). This research method was used as a tool for developing an understanding of participants' perceptions of academic literacy courses because it allowed the respondents to engage in the process and discuss areas related to academic literacy courses, literacy experiences and opportunities for reflection related to participants' literacy skills (Ahlin, 2019).

One particular consideration, further examined as a limitation of the study and directly related to the design of the semi-structured interviews, was determining if the interviews would be conducted in person, over the phone or via video call. Based on previous research, in-person interviews would be favourable to phone or video call interviews (Johnson et al., 2021). It has been suggested by Johnson et al. (2021) that in-person interviews are superior to other modes of interviews and produce superb quality data.

Although the advantage of in-person interviews was noted, and the researcher initially intended to conduct in-person interviews while recording and documenting responses, limitations from the institution relating to the use of institutional facilities were an issue, as was time on the part of the researcher. As such, the researcher opted for phone interviews which were the most

reasonable option during the institutional approval process and would assure participants of anonymity. Further, telephone interviews have been noted to have some benefits, including the greater likelihood of participants being honest in their responses, particularly when discussing sensitive topics or issues (Trier-Bieniek, 2012).

The questions were designed to gather data and allow participants to elaborate where necessary. The semi-structured interview participants or phase 2 participants selected dates and times to facilitate an interview to conduct the interviews at mutually agreed upon dates and times. As these interviews were held over the telephone, the researcher transcribed the responses in hand-written notes and later transposed them into a Word document. These questions or prompts (Appendix A) would provide structure. Semi-structured interviews gather valuable information.

In this study, the information pertains to the in-depth account of students' experiences attending academic literacy courses. However, to accurately analyse and interpret this information in a meaningful way, an interview schedule provides a decoding method useful in the data analysis process and focuses on important information (Choak, 2012). The framework for the semi-structured interview explores how these experiences provide information in a broader field of study (Braun & Clarke, 2006).

To interpret the data collected from the semi-structured interview response, the researcher examined the responses and identified areas where the responses either were alike or differed from code or established categories, much like Choak, 2012 in the use of a scheduling tool. The researcher also counted and compared vital words or ideas from the transcribed responses. Following this, the data was analysed, and specific themes were identified. Finally, the researcher also made notes of outliers that were rare among collected responses. This

interpretation method was helpful and allowed the researcher to hone in on key themes and ideas useful for the third phase of the study. However, a thematic analysis approach was conducted to gain greater insight into the responses provided during the semi-structured interview (Braun & Clarke, 2012).

Incorporating a semi-structured interview to collect qualitative data allows the subjects to provide information that would not be captured using only an online questionnaire. Although this information may be subjective, it contains valuable information related to the experiences and opinions of students and their understanding and interpretation of academic literacy courses at the examined HEI. Combining both data collection methods allows participants to share complete and descriptive responses (Ponce & Pagan-Maldonado, 2015). In developing the semi-structured interview phase of this study, questions were formulated to guide, but not limit, participants and facilitate the expression of experienced and allow for information, themes and data to emerge. Although semi-structured interviews are well suited to collect data from participants, Colemen (2019) notes that interviews used to collect data are not independent of the social interactions that take place and largely depend on many variables specific to each participant. Another critical consideration of semi-structured interviews is the natural improvisation when interacting with participants, which can lead to verbal hesitations, pauses and repetition of responses (Jacob & Furgerson, 2012). To maintain an orderly sequence and limit the recording of unnecessary data, such as repetition, questions following a protocol serve as a procedural plan. Further, the transcription of responses will allow the research to omit unnecessary data, such as the repetition of information (Jacob & Furgerson, 2012).

Therefore, applying a semi-structured interview data collection method is favourable and will provide the participants with a valuable opportunity to share information while also allowing the researcher to filter relevant information while transcribing responses.

Focusing on highlighted topics or critical points is common when conducting thematic analysis on semi-structured interview data. The data exemplar provided by Evans and Lewis (2018) explored how the experience of higher education (HE) bears upon their engagement in civil society. Although this was part of a broader project aimed at examining relationships between higher education and civic engagement, interviews addressed questions about the underpinning of civic engagement. This study provides three considerations that have been applied to this study: (1) Is thematic analysis helpful for this study? (2) What is considered a theme? Furthermore, (3) How are the themes represented or identified within the data? (Evans & Lewis, 2018). As such, themes were identified and further discussed in the analysis chapter of this study.

Another study by Gunes (2019) is a practical example of using semi-structured interviews to collect data and develop a coding method for data analysis. Based on a series of questions, Gunes (2019) examines each question and each response given and develops a meaningful coding system to decipher a common theme and draw a conclusion based on common threads of information for each response given.

Much like Evans and Lewis (2018) and Gunes (2019), this study will apply a standard method of analysing the qualitative data collected from the semi-structured interviews, using themes and coding methods to find commonalities among the responses provided by the participants.

3.6.2.1 Application of Thematic Analysis Approach to Qualitative Data collected in Semi-structured Interviews.

This approach to examining the qualitative data collected will be further described in the following chapter. However, applying the approach involved a complete examination of the data collected and applying Braun and Clarke's (2012) six phases approach.

This approach to thematic analysis is intended to provide insight into the qualitative data collected. This study will be applied specifically to the data collected in the semi-structured interview. The six-phase approach involves reviewing or becoming familiar with the data, creating a first set of codes, searching, reviewing, identifying themes, and drawing conclusions (Braun & Clarke, 2012).

The responses collected through the semi-structured interviews were examined using a thematic analysis approach. This method of analysing data developed by Braun and Clarke (2006) involved examining the responses and identifying emerging themes and patterns. Braun and Clark (2006) noted a six-step approach to the thematic analysis. Although initially developed for psychology, this method is very applicable to examining the semi-structured interview responses in this study.

The responses collected from the semi-structured interview were transcribed, and each participant's response was noted. The responses were collected based on the questions asked and examined individually to identify common patterns. After reviewing and extracting themes from the responses, all themes were defined and labelled. To avoid confirmation bias, the responses were examined impartially, and all negative and positive themes were included.

The thematic analysis approach used in examining the responses from the semi-structured interview followed an inductive or semantic approach. Each response was examined to arrive at

common and related themes rather than establishing a set of preexisting themes or codes and determining if any relation exists between the responses and the developed codes (Alhojailan & Ibrahim, 2012).

Each response was examined, and specific phrases were highlighted and paraphrased to create each code describing the opinions of the students who participated in the semi-structured interview. At this stage, items that were considered relevant or meaningful were noted. New codes emerged as each response was examined. The emerging themes and codes were grouped, and common themes were summarised. Themes considered too broad or not applicable were removed. In contrast, other themes were highlighted and incorporated to develop a clear understanding of the data collected while ensuring that the themes were accurate representations and the labels were correct.

3.7 Phase Two: Examination of Academic Literacy Course Learning Objectives and Course Content

The study's second phase required collecting information from existing academic literacy course outlines. These outlines provided information on the learning outcomes and specific information about students' academic literacy skills acquisition who have completed this course. In addition, this data collection method is similar to Armstrong, Stahl and Kantner's work (2015), where course outlines and materials were examined to gather information about literacy courses at the university level. However, this study phase also examines academic literacy course outlines, like Armstrong, Stahl and Kantner's work (2015). In addition, the present study also examines and considers the content of the course outline and applies the essence of Armstrong,

Stahl and Kantner's work (2015), examining course outlines with specific questions targeting. However, this study will only apply some of the questions noted in Armstrong, Stahl and Kantner's work (2015). Instead, the practice of examining academic literacy course outlines and considering the importance of examining course outlines to determine if the content is relevant was applied, as presented in Armstrong, Stahl and Kantner (2015).

On the other hand, to accurately and objectively examine the contents of the course outlines, the present study used a conventional content analysis (Hsieh & Shannon, 2005). The primary rationale for using conventional content analysis was that it provided the researcher with a structure to examine the content outlined in the course syllabus. Conventional content analysis involves examining the information provided in the course outlines. This provides the researcher with information related to what the course will cover, what topics will be discussed and the areas of instruction.

Moreover, the researcher examined the contents of the course outlines by reading three years of archived course outlines. In addition, the researcher highlighted and noted vital concepts, developed a coding system, and later categorized them into clusters. These clusters and codes were used to compare the outlines' content to the data collection from phase 1 of the study. On the contrary, the research developed a colour coding system (Appendix B) which allows for a visual comparison of the information collected from the course outlines and how they compared or contrasted to the information collected from the survey and semi-structured interviews. Besides, the colour codes were based on the specific categories and areas defined as facets of academic literacy: writing composition, referencing, sentence structure, vocabulary, reading comprehension, understanding and using written works, locating information, problem-solving skills, and critical thinking skills.

Based on the above coding and criteria and in conjunction with the MASUS model, the researcher developed a new matrix to measure the quality of academic literacy courses. This will be further discussed in the Results chapter of this dissertation.

3.8 Phase Three: a comparative analysis of findings from Phase 1 and Phase 2

This phase involves the comparative analysis of findings gathered through online questionnaires and semi-structured interviews, along with examining course outlines. For this purpose, the emerging themes and patterns are used to develop a conclusion. Moreover, these themes and patterns are also the basis for developing an assessment tool or matrix tailored for academic literacy courses within Ontario. This assessment tool encompasses features of the MASUS model and theoretical perspectives such as the New Work Order and Adult Literacy Theory as well as factors to determine the quality of education in HEIs (Tsinidou et. Al, 2010). The primary purpose of this measurement matrix is to provide an effective tool for post-secondary institutions to use in determining the effectiveness of academic literacy courses and the areas that need improvement to create a practical academic literacy course where students will effectively acquire skills and prepare for the labour market. During this phase, the researcher analyses and understands why students are completing academic literacy courses yet still find themselves underprepared to cope with the academic literacy demands set by subject matter courses.

Developing an assessment or course evaluation tool is common and has been used within higher learning institutions to determine the value and effectiveness of courses. In particular, Fenton-Smith et al. (2018) advocated using an evaluation scale for curriculum reform, accountability and the meeting of learning outcomes, specifically for English language courses.

Hounsell (2008) also provided evidence supporting the usefulness of evaluation tools in determining the effectiveness of courses and teaching. Although teaching evaluations are not considered at this time, and the focus remains on evaluating the academic literacy courses alone, future studies may benefit from investigating instructional methods utilized and the quality of teaching within academic literacy courses.

Hounsell (2008) notes the evaluation of courses, particularly reviewing modules and ensuring the quality of education and instruction. Other scholars like Tsinidou et al. (2010) also have determined that measuring the quality of education is a sound practice, particularly when seeking ways to ensure the longevity of an institution. Although Tsinidou et al. (2011) have noted that measuring quality is complex, there is yet to be a concrete definition or understanding of what quality is within HEIs. This idea is also supported by Michael (1998 in Tsinidou et al., 2010). Much like the rest of the world, Accreditation agencies in Ontario have determined the importance of academic literacy skills within HEIs (Mudave, 2016). However, the methods used by the Ontario accreditation agency, The Quality Council and the Ministry of Training, Colleges and Universities use a mandate to ensure that publicly assisted universities maintain an ongoing quality of education in their academic programs within Ontario (Nicholson, 2011). Although a rigorous process with periodic audits, the mandate focuses on the overall academic programs rather than individual courses like academic literacy courses. One conclusion made by Nicholson (2011) in determining what quality education is suggests the existence of "outcome-based education." (Nicholson, 2011, p. 2).

The outcome-based education measurement, commonly used among faculty and measuring student knowledge acquisition or improved student skills supported by Nicholson (2011), requires a valuable method or tool to measure the quality of courses and student skill acquisition. For this

study, a tool has been developed to identify the quality of academic literacy courses by evaluating student knowledge acquisition and the effectiveness of these specific courses within an Ontario HEI.

The development of this tool was linked to the data and information collected through the online questionnaire, the semi-structured interviews, and the analysis of course syllabi. Further, the development of the evaluation tool is also based on similar principles noted by Tsinidou et al. (2010), which define quality characteristics in HEI courses. Tsinidou et al. (2010) base the quality of education in HEI on tangible factors, the accuracy of content being taught, the wiliness of faculty to provide instruction, the rapport developed between learner and faculty and the attention and care provided to the learner.

All of these have been considered; however, for this study, combined with many limitations placed on the researcher by the Research Ethics Board of the Ontario HEI being examined, all characteristics cannot be addressed within this study. However, as it aligns with the research questions and purpose of this study, the main goal is that the content of the academic literacy courses will be planted as a critical component within the evaluation tool in conjunction with the information collected throughout the study.

The application of this course evaluation tool is intended to determine if students have been exposed to all the necessary content within the academic literacy courses and if they received a sufficient amount of instruction in these areas of academic literacy to gain sufficient levels of academic literacy skills, thereby deeming the academic literacy course within the Ontario HEI as effective. Many evaluation methods intend to correct and improve, as noted by Hounsell (2008). This tool also is intended to identify areas needing improvement and, therefore, further in the

development of the academic literacy courses offered within the Ontario HEI and further in the development of student academic literacy skills and academic success.

Hence, the following stage breaks down the information when the data has been gathered and arranged. Data Analysis is viewed by Creswell (2015), Gall et al. (2007), Nassaji (2015) and Springer (2010) as the part where natural exploration occurs. According to Nassaji (2015), data analysis is a significant part of the research since the findings of the entire research depend on the method chosen for analysis. This is where the outcomes are examined and investigated to get to the profundity of the core of exploration. Information Analysis is where the derivation occurs (Nassaji, 2015). Consequently, inferential statistical analysis, including graphical representation, was used for the quantitative data. Besides, there are various motivations behind why this is utilized, as this permits the researcher to change over the numeric (Quantitative outcomes) to be introduced in an intelligible structure.

The qualitative data collected through interviews were analyzed through thematic analysis. According to Braun & Clarke (2012), the thematic analysis technique aligns with the themes following the research questions to articulate them appropriately. The below figure shows the Examination of Academic Literacy Courses, Mixed-Method Approach (Adapted from Creswell & Plano Clark, 2018).

Table 3.8 Examination of Academic Literacy Courses, Mixed-Method Approach (Adapted from Creswell & Plano Clark, 2018)

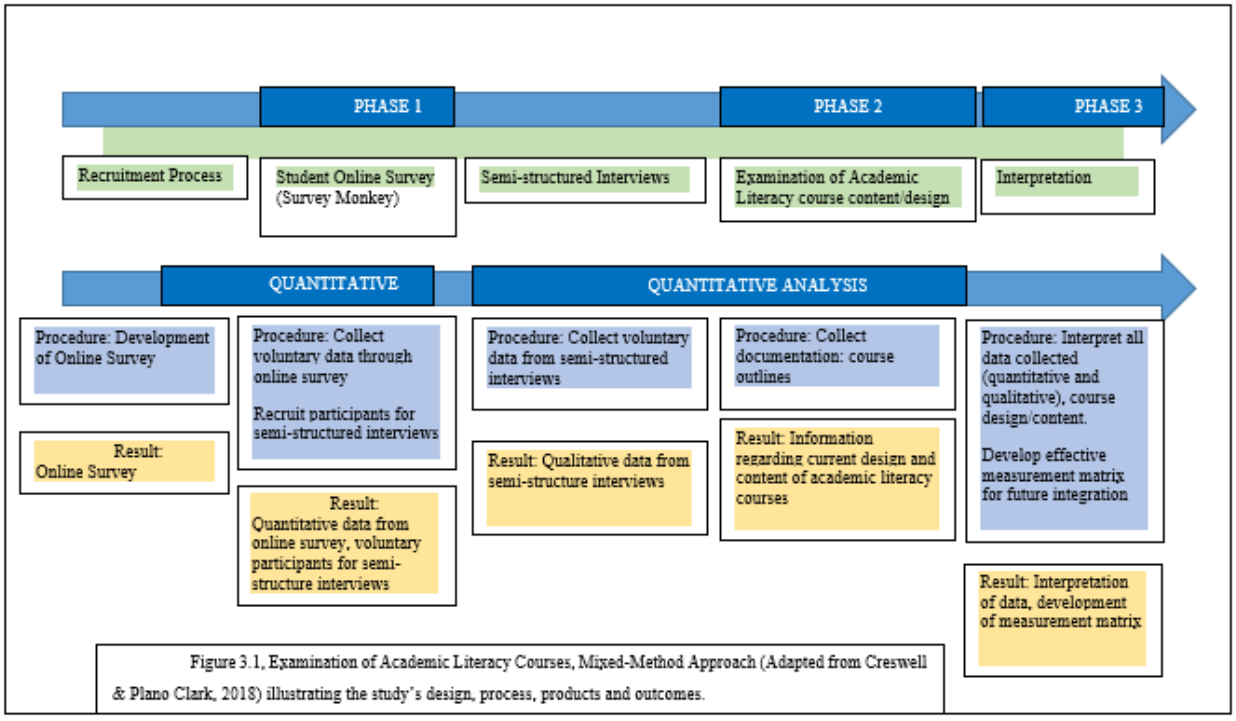

Figure 3.1, Examination of Academic Literacy Courses, Mixed-Method Approach (Adapted from Creswell & Plano Clark, 2018) illustrating the study's design, process, products and outcomes.

3.9 Limitations of current research design

The present study incorporated a mixed-method research design. Asamoah (2014) contended that this research design has many challenges and limitations. Although this method is flexible and connects to other methodological approaches, including action research, it also has some areas for improvement. Ivankova and Wingo (2018) noted that it is inferior to action research methodology. Ivankova and Wingo (2018) connect the mix-methods approach and the action research approach and suggest that research studies can apply the two methodologies together. However, in this study, limitations such as time and resources make using this framework

unattainable. Instead, considerations for future research may consider the application or collaboration of a mixed-method and action research method.

Greene, Caracelli and Graham (1989 in Şahin & Öztürk, 2019). The study examined the mixed method and determined that subcategories within this research methodology are determined by dominancy. Another study by Johnson and Onwuegbuzie (2004 in Şahin & Öztürk, 2019) classified nine mixed-method approaches based on the qualitative versus quantitative data collected order or level of importance. These studies focus on education science and therefore are meant for this study. Although this study follows a qualitative dominancy of data, based on Johnson and Onwuegbuzie (2004) and Şahin and Öztürk (2019), leaning towards one dominancy or another will not lead to any disadvantages as to the outcome of the data collected.

In contrast, although an action research method would have been favourable and would allow the researcher to design an alternative design, the researcher was aware of the limitations, including limited time and resources. An action research study would require a far greater allocation of resources and time than a mixed-method approach. Moreover, another limitation of the current research design is that it incorporated a sample from specific Ontario institutions to explore the effectiveness of academic literacy courses in post-secondary institutions. However, this would limit the findings to the context of only Ontario and may result in biases if implemented in another institution or educational setting.

3.10 Research Ethics

This study meets the standards for the protection of human subjects. The researcher did not anticipate any risks to the participants and ensured that the subjects' personal information was preserved. All ethical standards of the University of Liverpool Virtual Programme Research Ethics

Committee (VPREC) and the HEI Research Ethics Board were upheld. According to Kaewkungwal & Adams (2019), ethical consideration and obtaining permission to access the participant's details are the first steps taken before any data collection. While the researcher considered maximizing the positive outcomes of the research process, it was not at the cost of harming any participants. The following precautions were taken to ensure that this study followed all ethical practices and considerations. The researcher obtained permission from all institutional bodies and stakeholders. The Ontario institution's Research Ethics Board examined and provided permission to conduct the study after the proposal application and process were completed and adequately executed. Participation in the study was entirely voluntary, and students who did wish to participate were provided informed consent and informed that should the participant wish to discontinue participating, they could do so without any consequences.

Each participant was expected to complete a consent section when participating in the online survey phase of the study and again during the semi-structured interview. This consent allowed the researcher to collect demographic information, student opinions, and experiences directly related to academic literacy and the corrective courses in process or completed. The researcher stored all data collected in an electronic form in a secure location. As the principal and only researcher for this study, the researcher will have access to this information, and no other parties will have access to this information. All information collected will not have any personal identifiers to maintain anonymity.

Participants were provided with a link in order to participate in the study. Participants who accessed the online survey reviewed a disclosure statement at the start of the online survey. Subjects were explicitly informed that participation in the study would be voluntary, and they could exit the survey and stop the process at any time. Participants were allowed to ask questions

through email or in the space provided in the online survey. The participants' willingness to participate was acknowledged, and consent was granted before beginning the study questions in the online survey.

Once completing the survey, participants were invited to participate in a short semi-structured interview. If the participants wished to participate, students would provide their emails, phone numbers and a convenient time. Participants were assured that anonymity would be upheld and that all personal information would be held for only a set time and later deleted. Participants were advised that their names or any identifying features or markers would not be used in the study, and their programme of study would not be identified. The semi-structured interview was conducted via telephone, was approximately 10 – 15 minutes long, and followed the previously established semi-structured interview protocol. Each interview was transcribed.

All data collected during the online survey and the semi-structured interview transcribed responses were assigned anonymous identifiers of *P* referring to *the participant* and a number. Participants were assigned a number (Participants 1 – 10). This method of assigning an identifier provided adequate anonymity. However, no identifiers have been assigned to the responses and data collected. Two mechanisms were used to collect information. An online survey was used to collect demographic variables and opinions of student experiences. A semi-structured interview provided insight and qualitative information about the participants' relationship to literacy and their experiences with academic literacy courses.

All information collected during the interview was kept on the researcher's password-protected computer. No recordings were made to ensure privacy and confidentiality for participants; however, to ensure the accuracy of the data collected, the researcher transcribed

responses. The transcripts will be held securely for up to five years and destroyed shortly after that.

The researcher has a connection with the Ontario institution being examined and the sample population, and some issues may arise surrounding anonymity. However, as the participants are being recruited randomly through a public advertisement posted in common areas throughout the campus, no significant issues or matters of conflict of interest appear to be present during either of the study's quantitative or qualitative phases. Anonymity has been upheld as participants are not required to provide their names or identify characteristics when completing the online survey or the telephone interview.

Data was collected after permission was granted by the Research Ethics Board and the University of Liverpool Research Ethics Board to maintain reliability and uphold ethical research principles. All Research Ethics Board and the University of Liverpool Research Ethics Board guidelines for Human Subjects Safeguarding were followed. The researcher ensured that all the survey responses were anonymous and that all assessment data remained confidential. All research data have been stored on files securely housed and will be destroyed in five years.

Participants were informed that all the data collected online and during the semi-structured interview would be confidential. Gajjar (2013) indicated that ethical contemplations while leading the examination have a tremendous effect on safeguarding the entire exploration's relentless quality and legitimacy. Thus, no antagonistic circumstance is available concerning the current study's ethical concerns. The protection and security of the data were not compromised as they contained individuals' personal information. Likewise, it was clear while conducting the interview and gathering the data.

Furthermore, the current study ensures that the four principles of research ethics ought to be fulfilled to stay aware of the relentless nature of the study. In any case, all respondents were granted the chance to be informed regarding the research purpose. In such a way, they were drawn to sign a consent form. When respondents sign this form, they hold the honour to pull out from the present study without referring to any clarification or going through any disciplines, which fulfils the fundamental research ethics principle - autonomy. The researcher ensured that the respondents' information was not changed, subsequently giving value to the respondents, which is the third principle of research ethics.

The researcher ensured that the respondents' information would be handled ethically. Moreover, they were delegated numbered identifiers to ensure that the researcher safeguarded their security. The data quality was guaranteed, and the value was in keeping with the authenticity and credibility of the current study. To support the ethical practices within the present study, the researcher avoided biases in each part of the study involving the research method, data analysis, and interpretation by remaining impartial. The result of this study can be utilized in future studies.

3.11 Measures for Ethical Research Practices

All participants were informed of the confidentiality of qualitative data collected from surveys and interview responses, and information collection will be voluntary. Participants were free to disengage or withdraw from the study at any time, and no harm or stress was applied to them during the study.

3.12. Limitations of the Research Methods

The limitations of a study are commonly associated with weaknesses within the research design and can ultimately alter the results and conclusions of a study. The researcher of this study has made all efforts to curb these limitations, and by curtailing these limitations as much as possible, the researcher has conducted the study and gathered as much meaningful data as possible. However, it is also imperative to present the study's limitations to maintain transparency (Ross & Bibler Zaidi, 2019). To ensure that the presentation of the limitations of this study is outlined, implications, alternatives, actions taken to mitigate the limitations and considerations for future research are described.

The study or examination of academic literacy courses has several limitations. Firstly, according to Lea (2004), examining aspects of the educational environment can sometimes be controversial. Much like the academic literacy courses examined in this study, the findings may or may not be well received by the institution being examined. Lea (2004) describes research outcomes and the implementation of newly developed methods of instruction or assessment as complex to apply outside of the scope of research and into the actual educational environment. Therefore, the design of this study may provide outcomes and recommendations that, while in the research setting, may be deemed remarkable or exciting, prove difficult to put into practice. The application of the study's results will also be met with institution procedures and practices, course design and ministry curriculum mandates (Lea, 2004).

In the design of this study, certain limitations relating directly to the sample population were present before the research study's data collection phase. The researcher was restricted to the recruitment of participants, possibly altering the type and size of the sample population recruited for the first stage of *Phase One*. The online survey recruitment process stagnated due to

restrictions related to how the researcher was able to access participants, which ultimately led to advertisements posted throughout common campus areas. This led to a self-selection process rather than the researcher extracting participants from a larger, more specific pool of students. Although it was beneficial to ensure a random sample size was collected, it was no longer possible to concentrate and ensure that the participants were extracted from a large pool of participants who did complete the academic literacy courses at the HEI being examined. Also, due to the restrictions, the participants who participated in the online survey could not be verified as students on the HEI.

However, questions embedded in the survey were used to specifically identify if the participants were students rather than members of the public who completed the survey. Question directly relating to the participant's program affiliation and relationship with the academic literacy courses were also included. Participants who were not students at the HEI would not be able to accurately answer such questions. A full list of the questions are noted in Appendix A. Also, the survey, although a source of information, served as a recruitment tool for the semi-structured interview to circumvent the restrictions of accessing students in the HEI being examined in this study.

According to Westland and Westland (2015), randomness is imperative to ensure valuable results and allows for the application of probability theory; however, this method limited the researcher to honing in on a specific group of students who had completed the academic literacy courses at the HEI. To accommodate the randomness of the sample size, the online questionnaire included questions allowing participants to indicate if they had attended the academic literacy course, if they were in the process of completing it at the time of the study or if they still needed to take it. However, it should be noted that according to Clougherty et al. (2016), the issue of

self-selection and self-selection bias is present when non-random samples are selected to estimate causal relationships. In this study, self-selection has removed some bias. However, it has also limited the focus of the participant pool to students who have completed the academic literacy courses. Adeoye-Olatunde and Olenik (2021) confirm the importance of a random sample, suggesting that the randomness of the sample can ensure that different perspectives can be noted.

Several methodological limitations were present in the development of the semi-structured interviews. As the semi-structured interview questions were designed and written before the administration of the online survey, the questions were written without any insight that may have stemmed from the online questionnaire responses. The recruitment process for the semi-structured interviews was voluntary. The participants who completed the online survey were allowed to volunteer in the second part of *Phase One*, the semi-structured interview. The interviews were also restricted and could not be in-person and use any HEI facilities. Therefore, participants were instructed that the interviews would be conducted over the phone and that responses would be transcribed. The sample population in the qualitative data collection can affect the dependability of the data and the results (Adeoye-Olatunde & Olenik, 2021). The questions were initially intended to be used as a guide, provide the natural flow of conversation, and have follow-up questions embedded into the protocols. However, after the HEI's research ethics board heavily edited the questions, the informal interview process was not as present and, although still maintaining a semi-structured format, did not provide as many opportunities for probing follow-up questions. Many of the questions may have been altered, resulting in closed-ended responses, which may have led to the limitations in the responses and, ultimately, the

richness of the interview results (Adeoye-Olatunde & Olenik, 2021). The responses, once collected, would be examined using a thematic analysis approach (Clarke et al., 2015).

3.13 Summary

This research methods chapter is intended to provide the reader of this dissertation information related to the development and design of this research study and the methods employed to create appropriate research questions, data collection methods and analysis goals. Ethical considerations and efforts are discussed. This chapter explained the tools and processes used throughout this study, including how collected documentation and data were examined, coded and interpreted.

The chapter also explained why the researcher used a mixed-method approach, notwithstanding the noted limitations. This chapter provided the reader with a clear outline of the study's progression through three phases and identified each phase's importance. The researcher attempted to take all precautions to maintain the utmost ethical practices during this study and future data treatment. The following chapter introduces the reader to the analysis of data collected in phases 1 and 2 and a detailed description of the newly designed evaluation matrix for academic literacy courses.

Chapter 4 – Results

4.1 Introduction

This study aimed to investigate the effectiveness of academic literacy courses offered within an Ontario HEI. As a corrective measure, these courses are intended to provide students with the necessary literacy skills to cope and flourish in academic programmes at a large-sized urban post-secondary institution in Ontario. This study administered an online survey in the first phase and collected data on the general demographics of participants and opinions and experiences related to academic literacy courses. Thirty-eight students participated in the online survey and were invited to participate in a semi-structured interview where a set of prepared questions guided their responses. Ten students participated in the semi-structured interview.

This study examined the responses provided by students in both the online surveys and semi-structured interviews and the content of academic literacy course outlines. A comparison analysis was conducted.

Three phases of this study, tables and visual representations, complemented the summary provided. Vignettes and excerpts from the interviews illustrated vital themes and developed the measurement matrix introduced towards the end of this chapter. The first part of this chapter focused on the data gathered from an online survey, and the second section discussed the results of semi-structured interviews. The third section provided the data collected from examining the academic literacy course outlines. Lastly, this chapter also provides a detailed comparison of the data collected in the online survey, semi-structured interviews and the content examined on course outlines. This chapter examined the data collected and introduced the new design evaluation matrix.

4.2 Findings of Online Survey

The Ontario institution examined in this study hosted several academic programs. Most academic programs admit approximately 120 students each year. Thirty-eight participants participated in the online survey, and of those 38 participants, ten continued with the research study and voluntarily agreed to participate in the semi-structured interview.

Moreover, the researcher noted that the response rate might have been much higher with a longer data collection window. For example, the researcher collected responses over 14 days. However, according to Johnson and Christensen (2012), the ideal response rate is over 70%.

Nevertheless, much like Gallo (2021), various studies collected a much smaller sample size of 20% when completing a study focusing on the Professional Development Practices of Academic Advisors in the Ontario College System and collecting data over 14 weeks (Gallo, 2021). This is a closely related example of sample size and data collection within the Ontario post-secondary environment. Therefore, the sample size for the projected dissertation study, at 15.8% and with a data collection window of only 14 days, seems reasonable. However, the response rate may only reflect some students of the investigated institution's overall student population.

Using an ordinal scale, the design of the survey questions allowed participants to rate their opinions based on statements. Ordinal scales provide a quality rating, much like Likert scales and other scales using values between 0 and 10. Mishra et al. (2018) indicate that the ordinal scale provides estimates but needs more information regarding the level of variation between each response. In contrast, Dalati (2018) contends that the ordinal scale is a clear-cut, factual information type that provides standard, ordered classifications and unknown distances. This information exists on an ordinal scale, one of four degrees of estimation portrayed by

Stevens in 1946. Although a dated source, Stevens (1946) is a foundation source supporting the value of ordinal scales. Participants of this study could move a marker on a bar from zero to one hundred, with zero representing a *strongly disagree* response and one hundred representing a *strongly agree* response. The participants shifted the marker to a value they felt represented their response accurately, thus, representing the responses from the online survey. The online survey was divided into two sections. The first section is based on the demographical information of the participants, while the second section demonstrates the survey question relevant to the efficacy of academic courses in students.

4.2.1 Demographics

Before addressing further questions, the participants who accessed and completed the online survey were first questioned about their age, the geographical community of Ontario where participants completed their high school studies, and the program in which they are enrolled. The survey segment examining the subject's background info was assessed through frequencies and graphical illustrations. Thirty-eight students from an Ontario college participated in the current study. Subsequently, the results of the participants are displayed underneath.

Age

The first demographic variable inquired from students was their age. The graphical demonstration of the distribution of age is represented in Figure 4.1. Figure 4.1 demonstrates that most of the participants involved in the study are between 18 and 24 years of age, representing 65.79% of the total participants. However, participants belonging to the 25-34 age category represent 18.42%. On the other hand, participants in categories 35-44 and under 18 are relatively low, representing 13.16% and 2.63% of the overall participants, respectively. The outcomes

signify that the maturity levels of the participants with the majority age category (18-24) may influence the results inferences. In addition, the youthful nature of another category under 18 and 35-44 might also affect research interpretations since the participants' age may indicate exposure to academic literacy skills and experience and can define how well certain age groups will perform academically (Pearce, 2017).

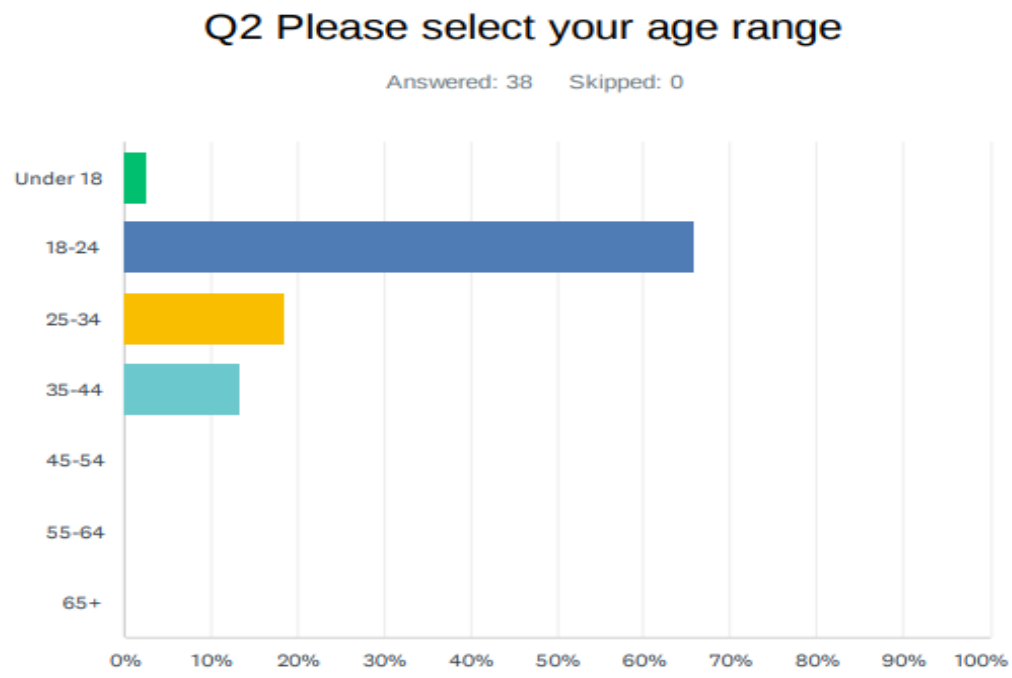

Figure 4.1: Age – Demographics

Geographical community of high school studies

The 2016 *Annual Report for Ontario's Public Funded Schools* (People for Education, 2016) concluded a discrepancy in the quality of education and allocation of academic skills and competencies between urban and rural schools. It is, therefore, an important consideration when examining Ontario post-secondary students. Students admitted into post-secondary institutions may originate from various municipalities and geographic areas, and academic levels and competencies may differ. This data was essential in understanding the level of preparedness

these students may have had. Although many factors influence an individual's preparedness for higher learning, the quality of secondary school education is an important consideration. This is directly linked to educational funding. Each school board receives funding from the provincial government. However, these funds were not equally distributed, and this inequity in resource distribution can impact the quality of education (Ostrander, 2015).

The graphical demonstration of the distribution of this demographical variable is represented in figure 4.2. Figure 4.2 demonstrated that half of the 55.26% involved in the study had completed their higher education in Toronto. In contrast, the second most geographical community observed through the analysis was Peel representing 23.68% of the participants. In addition, 18.42% of the participants have not mentioned their community of higher studies, but they still need to complete the geographical communities listed in the survey. On the other hand, participants who have completed their high studies from other geographical communities, including Halton, Waterloo, and York, represent 2.63%, 5.26%, 2.63%, and 2.63%, respectively. Each of these municipalities is allotted a specific yearly budget from the province of Ontario. Each of these municipalities and school boards received varied amounts. For example, while the Dufferin-Peel School board received approximately 24 million dollars, the York Region school board received approximately 17 million, and the Toronto school board received approximately 26 million dollars (Delairem, 2021).

The study participants generally attended secondary schools in the Toronto and Peel district, which according to Delairem (2021), exhibited discrepancies in their yearly financial budgets and funding distribution. In comparison, a tiny percentage of students surveyed attended schools in the York Region, where they have been issued a significantly smaller budget.

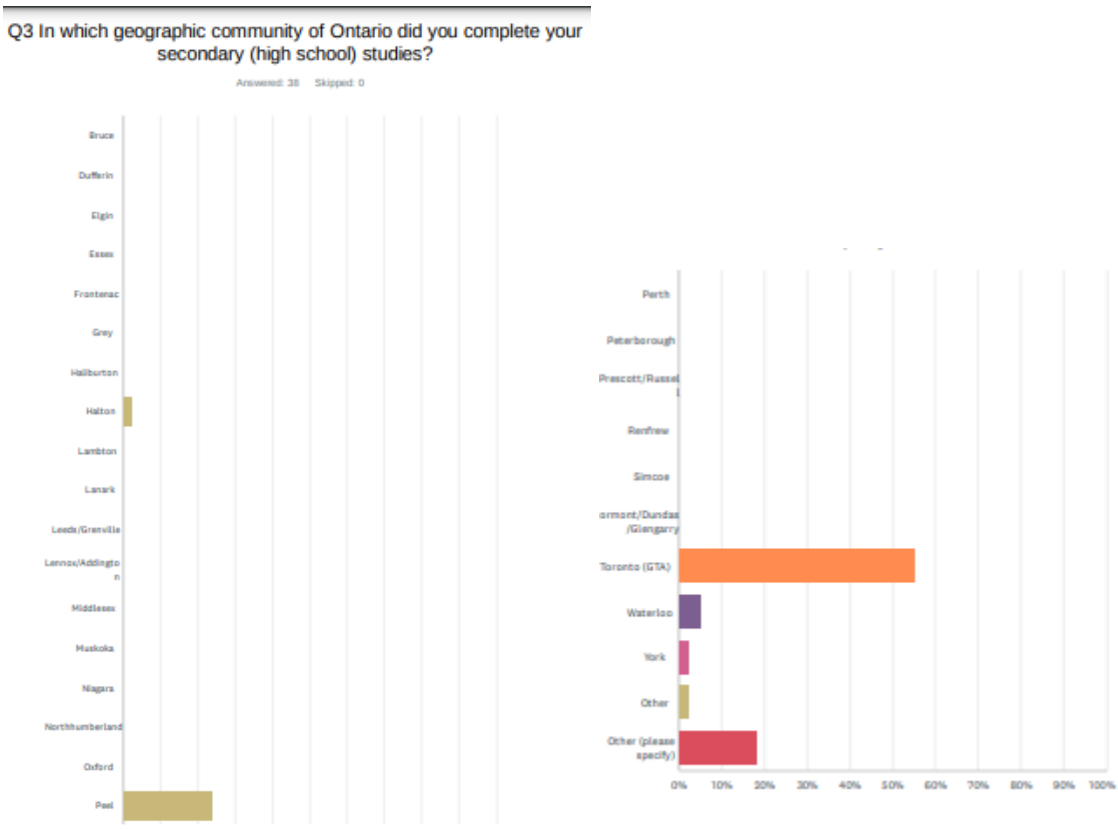

Figure 4.2: Geographical community – Demographics

Programs enrolled

The third demographic variable inquired from students was regarding the program in the faculty in which they are enrolled. The graphical demonstration of the distribution of this demographical variable is represented in figure 4.3. Figure 4.3 illustrates that most participants have enrolled in the community and justice services program, denoting 84.21% of the total participants. Whereas 10.53% of the participants were enrolled in different programmes; however, these programs were not listed in the online survey. On the other hand, participants enrolled in Social Service Worker represent 2.63% of the participants. In contrast, 2.63% of participants responded that they were enrolled in programs offered by the HEI outside the above-noted programs.

The majority of participants were enrolled in the same academic program. The campus and shared spaces where the recruitment was conducted are heavily frequented by students attending the same program, as are the physical classes, labs and other facilities designated for specific programs, including common student spaces. The common space where the postering took place is frequently occupied by students attending Community and Justice Service-related programs and therefore produced a significant number of participants from this field of study.

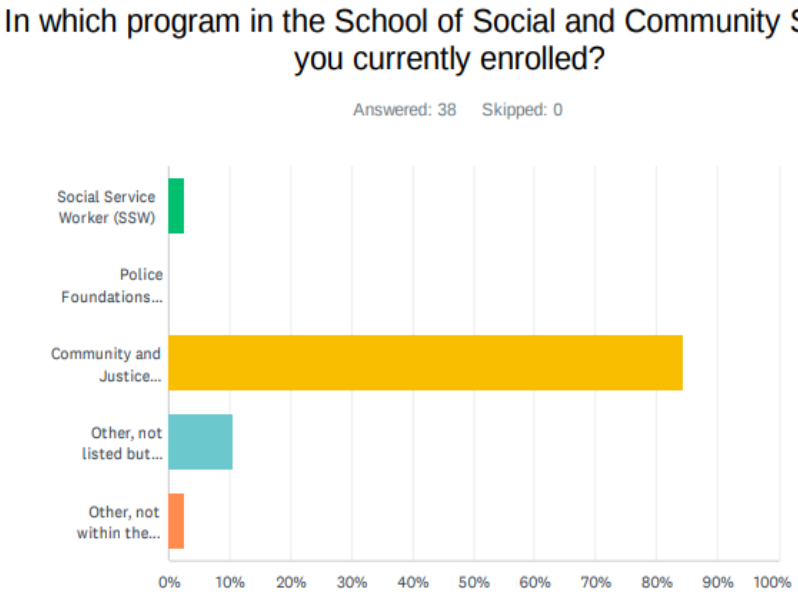

Figure 4.3: Program enrolled - Demographics

Participant familiarity with academic literacy courses

To find whether the academic courses effectively provided and improved students' academic literacy skills, they were asked whether they had completed the course within the last 24 months. Figure 4.4 demonstrated that more than half of the participants, representing 57.89%,

have completed the academic course within the last 24 months. However, 31.58% are currently enrolled. Nevertheless, only 13.16% of the participants have yet to complete or are currently enrolled in the college's academic writing courses.

These outcomes suggested two possible conclusions. The first consideration is whether this 13.16% not currently enrolled in the course possessed adequate academic writing skills and therefore did not need to enrol in the academic course to improve their literacy skills. The second consideration is that this small percentage indicated that they have not enrolled. This may be for various reasons, including financial constraints. This aligned with Hemmerechts, Agirdag, and Kavadias (2017), who found that socioeconomic and political issues are the main barrier to students' basic academic literacy skills. Besides, these results are supported by Anisef et al. (2011). According to Anisef et al. (2011), a student's decision to study academic courses is associated with socioeconomic status and cultural background. Even though post-secondary education is accessible, socioeconomic status and social inequality impact students pursuing academic programs and their ability to complete courses. Hemmerechts, Agirdag, and Kavadias (2017) showed that socioeconomic status impacts accessibility, limiting educational opportunities. Although an important factor in academic success, socioeconomic barriers will be further discussed in the final chapter of this study.

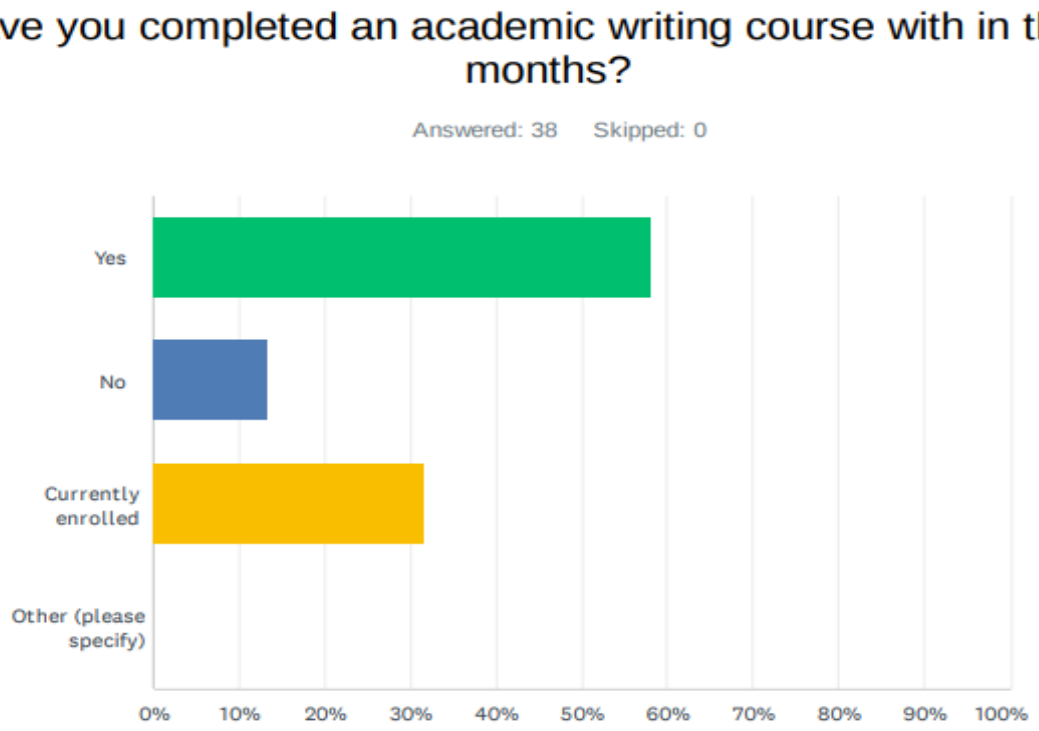

Figure 4.4: academic course within the last 24 months

Participants were asked to identify areas of academic literacy they feel need improvements. The results demonstrated in figure 4.6 showed that 60.53% of the participants need improvement in referencing numerous styles, including APA and MLA. However, the remaining areas of academic literacy were also noted as needing improvement. For instance, Figure 4.6 indicated that 57.89% of the participants need improvement in composition and essay writing, while 42.11% want to improve their sentence structure. It was further examined that participants wanted to improve their grammar and spelling in post-secondary education, representing 28.95% and 23.68%, respectively. At the same time, only 1.05% of the participants

were interested in improving their reading comprehension. In contrast, a minimal number of participants representing 7.89%, need to improve their vocabulary.

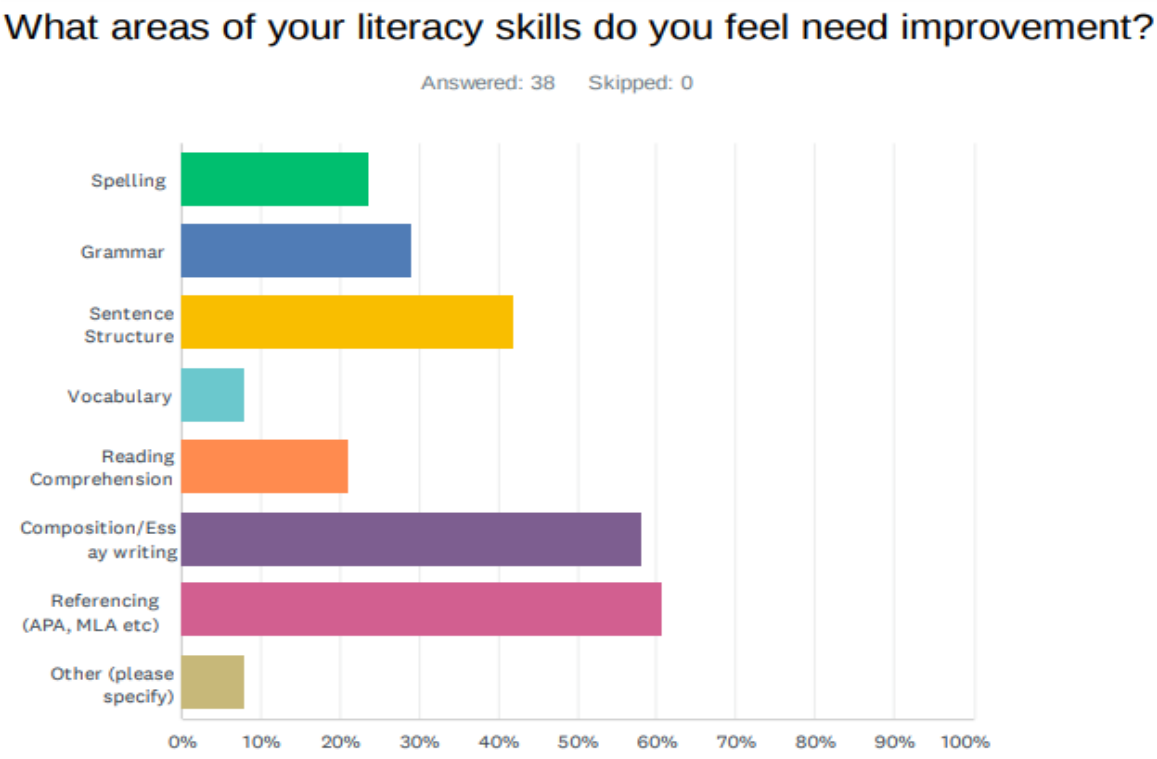

Figure 4.6: literacy skills in which they require improvements

The ordinal scales were used to rate the participants' opinions and experiences and adequately measured the responses collected. Participants were expected to respond using an ordinal scale of 1 to 10, where 1 would represent the participant *Strongly Disagreeing* with the statement and 10 representing the participants S*trongly Agreeing* with the statement given. The responses on the ordinal scale were also interpreted with 5 representing a neutral response and a response between 1 to 5 representing *Disagree* while a response between 6 to 10 would represent a response of *Agree.* The data collected using the ordinal scales allowed drawing on comparisons and efficiently categorized the responses. As the responses collected were intended to capture the

participants' opinions, no specific claims can be made that those responses can accurately depict the attitude of all students.

The responses were collected, and descriptive statistics are provided for each question below. The descriptive statistics in the present study included measures of central tendency and dispersion. The applied descriptive statistics allowed the researcher to describe the characteristics of the data collected and summarize the data. Although the descriptive statistics did not provide conclusions about the participants, it provided the opportunity to use inferential statistics. Significant components were discussed as descriptive statistics, mean, standard deviation, kurtosis, and skewness. The uses of descriptive statistics were heavily based on the use of ordinal scales and the complexity of converting data from ordinal scales into statistics. Therefore, descriptive statistics provided an opportunity to understand the data collected. Descriptive statistics depicted the behaviour of the dataset test (George & Mallery, 2018). Thus, descriptive statistics was central since it perceived the tremendous piece of data as an immaterial sum. The descriptive statistics clearly illustrated where students needed additional academic literacy instruction. The mean depicts that the participants mark the value of the common dataset at the time of the study. At the same time, the SD value depicts the mean distance between the mean and genuine dataset values. It showed how the values of the real dataset were diverted from its mean values and exhibited abnormalities in the dataset. Moreover, it shows the deviation from the mean values (Mishra et al., 2019). In addition, the kurtosis values and skewness in descriptive statistics depicted the dataset normality.

Participants were asked whether they had adequate literacy skills before entering post-secondary studies. As mentioned above, participants were expected to respond using an ordinal scale of 1 to

10, where 1 would represent the participant *Strongly Disagreeing* with the statement and 10 representing the participants strongly agreeing with the statement given. Table 4.1 represents the responses of participants when asked their perception of possessing adequate literacy skills when entering the program. Of the 38 participants who completed the online survey, the average response was 6.8 on a scale of 1 to 10. A significant number of participants answered that they *Agreed* that they possessed adequate literacy skills when entering the program. Although the standard deviation (σ= 19.7) for this data set indicated that the distribution is quite broad, leaning toward a response that indicated that students felt they had adequate academic literacy skills while entering the program. This is an important consideration. Students self-identified their literacy aptitudes as sufficient when entering their HEI studies.

Table 4.1: Descriptive statistics of adequate literacy skills before entering examined HEI

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I already had adequate literacy skills when I entered my program	38	68.16	19.790	-.432	.383	-.296	.750
Valid N (listwise)	38						

The survey responses, as reported in Table 4.2 indicated that a large number of participants felt that they had weaknesses in the area of academic literacy at the time of the survey. Although 65% of participants responded to a previous question confirming that they had completed their mandated academic literacy courses, a large number of participants responded that they *Agree* that still felt they were experiencing weaknesses in literacy with an average response of 6.7. This data set's standard deviation (σ= *28.15*) indicates a wide distribution from the mean. The data collected

from this survey provide profound information. Students indicated that they continue to experience literacy weaknesses.

Table 4.2: descriptive statistics of experienced weaknesses in literacy

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I currently have areas of weakness in my literacy	38	67.08	28.152	-.589	.383	-.735	.750
Valid N (listwise)	38						

The outcomes of the descriptive statistics, as reported in Table 4.3, further indicate that participants who had completed the academic literacy course or were enrolled at the time of the survey indicated that they were leaning towards a *Disagreed* response to the statement that the academic literacy course improved their overall literacy skills (M=59.29). This indicates that participants felt they did not feel that possessed adequate literacy skill acquisition after completing the academic literacy course.

Table 4.3: descriptive statistics of participants who had completed the academic literacy course or were enrolled

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The academic writing course that I complete improved my literacy skills	38	59.29	24.571	-.413	.383	-.661	.750
Valid N (listwise)	38						

Moreover, participants were asked if they felt more confident in their academic literacy skills after completing the course. According to their responses, the average of participants

*Dis*agreed did not feel more confident with their academic literacy skills upon course completion, as reported in Table 4.4.

Table 4.4: descriptive statistics of felt more confident in their academic literacy skills

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The academic writing course that I completed made me more confident in my literacy skills.	38	58.50	26.686	-.338	.383	-.819	.750
Valid N (listwise)	38						

On the contrary, participants were also asked if they felt their literacy skills were adequate while attending their program. The results shown in Table 4.5 indicated that participants *Agreed* that they did not possess adequate literacy skills while attending their subject-focused courses.

Table 4.5: descriptive statistics of literacy skills were adequate while attending their program

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
While attending the HEI being examined, I sometimes felt that my literacy skills were inadequate	38	46.00	28.856	.045	.383	-1.148	.750
Valid N (listwise)	38						

In contrast, after completing the academic literacy course or enrolling, the results reported in Table 4.6 indicate that participants, responded and *Disagreed* that their weaknesses were adequately addressed through the academic literacy course. However, participants were asked to

rate how effective the academic literacy instructor was in addressing areas of academic literacy that participants felt were weak. Again, participants seemed dissatisfied and indicated that the professors should have address their academic literacy needs or weaknesses.

Table 4.6: Descriptive statistics of weaknesses were not adequately addressed through the academic literacy course

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The academic writing course that I completed effectively addressed my literacy weaknesses	38	63.55	25.111	-.855	.383	.667	.750
Valid N (listwise)	38						

The online survey results indicate that participants who completed or were enrolled in academic literacy courses felt that their academic literacy skills were adequate before attending the courses, with a slight improvement in their confidence level or perceived aptitude. Participants also indicated they felt their needs were met through mandated academic literacy courses, although also indicating that they continued to struggle with literacy skills even after having completed the academic literacy course. The descriptive statistics also indicated a very widely spread curve. The results suggest that most responses lean towards an A*gree* or *Disagree* response based on the high standard deviation. In contrast, the data is normally distributed since each descriptive statistic's kurtosis, and skewness values met the normal distribution criteria.

4.3 Findings from semi-structured interviews

To analyse the data collected through semi-structured interviews, various themes were produced concerning the questions and was analysed accordingly. The participants' responses and precise discussion are shown in Appendix C and Appendix D.

Coding and data analysis

Participants' responses were categorised into themes based on the thematic analysis process (Braun & Clarke, 2006). The responses were collected during a semi-structured interview based on the participants' opinions, views and experiences. Each response was examined, and codes were linked into meaningful groupings forming a thematic category (Braun & Clarke, 2006). Only one researcher conducted the research, so biases were considered. Three primary themes emerged.

Theme 1: Inadequate

Inadequacy of course content emerged as a significant theme from the responses collected during the semi-structured interview. The inadequacy of content emerged as a typical pattern among respondents. Participants noted that the academic literacy course content needed to be improved in areas such as reading, writing and referencing, noting that these areas needed to be adequately covered in the course, while irrelevant content was included. Participants also noted that the lack of feedback was an issue.

Eight of the ten participants noted that specific literacy-related content was missing within the academic literacy courses, explicitly identifying the lack of instruction in writing, reading and referencing. These responses are consistent with the findings and conclusions of Wingate (2018), who also concluded that students' literacy skills are founded in writing and reading. Further, Wingate (2018) also argues that the development of literacy skills involves the manipulation of

content through reading and writing, often disregarded in literacy instruction courses like the academic literacy course in the examined HEI. Further, when instruction is given vaguely, the learner cannot fully acquire the skills and, therefore, will experience challenges and difficulties (Wingate, 2018). This is also noted by the common response of participants experiencing challenges and difficulties even after having experienced literacy instruction. In addition to the responses noting a lack of literacy content, participants also noted a lack of feedback. Also, as noted by Wingate (2018), feedback holds value in the learning process. Meaningful feedback provided by faculty with consideration of how comments and advice could bolster the student's learning experience is essential to skills acquisition, particularly in literacy instruction.

The responses identifying this theme were asked about their opinions and areas of writing they find challenging while attending academic literacy/writing courses at an Ontario HEI. In this regard, one of the participants responded:

"The academic literacy courses are useful; however, they do not cover everything I need to know to complete writing assignments or reading assignments in class. I did not know how to reference properly until the other instructor showed us how." (P-1)

In relationship to the same issue another participant replied:

"I do not think that the content of this course covers what I need to know for my other classes. For example, when I was in the academic literacy course, we had to read an article and write about it. However, it doesn't explain how to write an essay paper. Alternatively, referencing properly." (P-5)

It was also suggested that the current literacy/academic writing courses lack a relationship with one another:

"I think that the teachers for the regular classes and the teachers for the literacy courses should communicate so that the teachers for the literacy courses could teach us the things we need to know." (P-7)

These findings align with the survey responses gathered earlier and have led to the development of the theme of inadequate content in the academic literacy course examined in the Ontario HEI. Besides, the findings further align with Bain (2012). Bain (2012) showed the ineffectiveness of academy literacy courses and contended that they might not be practical as faculty providing academic literacy instruction may not be adequately equipped to provide students with information and direction related to academic literacy. However, Smagorinsky et al. (2014) suggested that academic literacy courses are taught by faculty trained in English literature, but not necessarily in language mechanics and other aspects of academic literacy.

Participants were further asked about the areas of writing they found challenging when they first started attending post-secondary studies. In this regard, almost all participants responded similarly:

"The challenging areas include reading, writing, referencing, and grammar."

These findings align with Manjet et al. (2015), who indicated that as for academic reading, the usual difficulties students often face are extracting and synthesising info from numerous sources and identifying and obtaining academic vocabulary for writing for academic purposes. Moreover, these writing difficulties further add to the challenges in grammar and referencing, and

students do not obtain adequate writing skills which can improve their writing or grammar, as their main focus is on reading particular newspapers and magazines. Besides, the findings aligning with Pulec (1994) showed why students experience these challenges. Thus, Pulec (1994) indicated that although subject matter is important, academic literacy courses provide instructions on language mechanics, grammar, effective writing, adequate reading comprehension, critical thinking, and referencing. However, many subject matter professionals are relatively weak in areas relating to academic literacy.

Theme 2: Skill acquisition

A key finding in this study was that most students' responses focused on the lack of literacy skills acquisition. Students noted that after receiving literacy instruction, they felt confused, continued to experience difficulties in academic literacy-related tasks, and still felt inadequately prepared to meet the challenges of the HEI. Further, the collected responses also indicated that while some students did feel that some improvements were evident, some literacy skills were still lacking. A typical response among several students indicated regression of skills. No intrinsic motivation for reading was also a common theme when responses were tied to exposure and experiences related to reading and writing.

Based on this theme, participants were asked about their experience attending academic literacy and writing courses at an Ontario HEI. They were also asked about the changes or improvements they noticed over time. In this regard, one of the participants responded:

"It's still a challenge for me to write a paper. I was supposed to write papers before high school, but it was different. The papers they want me to write in post-secondary are different. I feel that high school didn't prepare me, and now I am taking the academic literacy course, and I

am learning, but I still don't think that the stuff they are teaching in this course will prepare me for writing large papers." (P-7)

The results and findings of this study are supported by Atkinson (2016), who contended that many academic institutions have attempted to address the literacy weaknesses of their students by mandating academic writing courses and various other corrective support. However, although these courses are well intended, scholars have identified specific gaps within academic literacy courses, leaving students unprepared even after completing the courses. However, these responses are further highlighted by Harris et al. (2017). According to Harris et al. (2017), educators provide students with basic skills through subtle strategies without linking the learning experience to meaningful content. Thus, although students improve their literacy skills in reading/writing, it will not prepare them to write important papers.

On the other hand, concerning the first experience in terms of reading and writing in academic history, two of the participants responded:

"I like reading, but the content and textbooks are very boring and hard to read. Some of the readings are on Blackboard, and I find them even more difficult to read. I prefer listing in class and learning that way. I do not understand when I read, but I understand the content when I hear the professor explaining things. Writing is also hard for me because the way I write is not what the professors want." (P-4)

Both participants, 4 and 9, clearly express a lack of understanding and comprehension of reading and writing, both primary components of academic literacy.

The connection between reading, writing and academic literacy skills is profound and noted in Grabe and Zhang (2016). The responses from both participants 4 and 9 indicated that both the reading and writing are weak and have drastically affected their academic success.

"I understand how to write, and my experience was that I write well. My teachers in the past said I am a good writer. But, now my writing style isn't what I should be doing, so I had a learning curve when coming to university." (P-9)

Another participant responded:

"The academic literacy course is only helping me read articles and understand them. I still can't figure out what a pronoun and stuff like that is and how it fits in a sentence." (P-9)

These findings align with Fisher & Hoth (2010), who identified academic literacy weaknesses among post-secondary students. In contrast, the findings are further supported by Perin & Holschuch (2019), who indicated that students are only focused on reading within academic courses, and that critical thinking needs to be included in the areas students found missing in academic literacy courses.

However, when asked to recall if their first experiences with literacy were positive or negative, participants indicated mixed reactions; some recalled positive experiences, some had negative experiences, and some could not recall their first experiences. For instance, some of the participants find it positive, as voiced by P-3:

"My experience reading was positive because I remember my teacher doing circle time and reading stories to us. But I don't remember when I started reading and writing on my own." (P-3)

The responses provided by participants 2 and 3 indicated that experiences vary and may not be directly tied to current academic literacy skill sets. Participants experiencing positive early learning experiences did not indicate more vital academic literacy skills. They were expected to attend the mandated academic literacy courses, just as the students, like participant 2, indicated a negative experience in exposure to reading during their early years of learning and literacy instruction. Although these results were gathered from two participants, the results are inconsistent with studies such as the Abecedarian Project, which established the importance of early educational interventions and continued success in higher education (Campbell et al., 2002). Additionally, Shuey and Kankaraš (2018) indicated and supported the importance of early learning to future academic and educational success. The results and responses provided by participants are not congruent with those of published works, and the results suggest that additional research related to this area is needed.

"My parents forced me to read books and learn to read-only after my teachers were saying that I need to improve on my reading." (P-2)

This response is heavily supported by the literature, which has indicated that early parental involvement in developing the foundations of literacy is crucial to literacy skills in future post-secondary education (Camacho & Alves, 2017; Sénécha & LeFevre, 2002; Hornby & Blackwell, 2018). However, as noted, participant 3, also experiencing literacy challenges, expressed a positive early learning experience.

"I was never taught to write using grammar or read using phonics. It was just that I had to remember the words and recall them when reading. The same thing for writing. So when I got to higher grade levels, I got more confused and had some issues." (P-4)

These findings align with the study by Al-Sohbani (2018). The findings of Al-Sohbani (2018) also showed the mixed experiences of students in terms of reading. They contended that individuals do not like academic reading as they perceive it as unimportant and enjoyable. Besides, Hadiyanto (2019) also indicated that some individuals defined reading as 'work'; they approach it one way, whereas when they define it as 'just for interest' or for pleasure, they approach it another way. Thus, individuals' reading experience depends on their approach to reading. Furthermore, a paper by Maharsi et al. (2019) concluded that students perceived reading as valuable, but almost one-third of students did not read the provided materials.

Theme 3: Underprepared

Another prominent theme that emerged was that students indicated they felt underprepared for courses related to other disciplines, future studies and post-graduation careers. Students indicated they continued to experience literacy issues, lacking confidence in their skills. Phillips and Giordano (2016) also noted the theme of under-preparedness. Having identified the lack of preparedness to meet academic literacy demands, Phillips and Giordano examined the complex and challenging issues surrounding academic literacy courses. Further, Perin (2013) devotes efforts to examining why students are underprepared to participate in HEI due to their lack of literacy skills. Perin (2013) suggests that inadequate instruction during the early years of exposure to literacy instruction, low language proficiency, learning disabilities and lack of motivation can be linked to students being unprepared for HEI literacy demands. This is echoed in the subthemes emerging under the theme of under-preparedness.

Based on this theme, participants were asked how they would apply literacy skills and how well they are prepared for future careers concerning the capability to employ literacy skills. In this regard, all participants responded similarly:

According to the Canadian National Occupation Classification, the primary duty of Human Service Workers is to "review client background information, interview clients to obtain case history and prepare intake reports" (Statistics Canada, 2021) and, thus, support the responses provided by participants. Most students who participated in this study are in a programme related to the human service field. Moreover, the responses concerning where literacy skills can be employed were additionally supported by Hanrahan (2009). Hanrahan (2009) indicated that literacy skills gained by students by attending academic writing courses might help in report writing as literacy skills assist in organising the components of the report to make it easily understandable. Besides, Hanrahan (2009) further contended that if individuals are familiar with what and how they will write, they might make the report more accessible. However, reading future careers, one of the participants responded:

"We were directed to read articles like newspaper and magazine articles. But we didn't have to read anything else." (P-1)

Another participant responded:

"No - I feel like something is missing. We need more. Nothing that was taught in that class is useful for our other classes. The teacher only told us to read articles and summarise the article, but she didn't tell me if I did it correctly or not. But, when I write an assignment for my other classes, some teachers tell me I should go to the writing centre for help, or they don't tell me anything at all." (P-6)

These findings align with those of Hochman & Wexler (2017), who believed that many academic institutions have attempted to address the literacy weaknesses of their students by mandating academic writing courses and various other corrective supports. However, these courses frequently underperform and do not provide students with the necessary skills to successfully complete courses and programmes. Moreover, the students did not receive accurate instructions concerning reading and writing at advanced levels, leading to poor improvement, poor language mechanics, and an inability to exhibit good writing and reading comprehension skills (Hochman & Wexler, 2017).

4.4 Academic Literacy Course Document Analysis

According to Defazio et al. (2010), the course outline is a crucial document used to inform students of the content of academic literacy courses. It provides the learning outcomes, content and other pertinent information. However, Milkova (2012) indicated that two of the main components of the course outline, including learning objectives and content noted on the course outline, are examined for this study.

The course outlines of an Ontario HEI were analysed using a systematic review of the learning outcomes and content. As a result, unique concepts were noted. Codes were cross-referenced with the information collected from the online survey and semi-structured interviews. A table was created and built creditability to develop a reliable measurement tool and matrix for assessing academic literacy courses. The results are outlined in Appendix E (Table 4.7). In contrast, the cross-reference of data sets produced exciting results.

After course outlines for the HEI academic literacy courses within the Ontario institution were examined, gaps and connections were present. The data collected in phases 1 and 2 suggested that students felt they experienced weaknesses and shortcomings in academic literacy. While participating in the online survey and semi-structured interviews, areas of literacy that needed improvement were compared to the content of academic literacy course outlines. The course content, learning objectives and program learning outcomes were compared to the information collected from students during the online survey and the semi-structured interviews. Comparing the data sets against the course outlines provided information regarding gaps and connections.

The course outlines were accessed through the HEI website and were publicly accessible. Three consecutive academic calendar years were examined. The three-course outlines included syllabi from Year 3, 2018 to 2019, Year 2, 2019 to 2020 and Year 1, 2020 to 2021. Each year, the course outlines changed their content slightly.

Although slight adjustments were made, the content did not directly mirror the areas students indicated during phases 1 and 2 needing improvement. Therefore, the literacy weaknesses students identified during the survey and interviews needed to reflect the areas noted on the course outlines. These findings suggested that students' needs should be addressed within the academic literacy courses initiated as a corrective measure to address literacy concerns. The primary objective of the academic literacy course was to improve students' academic literacy skills in post-secondary institutions. It was further examined that crucial literacy skills in academic writing and reading are distinguished within the three-course outlines, including from the syllabi (Year 1, Year 2, and Year 3). The Academic Literacy course aims to audit the vital components of academic writing and reading while drawing in students with criticality and style in academic writing and reading (utilisation of counter-contention, laying out a perspective, tracking down voice,

distinguishing arguments in a nuanced way). Moreover, in these courses, various texts have investigated experiences in logical composition and recognising solid and less dependable forms of argument.

It was found that there were no drastic changes between the Year 2 and Year 3 outlines; however, a significant shift was noted in the Year 1 outline. It was found that grammar was removed in the Year 1 outline and replaced with a stronger emphasis on reading comprehension and digital literacy. Moreover, Year 1 demonstrated digital fluency by locating and assessing online information and using conventional citation practices. Further, each year did note a solid critical analysis or thinking presence outside the outlines of Year 2 and Year 3. On the contrary, the overall content identifies all the major areas of academic literacy as noted by various scholars (Fisher & Hoth, 2010; Perin & Holschuch, 2019), and yet, it is strongly noted by participants' responses in Phase 1, both in the online survey and semi-structured interviews that these areas were not included in the academic literacy course. The gaps and the connections noted in the comparative analysis can be attributed to several factors discussed in the discussion chapter of this thesis.

Torgesen et al. (2017) contended that instructional strategies are a significant component of the course outline that generally impacts students' academic literacy skills. From the examination of courses of all three years, it was perceived that the instructional strategies had remained the same. It is articulated that all of the course outlines of Year 1, Year 2 and Year 3 allow the students to recognise the significant theoretical stances within an area of interest. In addition, all course significant objectives are that teachers must critically discuss and embrace explicit issues, which are similar throughout the course objectives when examined in the academic literacy courses within the chosen post-secondary institution of Ontario.

An exploratory content analysis of the course outlines over three years was completed and considered the content of the academic literacy courses in an Ontario HEI. The content analysis was based on the theoretical frameworks of competencies for sustainability and transformative learning processes.

This analysis performed by Olalla and Merino (2019) also examined the contents of course outlines; however, rather than examining academic literacy courses, the focus was on business education programs and examining ethics and social responsibility within business-related courses.

Much like Olalla and Merino (2019), examining academic literacy courses within an Ontario HEI focuses on competencies and how these competencies will lead to applicable skills in the labour market (Olalla & Merino, 2019).

Three academic literacy course syllabi were retrieved from the HEI internet site. Three years were examined as the sample population in phase 1 would have most likely been exposed to these three years of academic literacy course instruction. When examined, several themes emerged. The first syllabus (Year 1: 2020-2021) noted that reading, summarising, analysing text, digital fluency and developing a process for writing were noted as learning objectives. In the second syllabus (Year 2: 2019- 2020), the learning objectives focused on summarising texts, critiquing texts, writing processes and composition, essay writing and referencing. The final outline examined (Year 3: 2018-2019) indicated that the learning objectives focused on summarising texts, critiquing and argument, writing processes, essay writing and referencing. The content did change over three academic years. Most recently, when examining the Year 1 (2020 – 2021) course outline, the content related to essay writing and referencing was absent from the learning objectives.

4.5 Presentation of the newly designed evaluation matrix for Academic Literacy Courses in Ontario

The current research aims to prepare a tool to measure the performance of academic literacy courses in an Ontario HEI. The design of the evaluation matrix relies on criteria derived from the information collected from the previous phases of the study, including the online survey, the semi-structured interview and the examination of course content in the course syllabi analysis. The evaluation matrix is also based on the responses of faculty or HEI course designers designing materials and developing course content for academic literacy courses within the Ontario HEI.

Rather than measuring the 'ability' of students, the tool is being applied to measure the 'ability' of the academic literacy course to perform as intended. Although an unorthodox method, the application is theoretical and requires further examination to validate its effectiveness and use. This evaluation of academic literacy courses examines the ability of these courses to perform and provide the appropriate instruction to students. Based on the collected data sets in the above phases, developing this measurement matrix provides an evaluation method for Ontario institutions to develop and design effective and practical academic literacy courses in the future. In preparing this matrix, the researcher also applied and repurposed some concepts taken from the MASUS model (Bonanno & Jones, 2007).

The purpose of this evaluation method was to provide instructors and administrators with a matrix to be used in the design stages of course development to ensure that all aspects of literacy are embedded into the academic literacy courses. The matrix is a clearly defined checklist where the user will note which areas of academic literacy are included in developing the course learning objectives and content. In addition, each item on the checklist will be assigned a corresponding value. On the other hand, the values are tabulated and based on the results. The course designer,

instructor or program administrator can determine if adjustments are made to improve the quality of the academic literacy course or if specific areas related to literacy should be considered and added to the course content. The rating system used in the evaluation matrix is used to apply a value to the presence of a specific topic of learning outcome related to the academic literacy course within an Ontario HEI. If an item on the evaluation form is fully present and will be covered within the course, a score of 4 is given. However, a lower score is applied and noted if a topic is only slightly covered and not given much time throughout the course or academic term. If not present at all, a score of zero is applied. An overall score is then tabulated, and if the score is between 78 to 104, the course possesses an adequate level of content related to literacy. However, the content is fair if the score is between 52 to 78. In contrast, any score less than 52 would indicate that the content may be lacking in relation to academic literacy concepts and the relevance to future literacy applications to the labour market.

Much like the rating scale designed by Stiggins (1987) when creating a "performance assessment blue print", it also was proposed in a theoretical context; certain factors were considered in its design, just as considerations were made in the design of this evaluation matrix. Stiggins (1987) considered the type of score, who would be using the scoring system, the rating plan and how the data would be recorded. These considerations were also made in the development of this evaluation matrix.

The evaluation matrix proposed in this study as a tool to measure the relevance and content of academic literacy courses within an Ontario HEI contains two parts. The first section considers the *content* and requires the user of the matrix to apply a value as to the likelihood that concepts such as spelling, grammar, sentence structure, vocabulary, reading comprehension, effective reading strategies, paraphrasing, text analysis, digital fluency, and essay and writing

composition and referencing were present. These topics were linked to academic literacy by several scholars as well as data collected throughout the first phase of this study and were then compiled in this measurement tool (Cox, Friesner & Khayum, 2003; Horbec, 2012; Magliano, Higgs Santuzzi et al., 2020; Nozari & Siamain, 2015). The second section, *Course Learning Outcomes*, requires the user to apply a score to the likelihood that specific learning outcomes would be met over the term, including the student developing skills around reading, writing, digital fluency, preparing reports and notes, conducting compelling interviews, communicating effectively (written and orally) and the use and citing of sources. These learning outcomes were extracted from the *National Occupational Classification* bureau as key markers linked to academic literacy and the demands of the labour market in Canada.

Applying this matrix to academic literacy courses outside of the Ontario HEI being examined is favourable. However, it would require additional testing and validation, which were not possible in this study due to limitations and constraints. However, most academic literacy courses cover similar content topics, and the learning outcomes may be versatile, leading to using the measurement tool in other HEI offering academic literacy courses.

Chapter 5 – Discussion

5.1 Overview of Study

This chapter is a recapitulation of the findings of this study and its relationship to the existing literature followed by the limitations of this investigation and recommendations for future research.

This study involved three phases producing several tables and conclusions surrounding the effectiveness of academic literacy courses within an Ontario HEI. The study began by collecting data using an online survey followed by semi-structured interviews, which were then analysed using a thematic analysis approach (Braun & Clarke, 2006). Several themes emerged from the thematic analysis. Combined with the data collected from the online survey, it served as a guide for the second phase, which involved critically analysing the academic course outlines. The collection of these phases ultimately led to the development of a theoretical measurement matrix, or tool used to determine if all the components of academic literacy were present in academic literacy courses.

The existing literature, the researcher's observations and the results of the present study have determined that students struggle and find challenges surrounding aspects of academic literacy within and Ontario HEI, even when corrective instruction and courses have been completed. Students who completed the mandated academic literacy courses continued to need help with areas within academic literacy such as writing composition, reading comprehension, grammar, critical thinking and referencing. The survey showed participants experienced weaknesses not adequately addressed through the academic literacy courses within the Ontario HEI. These findings aligned with the study of Atkinson (2016) and Murray (2010), who indicated

that various academic institutions have attempted to remedy the literacy weaknesses of their students and provided academic writing courses and numerous corrective supports such as writing centres and academic supports. The findings of Atkinson (2016) also showed that well-intended academics left students unprepared after completing the courses. The survey further analysed that 58.5% of students felt unconfident with their academic literacy skills upon course completion. These responses further aligned with Harris et al. (2017). According to Harris et al. (2017), students who possessed basic skills combined with subtle instructional strategies and without linking the learning experience to meaningful content did improve their literacy skills in reading and writing, but this did not prepare them to write substantial academic papers. These are meaningful findings. Although a positive outcome was noted by Harris et al. (2017), the improvements noted did not meet the goals of the academic literacy courses. According to Harris et al. (2017), students did develop their literacy skills, but from an academic literacy perspective, they struggle with the literacy demands placed on them. This brings to question the effectiveness of academic literacy courses, and what aspects of the academic literacy course need to be addressed to create and design courses that will bring more effective results. Participants expressed that academic literacy courses did not adequately prepare them for the literacy demands of a subject or content-based courses, even though they were designed to cover academic literacy areas. When examined, further academic literacy courses provided students with reading comprehension, sentence structure, composition and citing or referencing, as most participants find reading, writing, referencing, and grammar challenges. However, these were the areas that were identified as needing assistance. These findings are supported by Condra et al. (2015). Condra et al. (2015) state that an intricate network of academic reading and writing practices challenges teachers' perspectives. Campbell (2014) showed that Canadian students faced academic changes in writing

and reading practices triggered by advanced literacy skills demanded by post-secondary institutions in Ontario.

These findings are also supported by Fisher & Hoth (2010) and reveal that academic literacy courses lack effective instruction. The participants' opinions align with the literature. The course outlines indicate that a large part of the content is directly tied to the areas of academic literacy that scholars outlined (Fisher & Hoth, 2010; Perin & Holschuch, 2019). Furthermore, from the documentation analysis of the academic literacy course, the present study found that grammar as one subtopic of academic literacy was the only area removed from the content and was mentioned as needing additional instruction by participants in Phase 1. However, grammar was not removed from the course content until recently, and it did not fully explain the lack of grammar among students in previous years when it was part of the course content.

The present study's findings, assessed through interviews, suggest that academic literacy course within an Ontario HEI supported reading and comprehending articles. However, even after completing these academic writing courses, the students still needed help applying basic grammar and composing sentences and some reading comprehension. These findings are supported by Fisher & Hoth (2010), who identified academic literacy weaknesses among post-secondary students in Ontario. These findings also confirm a gap resulting in students experiencing weaknesses after completing these courses. The findings of Fisher & Hoth (2010) confirmed and supported by the existing literature indicated that students feel that they continue to lack these skills even after completing the academic literacy courses. This is further supported by Perin & Holschuch (2019), who indicated that students are only focused on reading within academic courses and are not equipped to complete other literacy tasks. Critical thinking is included in the areas students find missing in academic literacy courses. This indicates that even after completing

these academic literacy writing courses, students still need to prepare to meet the demands of post-secondary institutions or the labour market.

The present study's findings, extracted from the survey and the semi-structured interviews, indicated concerning results. The survey asked student about their levels of preparedness to meet the literacy demands set by the institutions. The ineffectiveness of these courses was also confirmed by the results of the semi-structured interviews. After completing academic courses, inadequate literacy and academic skills are further articulated by Wingate (2015). They showed that cognitive training and the ability to develop healthy study and learning methods is one possible explanation for why students are completing academic literacy courses yet still experiencing academic literacy challenges. However, Wingate (2018) contended that by improving the design of the academic literacy course to incorporate appropriate exercises, students might become better acquainted with concepts and be better able to apply them to subject matter courses. On the other hand, the findings are further supported by Shrestha & Parry (2019), who depicted that a student may not be familiar with the necessary cognitive training for simply practising concepts, or courses are not designed to provide students with the activities and exercises to understand academic literacy concepts.

Moreover, the present study findings analysed through interviews showed the inefficacy of academic courses. The finding included the extraction of three themes, which indicates that students felt inadequate, were concerned about lacking skill acquisition and felt underprepared. These themes emerged from a collection of responses, particularly noting missing content in the courses, confusion with regression of skills and continued difficulties in literacy. Students identified feeling unconfident and struggling even after having completed these courses.

These findings are aligned with the study of Hochman & Wexler (2017). They indicated that numerous academic institutions have endeavoured to address the literacy shortcomings of their students by commanding academic writing courses and other supports. Nonetheless, often these courses fail to meet expectations and do not offer students the fundamental abilities to guarantee the fruitful consummation of courses and projects. The current study has shown that students need precise guidelines concerning writing and reading on advanced levels, prompting an absence of progress, unfortunate language mechanics, and a failure to display extraordinary composition reading comprehension abilities (Hochman & Wexler, 2017).

In addition, from the survey findings in the present study, it was also examined that numerous participants still needed to complete or were enrolled in academic writing courses offered by the Ontario HEI. Speculatively, students who were not enrolled or still were required to complete the academic literacy courses might not have adequate financial resources to enrol and may lead to literacy under-preparedness. These findings are supported by various scholars, which contend that social and political issues are the primary concern that hinders students from getting advanced level knowledge and literacy skills to perform better in academic in post-secondary institutions (Hemmerechts et al., 2019; Anisef et al., 2011). Hemmerechts, Agirdag, and Kavadias (2017) also indicated that socio-economic and political issues are the primary obstacles to students' basic academic literacy skills. These results are further aligned by Anisef et al. (2011). As per Anisef et al. (2011), the student's choice to concentrate on academic courses relates to financial status and social background. In this manner, even though post-secondary schooling is accessible, issues connected with financial status and social disparity sway whether students foster the abilities essential to seek after academic courses; many struggles with poor literacy skills individuals who effectively start post-secondary education. Conversely, in support of the present study findings, it

was further articulated by Hemmerechts, Agirdag, and Kavadias (2017) that financial status impacts availability, especially in regions where poverty limits students' educational opportunities. Although this was an area that would have served great insight, strict limitations surrounding sensitive topic areas were established by the Research Ethics Board of the Ontario HEI.

Besides, the present study findings concerning the professor's efficiency in academic literacy courses offered at n Ontario HEI showed that when participants were asked to rate how effective the academic literacy instructor was in addressing areas of academic literacy that participants felt were weak. In addition, the findings also showed that participants seemed dissatisfied and indicated that the professors needed to address their academic literacy needs or weaknesses. The findings align with the study by Jenkins & Wingate (2015). Jenkins & Wingate (2015) indicated the main reason for the instructor's inefficiency in not addressing students' literacy needs by indicating that professors teaching specific subject matter might not feel equipped with the necessary knowledge to provide adequate literacy training. Therefore, rather than placing the entire responsibility on the shoulders of subject matter faculty, literacy instruction experts should provide literacy instruction to students (Jenkins & Wingate, 2015). However, this particular response is further supported by various scholars who contend that this model – where English language experts offer literacy instruction – also faces challenges leading to students struggling with academic literacy skills (Dziwak, 2014; Perin, 2013; Wingate, 2018).

Moreover, this newly designed measurement matrix for Academic Literacy Courses can help students of the Ontario HEI. This may include those who read autonomously and have a more prominent understanding of cognisance, verbal familiarity, and general information than those who do not. This newly designed theoretical measurement matrix intends to provide academic instructors and course designers within the Ontario HEI with a checklist of all the much-needed

areas of academic literacy, particularly those identified by students throughout the study's phases and the course outline analysis.

Based on the findings from Phase 1 and Phase 2 of this study and all the data collected, several conclusions have led to the development of two recommendations for an Ontario HEI to improve the overall academic literacy skills of their students through the academic literacy course conduit: (1) Establishing a full-time faculty, subject matter expert, position and (2) Establishing a comprehensive academic literacy corrective training program. These two recommendations will be further explored.

5.2 Subject Matter Expert

A speculative possible remedy to the issues surrounding academic literacy courses inadequately delivering training and instruction may be to consider the skill set of the faculty assigned to teach these courses or literacy concepts. Faculty at postsecondary institutions are commonly experts in their disciplines and need to be trained or equipped to provide instructions in other areas, such as academic literacy (Massey et al., 2020). Additional training related to classroom management, instructional design, assessments and instructing peripheral skills such as literacy would be favourable (Massy et al., 2020). Some HEIs have noted faculty needing to improve in delivering content outside of their area of expertise and have developed micro workshops and various forms of training to assist faculty in developing additional skills (Taylor & Colet, 2010). Most universities and colleges offer various training opportunities for faculty members to enhance their teaching capabilities to enhance the student learning experience (Taylor & Colet, 2010).

Academic literacy instruction is an aspect of education that many professors teaching discipline-specific courses need to prepare for (Holschuh, 2019). A possible and speculative possibility requiring further investigation is the introduction of *subject matter experts*, specifically equipped to create content, deliver instruction and provide students with adequate training in academic literacy. Introducing *subject matter experts* may also be an effective strategy to elevate the pressure on content course professors to provide academic literacy instruction or allocate additional resources to prepare them to provide additional instruction outside their subject areas. This may address Holschuh's (2019) concerns about subject content professors needing to be prepared to provide adequate instruction in academic literacy.

As academic literacy courses may need favourable results, future studies may consider examining academic literacy course professors. An in-depth analysis of academic literacy instructors' teaching skills, knowledge and backgrounds may be helpful in future research. These professors have been vetted by the HEI's administrative staff and human resources before hiring, and their credentials will not be questioned for this section. Instead, an assumption will be made, pending further investigation, that the academic literacy instructors have had sufficient training and knowledge to provide adequate academic literacy training to students. However, a *Subject Matter Expert* hired by the Ontario HEI in a hybrid instructional design and assessment role would be favourable for several reasons. Firstly, a *Subject Matter Expert* would possess knowledge and skills tied to developing course materials and content strategically designed to produce positive outcomes, that is, higher literacy levels among students. The materials and content, adapted and tailored to each cohort, may ensure that gaps would be addressed. Since each cohort is expected to complete a literacy exam before entering their respective programmes, the result of the literacy exam could prove valuable in developing academic literacy courses and addressing areas where

students are having difficulties. Furthermore, the *Subject Matter Expert* could also ensure consistency across all sections of academic literacy courses, ensuring that all students, no matter the section or professor, would receive the same instruction and content. One issue that needs further consideration is the teaching styles of professors or instructors, as each instructor has developed specific teaching styles and habits that could influence student skill acquisition.

The *Subject Matter Expert* could also prove to be a cost-effective solution for the HEI as the hiring of one individual per college to oversee the literacy examination, collection of data from these exams, development and design of academic literacy courses, even at the highest pay scales under the classification of either professor. Instructional designers might be a reasonable and fiscally responsible option than applying financial resources to additional training for program faculty or additional and existing corrective supports.

5.3 HEI graduates underprepared for the labour market, the link to New Work Order Theory

As the online survey and interviews showed that some students may have felt inadequate in their literacy skills. It was extracted as a common theme from the thematic analysis of the semi-structured interviews. Through semi-structured interview responses, students stated that these courses may not provide the skills needed to meet the literacy demands placed on them at the

postsecondary level. They indicated that they may have felt unprepared to meet the demands of the labour market upon graduating from their programs. These findings are supported by Perin and Holschuch (2019), who indicated that students are only focused on reading within academic courses and that critical thinking needs to be included in the areas students found missing in academic literacy courses. Students who have completed HEI programs undoubtedly attempt

to gain the necessary skills to secure meaningful employment in their fields of study. Students exiting academic programs, therefore, should be prepared to meet the demands of the labour market. However, students surveyed suggested that they needed more confidence in their literacy skills as they began their careers. The importance of employability, particularly in literacy skills, has set the stage for HEI to prioritise specific skills, such as literacy, within their programme learning outcomes (Little, 2001; Murray, 2010).

One particular piece of data collected during the interviews may shed light on this. Various participants suggested needing additional basic academic literacy skills before entering postsecondary studies. They suggested that they needed to be provided adequate instructions at the secondary school level. Students who entered the Ontario HEI were tested before attending their respective programmes to assess their level of academic literacy. These results were intended to determine if academic literacy courses are suitable. However, these assessments appear to be futile and serve no value. Students evaluated and deemed as suitable candidates for corrective academic literacy courses, expected to improve after completing these courses, need more basic literacy skills. Pre-enrolment literacy evaluations and assessments were found by Murray (2010) to be an effective way of determining how corrective measures should be taken to correct low literacy skills. Instead, Murray supports incorporating literacy instruction within the program's subject-related courses and curricula. By incorporating academic literacy training and instruction within subject-related courses, educators and professors of subject-related courses would require specific literacy instruction training and additional time. This may be an unfeasible model. Students completing academic programs at the HEI are being examined in this study aim to complete their programs in order to qualify for either subsequent academic programs or prepare themselves for the labour market. Upon investigation of academic literacy courses and students attending an HEI

in Ontario, students responded to a series of questions both in an online survey and during a semi-structured interview, which led to the results indicating that students felt they were underprepared to meet the labour market demands. According to scholars, *the New Work Order Theory* links the labour market literacy demands to the HEI academic literacy instructions provided to students attending HEIs (Gee et al., 2018; Livingston, 2011; English, 2016). Although some scholars have argued, such as Vargas Franco (2020), that professional development continues once an individual enters their profession and shifts away from academia, Cullgan (2005) provides an important consideration and suggests that individuals leaving academics and entering their careers should have pre-existing skills, including literacy skills. According to the findings of this study, students may feel, and some have suggested, that they need to be adequately prepared for the labour market while committing themselves for years and allocating financial resources to attend HEIs to qualify for higher-level jobs and future careers.

New Work Order Theory has provided a meaningful foundation for considering the importance of academic literacy instruction, particularly when considering student moving from academia into the workforce after completing their academic programs. A valuable example provided by Gee (et al., 2018; pg. 7-14) notes how law school is a training instruction to prepare law students for a legal workplace environment. Law students are expected to be trained in reading and interpreting the laws and statutes and also instructions about writing legal documentation, which could be deemed specialised literacy skills. According to Minnis (1994 in Gee et al., 2018, pg 7-14), these skills should be taught more. Instead, upon closer examination, law school is heavily based on 'Socratic dialogue' rather than preparing students for the legal literacy skills necessary for the legal profession. According to Poydras (2013), the legal profession and the

regulatory bodies continue to press upon the importance of adequacy in preparing law students for legal practice.

Poydras (2013) suggests that law schools should reconsider how they teach law students and new barristers and solicitors to be "legal information literate" before entering the profession and instilling competent legal literacy skills. This contradicts Vargas Franco (2020), who suggests that learning, including literacy skills, can be acquired once already within the labour market. The example of law school and legal literacy is quite applicable. It supports this study's position and application of the *New Work Order Theory*, as the HEI being examined is highly focused on training students for specific work and professional practices, just as the law school prepares students for the very narrow and specific field of law and legal practice. When preparing students for a specific field, it becomes imperative to prepare students adequately and provide literacy instruction as it relates directly to their future careers and professional fields. As noted in the online survey, many students who participated in their study are enrolled and attending the Community Justice Services field.

In applying the *New Work Order Theory* to this study and specifically to the voluntarily participating students, the need for direct and specific literacy training is essential. According to the Canadian National Occupational Classification (NOC) 2011, those in the Community Justice Services field should hold many skills, with one of the primary skills noted as reviewing client information and case history, interviewing clients and preparing reports. However, many students in the program have noted that they need to prepare for these professional literacy tasks. The lack of literacy skills is not specific to any one field or academic program, as noted by Gee (et al., 2018; pg 7-14), who discussed law students and the field of law medical students, according to Kling (et al., 2017) struggle with academic literacy skills and future pharmacists also experience literacy

struggles (Holder et al., 1999). The bottom line relates directly to the focus of education, specifically HEIs. Although learners should accept that learning and ongoing professional development can be expected with complex and multiple learning venues throughout one's professional life, some form of knowledge is necessary to qualify for the labour market, to be competitive and to ensure that new employees who are once students of the academic environment can cope with the literacy labour market demands. If the definition of knowledge according to Gee (et al., 2018; pg 20-23). interprets knowledge as physical energy used to produce an outcome, schools and HEIs are an element or contributor in developing this knowledge. Historically, workers would sell their skills in exchange for wages. Moreover, although in many streams of the labour market, this continues, the worker is now expected to commit and invest in their work. They are asked to think creatively, reflect and apply critical

thinking skills, all while being able to communicate effectively through the written language. This includes encoding information and directions from written texts (Gee et al., 2018; pg 20-23). To fully participate in this exchange, workers must have a firm grasp of literacy skills, ideally acquired while attending HEI, to acquire knowledge, training and skills.

5.4 Proactive Action

As previously discussed in earlier chapters, students are underprepared when entering postsecondary studies (Fisher & Hoth, 2010; Perin & Holschuch, 2019). Perhaps the solution to these ongoing issues is not corrective support or instructions while attending higher learning programmes but addressing the issue before students enter the program. This may be addressed in two ways. Firstly, students admitted into a postsecondary programme might attend an introductory academic literacy course to prepare students and address challenges identified in literacy

examinations. These courses could be offered in the form of workshops or seminars weeks before the start of the school term rather than being taken simultaneously with other program courses. Also, the student can focus on acquiring the necessary academic literacy skills before their programme. These primary literacy instructional training seminars could provide the students with literacy skills. These courses could be facilitated by highly skilled professors who can successfully prepare students with academic literacy skills specific to their studies. This, however, could be costly and require either students or academic institutions to carry the financial burden of such an undertaking.

A less costly alternative would be preparing students adequately at the secondary level before postsecondary studies. High school students would receive instructions on postsecondary academic literacy requirements in the last year of their secondary studies. This, however, would require secondary English language teachers to prepare students and themselves to understand the requirements of postsecondary literacy demands. The costs associated with the additional training to prepare secondary students would fall on the secondary school boards and government rather than on the student in tuition or HEI.

5.5 Technology in Academic Literacy Courses and Skills Acquisition

The field of advanced technology has a natural place in developing academic literacy skill acquisition. When explored further in future research, it could lead to technological methods to provide students with an advantage in developing necessary skills such as academic literacy.

The exploration of the human brain's ability to acquire skills and specific skills directly related to literacy was noted in Ojemann (1983), with the identification of brain hemispheres responsible for language-related functions. Duffau conducted further investigations, Moritz and

Moandonnet (2014), providing evidence supporting that those specific brain areas would directly affect language and literacy skills when stimulated. According to Krause and Kadosh (2013), transcranial electrical stimulation can improve learning difficulties when cognitive training is limited in skill acquisition. Instead, when used with cognitive training, it is very effective in developing language and other skills among adult subjects. Non-evasive electrical stimulation has been determined to provide cognitive enhancements in adults attempting to develop cognitive capacity (Farah et al., 2014).

As the field of technology, specifically non-invasive electric stimulation technology, further develops, research in the application of non-evasive electrical stimulation may provide unique opportunities to students struggling with the development of academic literacy skill acquisition. One study by Klaus and Schutter (2018) provided strong evidence that transcranial magnetic stimulation was favourable to studying language production in subjects. Therefore, future research considering this as corrective support may be valuable.

Chapter 6 – Conclusions

This study explored the nature and scope of academic literacy courses within an Ontario HEI. Due to the limited information directly tied to the Ontario post-secondary education system, environments outside of Ontario were also examined. The research questions aim to explore the effectiveness of academic literacy courses within an Ontario post-secondary institution.

This study examined the existing literature, collected data through an online survey followed by a semi-structured interview and developed an evaluation tool or intervention method to improve academic literacy courses within the Ontario HEI.

From the analysis of the results, the current study summarises that academic writing courses teach students basic literacy principles. Commonly taught by English professors and instructors, these courses provide students with instructions and resources to improve literacy. From the analysis, it has also been found that although academic literacy courses focus on areas directly tied to academic literacy, they may not explicitly teach writing or other commonly associated academic literacy content. The participants echoed that the courses in an Ontario HEI are designed to develop the student's existing writing skills, which have been determined through this study to be inadequate before attending the academic literacy course and need much improvement. In addition to improving basic literacy skills, the participants, particularly in the thematic analysis, articulated that academic literacy courses in Ontario post-secondary institutions led to feelings of inadequacy, under-preparedness and poor skill-acquisition. It was noted based on student responses that including critical thinking, referencing and precise writing might favourable within the academic literacy courses of the Ontario HEI.

However, these courses should be practical and offer students sufficient transferable skills as well. Students of the Ontario HEI require specific literacy skills based on their fields of study. From the analysis taken from the different academically published papers, which targeted Ontario post-secondary institutions, it has been found that the course outlines and critical paths are an opportunity for the course designers and facilitators to designate time and materials and purpose to the course and ensure that all the necessary components are present, thereby ensuring a practical course for the students studying in Ontario HEI.

This study evaluated only three years of course content and noted a shift in content, removing grammar from one year to another and adding digital information. Several changes to the academic literacy course content based on the comparison of course outlines have demonstrated changes that the institution has made; however, the shift of content did not appear to produce favourable responses, as noted in the semi-structured interviews where students still felt unprepared to meet the demand of content course. Regardless of these changes, academic literacy courses in Canadian post-secondary institutions need to invest resources in literacy, nurturing the learning environment and adequately linking the concepts directly to what students need in terms of skill acquisition for subject matter courses and their future careers in the labour market.

One of the contributions of this study has been the theoretical measurement matrix used to identify gaps in the academic literacy courses within an Ontario HEI and the connections between course content and the expectations of the Ontario labour market. Once the tool user has determined the extent of content, gaps and connections, the user can adjust the content accordingly. Thus, creating a more effective and valuable academic literacy course. Other academic literacy instructors and institutions could benefit from the literacy areas identified using this tool. This may

strengthen the field of academic literacy across post-secondary institutions in Ontario and North America. While the newly designed theoretical evaluation tool specifically addresses academic literacy courses in Ontario, this theoretical evaluation tool can be applied across disciplines with slight adjustments or used as a general academic literacy checklist.

From the analysis, the current study provides an opportunity to articulate that the course outlines identified a shift in content and, more specifically, the removal of grammar as a course content topic. While the document analysis provided data, the semi-structured interviews also provided insights into students' opinions and thoughts surrounding academic literacy courses and their own experiences surrounding the topic of academic literacy. The participants during the interviews echoed that the academic literacy courses were inadequate. In addition, some participants added that the courses do not provide them with the skills needed to meet the literacy demands placed on them at the post-secondary level. They also indicated that they felt unprepared to meet the demands of the labour market upon graduating from their programs.

The participants also indicated a disparity between the skills they should have possessed after completing the academic literacy course and the essential skills acquired after completing the literacy course. Some participants felt that they did not improve at all. The primary contribution of the current study has been the measurement matrix used to identify gaps in the academic literacy courses and the connections made between the course content and the labour market expectations.

The evaluation tool assists educators in assessing the value of the academic literacy course content and its impact on student literacy skill acquisition. Once the tool user has determined the extent of content, gaps and connections, the user can adjust the content accordingly, thus creating a more effective and valuable academic literacy course. Other academic literacy instructors and institutions could learn from the shortfalls identified using this tool. This would strengthen the

field of academic literacy across post-secondary institutions in Ontario and North America. While the newly designed evaluation tool specifically addresses academic literacy courses in an Ontario HEI, the evaluation tool's core can be applied across disciples with slight adjustments. This evaluation tool's specific instruments and components are easily amended to connect with a specific field of study using learning objectives set by accreditation bodies and agencies for those disciplines. Prospective users of this tool are encouraged to adapt this matrix to make it applicable to the specific academic environment or need. This evaluation can enable academic literacy instructors to evaluate and improve courses.

The proposed study has identified that post-secondary institutions can never thoroughly address all student barriers and challenges. Students face many challenges, including socioeconomic status, varying cognitive capacity levels, previous academic experiences, and various issues. However, the study summarises that institutions can address some of the challenges connected directly with education, like academic literacy course content and instruction. Creating a practical academic literacy course can only be done through continuous improvements to ensure the best possible outcome for students. Therefore, even though it is impossible to make definitive conclusions about the impact of the effectiveness of academic literacy courses, academic institutions and educators should investigate, inquire and learn from the evolution of education, namely academic literacy courses.

6.1 Limitations

This final chapter is complete with re-examining the content of the preceding chapters. The overall design of this study was in line with discussing and investigating the effectiveness of

academic literacy courses in an Ontario HEI. Although examining academic literacy in Ontario may seem like a minimal and isolated study area, the application potential is vast. The application of this study and the theoretical matrix developed from this study might be effective in other contexts. However, future research further supports the versatility of the theoretical matrix evaluation tool. Another area for improvement is that applying this newly developed measurement matrix does not guarantee long-term impact in its current form and requires a comprehensive validation of its scoring and application. For this tool to have continued use and longevity, it will need to be verified, updated and amended continuously and consider the changing needs of students entering post-secondary studies as well as the changing labour market landscape. Implementing this matrix to additional programs and institutions in Ontario and throughout North America would add value to the measurement tool and prove its versatility.

An identified limitation of this study's design is time and resources. Although favourable, an action research design would have required more time and resources. Unfortunately, accessing institutional information such as student literacy tests, grades, and other internal data was impossible. The study, therefore, had to compensate for such issues and the need for valuable data. If this study had been conducted over an extended period, additional information could have been gathered throughout an entire cohort, and an action research study may have been feasible. Also, full accessibility to various pieces of data could have strengthened this study and provided a fuller view of academic literacy courses and determining their effectiveness.

Although this is a consideration for future research, time constraints did not allow for such an extensive research project. Furthermore, as the traditional experimental design and action research method were not followed, it is impossible to conclusively determine whether the course changes would be responsible for students' academic literacy skill acquisition or success based on

the measurement tool. Additional considerations, like student cognitive capacity and various extraneous and societal or institutional factors, can play a part in developing practical courses, including academic literacy courses. Another critical consideration was limited access to information. Although the study could have developed a deeper understanding of students' literacy levels and overall development, access to previous academic records and literacy tests was not available due to privacy and confidentiality regulations set by the Ontario institution.

6.2 Recommendations for further research

Several recommendations for future research have emerged throughout this study; in addition to the theoretical evaluation matrix needing testing and undergoing various corrective measures to ensure the correct configuration of the tool, considerations related to how labour market needs may need to be considered in the development of academic literacy instruction connecting *New Work Order Theory* to academic literacy courses in HEIs.

Further investigation is necessary to investigate the skill set of the academic literacy instructors to determine if they are equipped to deliver all the necessary components of comprehensive academic literacy courses. A research study worthy of further investigation is whether measurement tools are helpful in course content development and design. Also, further examination of how to bolster the academic literacy courses to provide students with the necessary academic literacy to complete their post-secondary studies would be a remarkable contribution to this area of study.

6.3 Personal and Professional learning

This study is a collection of years of anecdotes and unstructured observations. As an educator, this process has been an opportunity for independent relearning of higher learning. As Gardner (2008) described as a process of independence, I have found that this study and the work that has been done represent my successes and frustrations. Undoubtedly, this has affected my professional practice and personal life and blurred boundaries, as described by scholars who examined the effects of doctoral studies on students (Hramiak, 2017). In addition to testing my patience, this journey has tested my self-confidence and intrinsic motivation on many occasions. This process forced rethinking of research methods and developed an understanding of how analytical tools such as thematic analysis can be used in a meaningful and insightful method.

Reflections on how this study could be more applicable to higher learning education have led to the understanding of how limitations placed on this study have stifled the process and altered the purpose and focus of this study. However, creative solutions, although met with restrictions at times, led to the completion of this study and provided the opportunity for future learning and research.

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Appendix A, Online Survey/Questionnaire

Invitation to Participate in a Study on Adult Literacy Programs

You are invited to participate in a study to assess the effectiveness of the post-secondary literacy programs offered at a Higher Education Institution in Toronto, Canada. Mira Kapetanovic, a current faculty member is currently completing her doctoral thesis at the University of Liverpool, is leading the study.

This study aims to assess the accuracy of current methods for evaluating students' literacy skills, the effectiveness of current instruction methods used to help students improve their literacy skills, and the improvement of students' skills under the current curriculum. Knowledge gained in this study will be used to develop new methods and strategies for improving students' literacy skills.

Participation in this study is completely voluntary, and students who agree to participate are free to withdraw from the study at any time. Should you decide to participate in this study, in the first phase, you will be asked to complete an online survey. In the second phase of the study, you will be asked to complete a short interview in which you will be asked several prepared questions.

Your responses to the survey and the conversation will remain confidential with your permission, your interview will be recorded. The audio recording will be used for a limited period and destroyed when the study has been completed. The researcher will use the interview recording solely to recall information, and the file will remain in a secure place to which only the researcher will have access. For two weeks following the completion of the interview, you will be free to review the content of the transcript to ensure accuracy.

If you wish to accept this invitation to participate in this study, please contact Mira Kapetanovic by email at mira.kapetanovic@online.liverpool.ac.uk.

1. Do you understand the above information and that you are participating in this survey on a voluntarily basis and can discontinue participating in this study at any time

- [ ] Yes, I understand and wish to participate
- [ ] Yes, I understand and wish not to participate
- [ ] No, I do not understand

2. Please select your age range

- ○ Under 18
- ○ 18-24
- ○ 25-34
- ○ 35-44
- ○ 45-54
- ○ 55-64
- ○ 65+

3. In which geographic community of Ontario did you complete your secondary (high school) studies?

- [ ] Bruce
- [ ] Dufferin
- [ ] Elgin
- [ ] Essex
- [ ] Frontenac
- [ ] Grey
- [ ] Haliburton
- [ ] Halton
- [ ] Lambton
- [ ] Lanark

- [ ] Leeds/Grenville
- [ ] Lennox/Addington
- [ ] Middlesex
- [ ] Muskoka
- [ ] Niagara
- [ ] Northhumberland
- [ ] Oxford
- [ ] Peel
- [ ] Perth
- [ ] Peterborough
- [ ] Prescott/Russell
- [ ] Renfrew
- [ ] Simcoe
- [ ] Stormont/Dundas/Glengarry
- [ ] Toronto (GTA)
- [ ] Waterloo
- [ ] York
- [ ] Other
- [ ] Other (please specify)

4. In which program in the HEI are you currently enrolled in?

- [ ] Social Service Worker (SSW)
- [ ] Police Foundations (PFP)
- [ ] Community and Justice Services (JCS)

- [ ] Other, not listed but within the School of Social and Community Studies
- [ ] Other, not within the School of Social and Community Studies but withing Humber College.

5. What semester are you currently enrolled in?

- [ ] First Semester
- [ ] Second Semester
- [ ] Third Semester
- [ ] Fourth Semester

6. Have you completed an academic writing course with in the last 24 months?

- [ ] Yes
- [ ] No
- [ ] Currently enrolled
- [ ] Other (please specify)

7. What areas of your literacy skills do you feel need improvement?

- [ ] Spelling
- [ ] Grammar
- [ ] Sentence Structure
- [ ] Vocabulary
- [ ] Reading Comprehension
- [ ] Composition/Essay writing
- [ ] Referencing (APA, MLA etc)
- [ ] Other (please specify)

8. I already had adequate literacy skills when I entered my program

OK

9. I currently have areas of weakness in my literacy

OK

10. The academic writing course that I complete improved my literacy skills

OK

11. The academic writing course that I completed made me more confident in my literacy skills.

OK

12. The academic writing course that I completed led me to change my academic goals

OK

13. While attending the HEI I sometimes felt that my literacy skills were inadequate.

0 - Strongly Disagree 10 - Strongly Agree

OK

14. The academic writing course that I completed effectively addressed my literacy weaknesses.

0 - Strongly Disagree 10 - Strongly Agree

OK

15. My writing course professor was an effective instructor who helped me address my weaknesses.

0 - Strongly Disagree 10 - Strongly Agree

OK

16. Do you wish to continue to the next phase of the study?

- ☐ Yes
- ☐ No
- ☐ Undecided at this time

17. If you answered Yes and you wish to continue to the next phase of the study, please complete the following:

First Name (first name only):

Email Address:

18. To confirm the completion of your survey and to qualify for your gift card, please provide you address where you would like your gift card to be mailed to. Thank you.

Appendix B, Transcripts of Semi-Structured Interview

1. What is your opinion of the current literacy/academic writing course offered at this institution?

P1 – the academic literacy courses are useful however; they do not cover everything I need to know to complete writing assignments or reading assignments in class. I didn't know how to reference properly until the other instructor showed us how.

P2 – I think that the academic literacy course is good. It covers the areas that I didn't know from high school.

P3 – I don't think that the academic literacy course covers what I need to know. Its useless.

P4 – Its ok. But, I think that its should be two courses – 1st semester and 2nd semester. It should also cover things like writing large essays and papers because that's that we are supposed to do in other classes.

P5 – I don't think that the content of this course covers what I need to know for my other classes. For example, when I was in the academic literacy course, we had to read an article and write about it. But, it doesn't explain how to write a essay paper. Or referencing properly.

P6 – The referencing is a big issue. The teacher covers some stuff but when I need to research something for my other classes I am lost. I don't know anything. I had to go to the library and try to figure it out. The librarian helped me a lot and so I didn't plagiarize anything.

P7 – I think that the teachers for the regular classes and the teachers for the literacy courses should communicate so that the teachers for the literacy courses could teach us the things we need to know.

P8 – Instead of making us take philosophy, I think I should take another writing course because I am having a lot of issues with my writing.

P9 – I did okay on my literacy test but when I took the academic literacy course I realized that I don't know anything about literacy, writing or reading comprehension.

P10- The literacy course was fine. I felt that it was a good review of literacy concepts.

2. What areas of writing did you find challenging when you first started attending this institution?

P1 – readings, writing, referencing,

P2 – amount of reading – I don't read everything. Its too much. Writing papers and referencing.

P3 – grammar, reading, writing, referencing

P4 – writing and referencing

P5 – sentences, grammar, writing, referencing and too much reading

P6 – too much reading

P7 – writing and tests with short answers and essay questions. I like multiple choice questions

P8 – writing and too much reading

P9 – grammar, writing and referencing

P10 – too much reading

3. What changes have you experienced or noticed in your writing (comparing before attending the academic writing course and after)?

P1 – I am even more confused than before. When I was in high school, I was able to write but now I feel like I can't. I took the academic literacy course but I don't feel that I learned how to write the way I should for this level.

P2 – I think my writing has gotten worse. My papers are coming back with more corrections than before. I think that the teachers expect more.

P3 – I think my writing has improved but I think I still need to work on my writing especially my sentence structure and grammar. My teacher explained that I need to watch tense agreement.

P4 – Grammar and writing have not been my strongest skill. I think that I have improved but my papers are still difficult to complete.

P5 – I don't know. Its hard to say because I am still in the course. I will be finished this semester.

P6 – I think I have improved.

P7- Its still a challenge for me to write a paper. I was supposed to write papers before in high school but it was different. The papers they want me to write in post-secondary are different. I feel that high school didn't prepare me and now I am taking the academic literacy course and I am learning but I still don't think that the stuff they are teaching in this course will prepare me for writing large papers.

P8 – I have improved and my papers are better than before. My grades are better so I think my writing is better.

P9 – The academic literacy course is only helping me read articles and understand them. I still can't figure out what a pronoun and stuff like that is and how it fits in a sentence.

P10- My biggest problem is referencing and summarizing something that I read without copying or plagiarizing.

4. How would you describe your experience in terms of reading/writing in your academic history?

P1 – When I was in grade school or in high school the teachers in my English class did not explain things like grammar. I was only expected to write stories and papers. In high school they taught us about argumentative writing but did not explain grammar or referencing. When I started this program and I took the literacy test, I was placed in the academic literacy course but I was confused and didn't know what I was doing. I did understand somethings but still do not feel comfortable with writing.

P2 – I was expected to write papers before and read some things. But now, there is too much reading and I find that when I write a paper the professors don't read what we write. I am not corrected and I feel like I make the same mistakes over and over again.

P3 – I always hated reading and I didn't like writing. I always had issues with it. When I finished high school, I didn't think there would be so much reading and writing. Also referencing is very new to me and I doubt everything that I write and doubt everything I reference. I need to use software to make sure that my referencing is correct.

P4 – I like reading but the content and textbooks are very boring and hard to read. Now, some of the readings are on Blackboard and I find them even more difficult to read. I prefer listing in class and learning that way. I do not understand when I read but when I hear the professor explaining things then I understand the content. Writing is also hard for me because the way I write is not what the professors want.

P5 – I like to read and write but what I am used to and what I was taught in high school doesn't match up with what we are doing now in my classes.

P6 – I think I have been prepared as far as writing and reading comprehension. My biggest issue is referencing which is something that was not introduced to me in high school and now I struggle with it.

P7 – I am not a creative person. I do not like writing composition and prefer math and science-based courses. I feel that since I am not a very creative person I can't write as well as some other people who are more creative. I don't mind writing a report but essays and argumentative essays are not my strong suit.

P8 – I felt that I my literacy skills were fine for university and I learned a lot in my academic literacy course about referencing. I do not have a bad experience with reading and writing.

P9 – I understand how to write and my past experience was that I write well. My teachers in the past said I am a good writer. But, now my style of writing isn't what I should be doing so I had a learning curve when coming to university.

P10- I really didn't have any problems until I came to Humber.

5. What was the first reading/writing experience you can recall? Was it positive or negative?

P1 – I learned to read in school and write in school. My memory of reading was positive. But I don't think I was drawn to books.

P2 – My parents forced me to read books and learn to read only after my teachers were saying that I need to improve on my reading. The experience was not positive or negative.

P3 – My experience reading was positive because I remember my teacher doing circle time and reading stories to us. But, I don't remember when I started reading and writing on my own.

P4 – I was never taught to write using grammar or read using phonics. It was just that I had to remember the words and recall it when reading. The same thing for writing. So when I got to higher grade levels I got more confused and had some issues.

P5 – My parents read me bedtime stories and my mom took me to the library. I liked reading story books but, when I when to high school I didn't like textbooks. I don't remember when I started writing. But, I do remember that in school we did worksheets that did cover some basic grammar. I also learned a lot from journal writing in school. We had to write journals in high school English class Grade 9 and 10 and the teacher would read my weekly journals and correct the spelling and grammar. That helped. But, the other things we did in school like reading literature wasn't too helpful for what I am expected to do now.

P6 – I remember when I was in grade school reading a book and doing a book report. I didn't like it because I usually read a book, I didn't find interesting then I had to write about it. I did get instructions on how to do it. I did find it helpful but when I was stuck, the teacher just expected us to know how to do it. I had to figure out somethings on my own and that's when I learned the most.

P7 – My memory of reading and writing in school were pretty much English class and when I had to read a book I usually when online and tried to find a summary so I wouldn't have to read the entire book. When I had to write something, I tried to write it and most of the time the teachers would read for the meaning behind what I wrote and wouldn't correct the sentence structure or grammar.

P8 – I remember my Gr 8 teacher telling me that when I write something to put a common every time I breath when I read it back to myself. Now that I think about it, I think that my Gr 8 teacher probably would have benefited from an academic literacy class too.

P9 – I really can't recall anything about reading and writing. I just knew when I had to write – I just did it.

P10- My reading and writing were fine in grade school and in high school. I don't really have much to say except that I struggled coming to post-secondary.

6. In secondary school what literacy instruction, if any did you receive?

P1 – none

P2 – none

P3 – none

P4 -none

P5 – some

P6 – none

P7 – none

P8 – none

P9 – none

P10 - none

7. Did you family/friend support literacy skills? (Yes/No)

P1 – yes

P2 – yes

P3 – yes

P4 – yes

P5 – yes

P6 – yes

P7 – yes

P8 – yes

P9 – yes

P10 – yes

8. In your area of study (your program of study) how do you think your literacy skills will apply?

P1 – report and notes

P2 – reports and notes

P3 – reports and notes

P4– reports and notes

P5– reports and notes

P6– reports and notes

P7– reports and notes

P8– reports and notes

P9– reports and notes

P10 – reports and notes

9. Thus far, how well prepared are you to meet the challenges of your future careers in terms of your ability to apply literacy skills?

P1 – not. I feel like I am not prepared. We spent too much time reading articles and summarizing them but nothing much more than that.

Researcher Follow up – what kind of articles? And were you assigned any additional reading?

P1 – Response to follow up – we were directed to read articles like newspaper and magazine articles. But we didn't have to read anything else.

P2 – no

P3 – no

P4 – no

P5 – Yes But, I also feel like I need to work on my writing

P6 – no - I feel like there is something missing. We need more. Nothing that was taught in that class is useful for our other classes. The teacher only told us to read articles and summarize the article but she doesn't tell me if I did it correctly or not. But, when I write an assignment for my other classes some teachers tell me I should go to the writing centre for help or they don't tell me anything at all.

P7 – yes

P8 – no

P9 – yes

P10 - no

10. Is there anything you would like to add?

P1 - no

P2 – no

P3- no

P4- no

P5- no

P6- no

P7- no

P8- no

P9- no

P10- no

Appendix C, Overview of Student Needs, Areas of Weakness and Academic Literacy Course Content

Academic Literacy Courses in Ontario

What students said they need:

- Writing composition
- Referencing.
- Sentence structure
- Vocabulary
- Reading comprehension, understanding and using information from written works
- Locating information
- Problem-solving skills
- Critical Thinking skills

Areas that students showed academic literacy weaknesses:

In order of greatest academic literacy insecurity:

- Referencing
- Composition & writing
- Sentence Structure
- Grammar
- Spelling
- Reading Comprehension
- Vocabulary

Other:

- Locating knowledge
- Problem-solving skills
- Critical Thinking skills

Course Modules

- Strategies for Effective Reading
- Paraphrasing/
- Summarizing
- Critical Analysis
- Writing process
- Academic Integrity

Course Learning Outcomes:

- Read a variety of texts actively to paraphrase and summarize accurately.
- Identify and analyze strategies used by authors to persuade audiences.
- Evaluate a variety of texts for reliability and effectiveness.
- Develop and apply a process for writing well-structured texts that employ tone and language appropriate to their context.
- Demonstrate digital fluency by locating and assessing online information and using conventional citation practices.

Appendix D, Semi-Structured Interview Question Coding Table (Part 1)

Semi-Structured Interview Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
1. What is your opinion of the current literacy/academic writing course offered at this institution?	The academic literacy courses are useful however; they do not cover everything I need to know to complete writing assignments or reading assignments in class. I didn't know how to reference properly until the other instructor	I think that the academic literacy course is good. It covers the areas that I didn't know from high school	I don't think that the academic literacy course (does not) covers what I need to know. Its useless.	Its ok. But, I think that it should be two courses – 1st semester and 2nd semester. It should also cover things like writing large essays and papers because that's that we are supposed to do in other classes.	I don't think that the content of this course (does not) covers what I need to know for my other classes. For example, when I was in the academic literacy course, we had to read an article and write about it. But, it doesn't	The referencing is a big issue. The teacher covers some stuff but when I need to research something for my other classes I am lost. I don't know anything. I had to go to the library and try to figure it out. The librarian helped me	I think that the teachers for the regular classes and the teachers for the literacy courses should communicate so that the teachers for the literacy courses could teach us the things we need to know	Instead of making us take philosophy, I think I should take another writing course because I am having a lot of issues with my writing.	I did okay on my literacy test but when I took the academic literacy course, I realized that I don't know anything about literacy, writing or reading comprehension.	The literacy course was fine. I felt that it was a good review of literacy concepts.

	showed us how.				explain how to write a essay paper. Or referencing properly.	a lot and so I didn't plagiarize anything.				
2. What areas of writing did you find challenging when you first started attending this institution?	readings, writing, referencing	amount of reading – I don't read everything. Its too much. Writing papers and referencing	grammar, reading, writing, referencing	writing and referencing	sentences, grammar, writing, referencing and too much reading	too much reading	writing and tests with short answers and essay questions. I like multiple choice questions	writing and too much reading	grammar, writing and referencing	too much reading
3. What changes have you experienced or noticed in your writing (comparing before attending	I am even more confused than before. When I was in high school, I was able to write	I think my writing has gotten worse. My papers are coming back with more corrections than	I think my writing has improved but I think I still need to work on my writing especially my	Grammar and writing have not been my strongest skill. I think that I have improved but my	I don't know. Its hard to say because I am still in the course. I will be finished	I think I have improved	Its still a challenge for me to write a paper. I was supposed to write papers before in high	I have improved and my papers are better than before. My grades are better so I think my	The academic literacy course is only helping me read articles and understand them. I	My biggest problem is referencing and summarizing something that I read without

the academic writing course and after)?	but now I feel like I can't. I took the academic literacy course but I don't feel that I learned how to write the way I should for this level.	before. I think that the teachers expect more	sentence structure and grammar. My teacher explained that I need to watch tense agreement .	papers are still difficult to complete.	this semester.		school but it was different. The papers they want me to write in post-secondary are different. I feel that high school didn't prepare me and now I am taking the academic literacy course and I am learning but I still don't think that the stuff they are teaching in this course	writing is better	still can't figure out what a pronoun and stuff like that is and how it fits in a sentence.	copying or plagiarizing

							will prepare me for writing large papers.			
4. How would you describe your experience in terms of reading/writing in your academic history?	When I was in grade school or in high school the teachers in my English class did not explain things like grammar. I was only expected to write stories and papers. In high school they taught us about argumenta	I was expected to write papers before and read some things. But now, there is too much reading and I find that when I write a paper the professors don't read what we write. I am not corrected and I feel like I make the same	I always hated reading and I didn't like writing. I always had issues with it. When I finished high school, I didn't think there would be so much reading and writing. Also referencin g is very new to me and I	I like reading but the content and textbooks are very boring and hard to read. Now, some of the readings are on Blackboar d and I find them even more difficult to read. I prefer listening in class and learning	I like to read and write but what I am used to and what I was taught in high school doesn't match up with what we are doing now in my classes	I think I have been prepared as far as writing and reading comprehe nsion. My biggest issue is referencin g which is something that was not introduce d to me in high school and now I struggle with it.	I am not a creative person. I do not like writing compositi on and prefer math and science-based courses. I feel that since I am not a very creative person I can't write as well as some other people who are more	I felt that I my literacy skills were fine for university and I learned a lot in my academic literacy course about referencin g. I do not have a bad experienc e with reading and writing.	I understan d how to write and my past experienc e was that I write well. My teachers in the past said I am a good writer. But, now my style of writing isn't what I should be doing so I had a learning curve when coming to university	I really didn't have any problems until I came to Humber.

	tive writing but did not explain grammar or referencing. When I started this program and I took the literacy test, I was placed in the academic literacy course but I was confused and didn't know what I was doing. I did understand somethings but still	mistakes over and over again.	doubt everything that I write and doubt. Everything I reference I need to use software to make sure that my referencing is correct.	that way. I do not understand when I read but when I hear the professor explaining things then I understand the content. Writing is also hard for me because the way I write is not what the professors want			creative. I don't mind writing a report but essays and argumentative essays are not my strong suit			

	do not feel comfortable with writing.									
5. What was the first reading/writing experience you can recall? Was it positive or negative?	I learned to read in school and write in school. My memory of reading was positive. But I don't think I was drawn to books.	My parents forced me to read books and learn to read only after my teachers were saying that I need to improve on my reading. The experience was not positive or negative.	My experience reading was positive because I remember my teacher doing circle time and reading stories to us. But, I don't remember when I started reading and writing on my own.	I was never taught to write using grammar or read using phonics. It was just that I had to remember the words and recall it when reading. The same thing for writing. So when I got to higher grade levels I got more confused	My parents read me bedtime stories and my mom took me to the library. I liked reading story books but, when I when to high school I didn't like textbooks. I don't remember when I started writing. But, I do remember that in	I remember when I was in grade school reading a book and doing a book report. I didn't like it because I usually read a book, I didn't find interesting then I had to write about it. I did get instructions on how to do it. I did find it	My memory of reading and writing in school were pretty much English class and when I had to read a book I usually when online and tried to find a summary so I wouldn't have to read the entire book.	I remember my Gr 8 teacher telling me that when I write something to put a common every time I breath when I read it back to myself. Now that I think about it, I think that my Gr 8 teacher probably would have benefited	I really can't recall anything about reading and writing. I just knew when I had to write – I just did it.	My reading and writing were fine in grade school and in high school. I don't really have much to say except that I struggled coming to post-secondary .

				and had some issues.	school we did worksheets that did cover some basic grammar. I also learned a lot from journal writing in school. We had to write journals in high school English class Grade 9 and 10 and the teacher would read my weekly journals and correct the spelling	helpful but when I was stuck, the teacher just expected us to know how to do it. I had to figure out somethings on my own and that's when I learned the most.	When I had to write something, I tried to write it and most of the time the teachers would read for the meaning behind what I wrote and wouldn't correct the sentence structure or grammar.	from an academic literacy class too.		

					and grammar. That helped. But, the other things we did in school like reading literature wasn't too helpful for what I am expected to do now.					
6. In secondary school what literacy instruction, if any did you receive?	none	none	none	none	none	none	none	none	none	none
7. Did you family/friend support literacy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

skills? (Yes/No)										
8. In your area of study (your program of study) how do you think your literacy skills will apply?	reports and notes	reports and notes	reports and notes	reports and notes	reports and notes	reports and notes	reports and notes	reports and notes	reports and notes	reports and notes
9. Thus far, how well prepared are you to meet the challenges of your future careers in terms of your ability to apply literacy skills?	I feel like I am not prepared. We spent too much time reading articles and summarizing them but nothing much more than that. Researcher Follow up – what kind of	No	No	No	Yes But, I also feel like I need to work on my writing	no - I feel like there is something missing. We need more. Nothing that was taught in that class is useful for our other classes. The teacher only told us to read articles and	Yes	No	Yes	No

	articles? And were you assigned any additional reading? P1 – Response to follow up – we were directed to read articles like newspaper and magazine articles. But we didn't have to read anything else.					summarize the article but she doesn't tell me if I did it correctly or not. But, when I write an assignment for my other classes some teachers tell me I should go to the writing centre for help or they don't tell me anything at all.				
10. Is there anything you would like to add?	No	No	No	No	No	No	No	No	No	No

Appendix E, Examination of Emerging Themes and Discussion of Semi-structured Interviews

Semi-Structured Interview Questions	Quotes	Emerging Theme	Discussion
1. What is your opinion of the current literacy/academic writing course offered at this institution?	• "academic literacy courses are useful however; they do not cover everything" • "reference properly" • "good.. It covers the areas that I didn't know from high school" • "(does not) covers what I need to know" • "should be two courses" • "should also cover things like writing large essays and papers" • "(does not) covers what I need to know for my other classes" • "Referencing" • "I had to go to the library and try to figure it out" • "teachers for the regular classes and the teachers for the literacy courses should communicate" • "teach us the things we need to know" • "lot of issues with my writing"	• Not useful • Referencing • Does not cover all necessary areas • Covers what I need to know • Should be more comprehensive • Additional resources sought out • Lack of coordination between subject matter course and academic literacy course content • Content useful • Issues with writing • Issues with literacy, writing, reading comprehension • Good review of concepts.	Some participants identified that they found the course not useful and the content did not address their needs: literacy, writing, reading comprehension and referencing. Some participants found the course helpful and noted that the course did address areas of academic literacy that they were not previously introduced to.

	• "I don't know anything about literacy, writing or reading comprehension" • "that it was a good review of literacy concepts"		
2. What areas of writing did you find challenging when you first started attending this institution?	• Readings • Writing • Referencing • Grammar • Sentence composition • Too much reading	Participants note areas they found challenging namely, • Readings • Writing • Referencing • Grammar • Sentence composition • Too much reading	Notably, these areas that previous research (Fisher & Hoth, 2010; Perin & Holschuch 2019) identified as academic literacy weaknesses among post-secondary students. Some areas such as critical thinking was not identified by students.
3.What changes have you experienced or noticed in your writing (comparing before attending the academic writing course and after)?	• "even more confused than before." • "my writing has gotten worse." • "writing has improved but I think I still need to work on my writing" • "sentence structure and grammar." • "Grammar and writing" • "I don't know" • "Improved" • "challenge for me to write a paper." • "papers they want me to write in post-secondary are different. I feel that	• Confused • Improvement • Skill Decline • Ongoing challenges • Some issues – referencing • Poor academic skill acquisition	Some participants have noted an improvement in their academic literacy skills while other participants identified no change or improvement in their academic literacy skills after having completed the academic literacy course.

	high school didn't prepare me" • "improved and my papers are better" • "can't figure out what a pronoun is" • "My biggest problem is referencing and summarizing"		
4.How would you describe your experience in terms of reading/writing in your academic history?	• "Grade school or in high school the teachers in my English class did not explain things like grammar" • "Too much reading and I find that when I write a paper the professors don't read what we write" • "Hated reading and I didn't like writing" • "I like reading but the content and textbooks are very boring and hard to read" • "High school doesn't match up with what we are doing now in my classes" • "Prepared as far as writing and reading comprehension." • "Referencing issues"	• High school (Secondary school) • No instruction in grammar • Hated reading/writing • Challenges in reading/writing	Most students describe their previous academic experience negatively and note lack of preparation and poor instruction, in particularly in terms of grammar.

	• "I do not like writing composition" • "My literacy skills were fine" • "I do not have a bad experience with reading and writing" • "I am a good writer, but now my style of writing isn't what I should be doing" • "Didn't have any problems until I came to Humber"		
5.What was the first reading/writing experience you can recall? Was it positive or negative?	• "My memory of reading was positive" • "My parents forced me to read books" • "The experience was not positive or negative" • "My experience reading was positive" • "I don't remember when I started reading and writing on my own." • "never taught to write using grammar or read using phonics" • "I got more confused" • "My parents read me bedtime stories and my	• Positive • Negative • Neutral • No memory of how reading and writing were introduced.	When asked to recall if their first experiences with literacy were positive or negative, participants indicated mixed-reaction, some recalled positive experiences, some negative experiences and some could not recall their first experiences at all.

	mom took me to the library. I liked reading" • "I didn't like textbooks" • "I learned a lot from journal writing" • "Reading a book and doing a book report." • "I had to figure out somethings on my own and that's when I learned the most." • "(I would) find a summary so I wouldn't have to read the entire book" • "I think that my Gr 8 teacher probably would have benefited from an academic literacy class too." • "I can't recall anything about reading and writing." • "I struggled coming to post-secondary."		
6.In secondary school what literacy instruction, if any did you receive?	• 9/10 participants indicted "none" as their response • 1/10 participants indicated "some" as their response	• None • Some	The majority of participants indicates that they did not receive any literacy instructions in secondary school.
7.Did you family/friend support literacy skills? (Yes/No)	• 10/10 participants indicated that their family and friends were	• Yes	All participants indicated that they felt

	supportive of their literacy skills		supported by their family and friends.
8.In your area of study (your program of study) how do you think your literacy skills will apply?	• reports • emails • letters • notes	• reports • emails • letters • notes	According to the Canadian National Occupation Classification the main duty of Human Service Workers is to "review client background information, interview clients to obtain case history and prepare intake reports" (Statistic Canada, 2021). This is also noted in the responses provided by participants.
9.Thus far, how well prepared are you to meet the challenges of your future careers in terms of your ability to apply literacy skills?	• "I feel like I am not prepared" • "I also feel like I need to work on my writing" • "I feel like there is something missing" • "Yes" • "No"	• Not prepared • Prepared	Most participants responded that they did not feel prepared to meet the challenges of their future careers.
10. Is there anything you would like to add?	• No comment	No comment	No comment

Appendix F, Thematic Analysis of Semi-Structured Interview Responses

Semi-Structured Interview Responses	Emerging Codes
1. What is your opinion of the current literacy/academic writing course offered at Humber College?	
P1 – the academic literacy courses are useful however; they do not cover everything I need to know to complete writing assignments or reading assignments in class. I didn't know how to reference properly until the other instructor showed us how.	Positive Usefulness of course Acknowledgement of missing content Writing/Reading Referencing
P2 – I think that the academic literacy course is good. It covers the areas that I didn't know from high school.	Positive Acknowledgement of adequate presence content
P3 – I don't think that the academic literacy course covers what I need to know. It's useless.	Negative Acknowledgement of missing content
P4 – It's ok. But, I think that it should be two courses – 1st semester and 2nd semester. It should also cover things like writing large essays and papers because that's that we are supposed to do in other classes.	Neutral – Neither positive/negative Acknowledgement of missing content Writing
P5 – I don't think that the content of this course covers what I need to know for my other classes. For example, when I was in the academic literacy course, we had to read an article and write about it. But, it doesn't explain how to write an essay paper. Or referencing properly.	Negative Acknowledgement of missing content Writing Referencing
P6 – The referencing is a big issue. The teacher covers some stuff but when I need to research something for my other classes I am lost. I don't know anything. I had to go to the library and try to figure it out. The	Negative Acknowledgement of missing content Referencing

librarian helped me a lot and so I didn't plagiarize anything.	
P7 – I think that the teachers for the regular classes and the teachers for the literacy courses should communicate so that the teachers for the literacy courses could teach us the things we need to know.	Negative Acknowledgement of missing content (Faculty Collaboration)
P8 – Instead of making us take philosophy, I think I should take another writing course because I am having a lot of issues with my writing.	Positive Acknowledgement of missing content Writing
P9 – I did okay on my literacy test but when I took the academic literacy course I realized that I don't know anything about literacy, writing or reading comprehension.	Positive Acknowledgement of missing content Writing/Reading
P10- The literacy course was fine. I felt that it was a good review of literacy concepts.	Neutral – Neither positive/negative Acknowledgement of adequate presence of content Literacy (general)
2. What areas of writing did you find challenging when you first started attending Humber College?	
P1 – readings, writing, referencing,	Reading Writing Referencing
P2 – amount of reading – I don't read everything. It's too much. Writing papers and referencing.	Reading Writing Referencing
P3 – grammar, reading, writing, referencing	Reading Writing Referencing Grammar
P4 – writing and referencing	Writing Referencing
	Reading Writing

P5 – sentences, grammar, writing, referencing and too much reading	Referencing Grammar Sentence Structure Reading
P6 – too much reading	Writing Test taking
P7 – writing and tests with short answers and essay questions. I like multiple choice questions	Reading Writing
P8 – writing and too much reading	Writing Referencing Grammar
P9 – grammar, writing and referencing	Reading
P10 – too much reading	
3. What changes have you experienced or noticed in your writing (comparing before attending the academic writing course and after)?	
P1 – I am even more confused than before. When I was in high school, I was able to write but now I feel like I can't. I took the academic literacy course but I don't feel that I learned how to write the way I should for this level.	Confused Lack of improvement Regression of literacy skills
P2 – I think my writing has gotten worse. My papers are coming back with more corrections than before. I think that the teachers expect more.	Regression of literacy skills Faculty expectations
P3 – I think my writing has improved but I think I still need to work on my writing especially my sentence structure and grammar. My teacher explained that I need to watch tense agreement.	Improvement of writing skills Room for additional improvement/skill acquisition (sentence structure/grammar)
	Improvement of writing skills

P4 – Grammar and writing have not been my strongest skill. I think that I have improved but my papers are still difficult to complete.	Room for additional improvement/skill acquisition (grammar/writing) Continued difficulty
P5 – I don't know. It's hard to say because I am still in the course. I will be finished this semester.	Unsure of results – still in course therefore outcome not determined.
P6 – I think I have improved.	Improvement of literacy skills.
P7- It's still a challenge for me to write a paper. I was supposed to write papers before in high school but it was different. The papers they want me to write in post-secondary are different. I feel that high school didn't prepare me and now I am taking the academic literacy course and I am learning but I still don't think that the stuff they are teaching in this course will prepare me for writing large papers.	Continued difficulty Unprepared Unconfident in literacy skills Room for additional improvement/skill acquisition
P8 – I have improved and my papers are better than before. My grades are better so I think my writing is better.	Improvement of writing skills Improvement of Grades → positive outcome
P9 – The academic literacy course is only helping me read articles and understand them. I still can't figure out what a pronoun and stuff like that is and how it fits in a sentence.	Improvement of reading and reading comprehension Positive outcome Room for additional improvement/skill acquisition (Grammar)
P10- My biggest problem is referencing and summarizing something that I read without copying or plagiarizing.	Continued difficulty Room for additional improvement/skill acquisition (Referencing)
4. How would you describe your experience in terms of reading/writing in your academic history?	
P1 – When I was in grade school or in high school the teachers in my English class did not explain things like grammar. I was only expected to write stories and papers. In high	Unprepared Lack of instruction (grammar/referencing)

school they taught us about argumentative writing but did not explain grammar or referencing. When I started this program and I took the literacy test, I was placed in the academic literacy course but I was confused and didn't know what I was doing. I did understand somethings but still do not feel comfortable with writing.	Stories/papers Introduced to Argumentative writing Uncomfortable/unconfident in writing
P2 – I was expected to write papers before and read some things. But now, there is too much reading and I find that when I write a paper the professors don't read what we write. I am not corrected and I feel like I make the same mistakes over and over again.	Introduced to writing/reading Excessive reading amounts Faculty feedback missing No feedback Repeated mistakes
P3 – I always hated reading and I didn't like writing. I always had issues with it. When I finished high school, I didn't think there would be so much reading and writing. Also referencing is very new to me and I doubt everything that I write and doubt everything I reference. I need to use software to make sure that my referencing is correct.	Negative experience with literacy Excessive reading amounts Excessive writing Excessive use of referencing Uncomfortable/unconfident in writing Use of technology as coping mechanism
P4 – I like reading but the content and textbooks are very boring and hard to read. Now, some of the readings are on Blackboard and I find them even more difficult to read. I prefer listening in class and learning that way. I do not understand when I read but when I hear the professor explaining things then I understand the content. Writing is also hard for me because the way I write is not what the professors want.	Positive reading experience Course content – boring/difficult to read Difficulty in reading comprehension Difficulty in writing skills Faculty expectations not met
P5 – I like to read and write but what I am used to and what I was taught in high school doesn't match up with what we are doing now in my classes.	Positive reading and writing experience Unprepared to meet HEI literacy demands
P6 – I think I have been prepared as far as writing and reading comprehension. My biggest issue is referencing which is	

something that was not introduced to me in high school and now I struggle with it. P7 – I am not a creative person. I do not like writing composition and prefer math and science-based courses. I feel that since I am not a very creative person I can't write as well as some other people who are more creative. I don't mind writing a report but essays and argumentative essays are not my strong suit. P8 – I felt that I my literacy skills were fine for university and I learned a lot in my academic literacy course about referencing. I do not have a bad experience with reading and writing. P9 – I understand how to write and my past experience was that I write well. My teachers in the past said I am a good writer. But, now my style of writing isn't what I should be doing so I had a learning curve when coming to university. P10- I really didn't have any problems until I came to Humber. **5. What was the first reading/writing experience you can recall? Was it positive or negative?** P1 – I learned to read in school and write in school. My memory of reading was positive. But I don't think I was drawn to books. P2 – My parents forced me to read books and learn to read only after my teachers were saying that I need to improve on my reading. The experience was not positive or negative. P3 – My experience reading was positive because I remember my teacher doing circle time and reading stories to us. But, I don't remember when I started reading and writing on my own.	Positive reading and writing experience Prepared to meet HEI literacy demands Room for additional improvement/skill acquisition (referencing) Continued difficulty with referencing Negative writing experience Preferred analytical tasks (mathematics based) Positive -Analytical report writing Negative – essay/argumentative essays Adequate literacy skills Presence of literacy skill acquisition (referencing) Positive reading and writing experience Positive writing experience Previously good writer Presence of literacy skills Unprepared to meet HEI literacy demands Learning curve Unprepared to meet HEI literacy demands School instruction (reading and writing) Positive No intrinsic motivation for reading School instruction (reading) Neutral experience

P4 – I was never taught to write using grammar or read using phonics. It was just that I had to remember the words and recall it when reading. The same thing for writing. So when I got to higher grade levels I got more confused and had some issues.	No intrinsic motivation for reading School instruction (reading) Positive experience No recall of beginning of reading/writing experience
P5 – My parents read me bedtime stories and my mom took me to the library. I liked reading story books but, when I when to high school I didn't like textbooks. I don't remember when I started writing. But, I do remember that in school we did worksheets that did cover some basic grammar. I also learned a lot from journal writing in school. We had to write journals in high school English class Grade 9 and 10 and the teacher would read my weekly journals and correct the spelling and grammar. That helped. But, the other things we did in school like reading literature wasn't too helpful for what I am expected to do now.	School instruction (reading and writing) Negative experience No formal instruction- reading/writing Memorization of word (sight word recall) Confused Uncomfortable/unconfident Continued difficulty
P6 – I remember when I was in grade school reading a book and doing a book report. I didn't like it because I usually read a book, I didn't find interesting then I had to write about it. I did get instructions on how to do it. I did find it helpful but when I was stuck, the teacher just expected us to know how to do it. I had to figure out somethings on my own and that's when I learned the most.	School instruction (reading and writing) Early exposure to reading (bedtime stories/library visits) Positive experience – reading stories Negative experience – textbooks No recall of beginning of writing Exposure to basic grammar Positive experience- journal writing Feedback given Unprepared to meet HEI literacy demands – literature not helpful for HEI demands
P7 – My memory of reading and writing in school were pretty much English class and when I had to read a book I usually went online and tried to find a summary so I wouldn't have to read the entire book. When I had to write something, I tried to write it and most of the time the teachers would read for the meaning behind what I wrote and wouldn't correct the sentence structure or grammar.	School instruction (reading and writing) Negative experience – reading/writing Lack of interest in content Lack of intrinsic motivation for reading Teacher expectations Self-instruction
P8 – I remember my Gr 8 teacher telling me that when I write something to put a common	

every time I breathe when I read it back to myself. Now that I think about it, I think that my Gr 8 teacher probably would have benefited from an academic literacy class too. P9 – I really can't recall anything about reading and writing. I just knew when I had to write – I just did it. P10- My reading and writing were fine in grade school and in high school. I don't really have much to say except that I struggled coming to post-secondary.	School instruction (reading and writing) Negative experience reading Lack of intrinsic motivation for reading Lack of Feedback
6. In secondary school what literacy instruction, if any did you receive? P1 – none P2 – none P3 – none P4 -none	School instruction (reading and writing) Negative experience reading/writing Poor instruction/in accurate information given Questioned teacher knowledge/skills
P5 – some P6 – none P7 – none P8 – none P9 – none P10 - none	No recall of school instruction (reading and writing) Self-instruction School instruction (reading and writing) Unprepared to meet HEI literacy demands
7. Did you family/friend support literacy skills? (Yes/No) P1 – yes P2 – yes P3 – yes	

P4 – yes P5 – yes P6 – yes P7 – yes P8 – yes P9 – yes P10 – yes **8. In your area of study (your program of study) how do you think your literacy skills will** **apply?** P1 – report and notes P2 – reports and notes P3 – reports and notes P4– reports and notes P5– reports and notes P6– reports and notes P7– reports and notes P8– reports and notes P9– reports and notes P10 – reports and notes **9. Thus far, how well prepared are you to meet the challenges of your future careers in terms of your ability to apply literacy skills?**	

P1 – not. I feel like I am not prepared. We spent too much time reading articles and summarizing them but nothing much more than that. Researcher Follow up – what kind of articles? And were you assigned any additional reading? P1 – Response to follow up – we were directed to read articles like newspaper and magazine articles. But we didn't have to read anything else. P2 – no P3 – no P4 – no P5 – Yes But, I also feel like I need to work on my writing. P6 – no - I feel like there is something missing. We need more. Nothing that was taught in that class is useful for our other classes. The teacher only told us to read articles and summarize the article but she doesn't tell me if I did it correctly or not. But, when I write an assignment for my other classes some teachers tell me I should go to the writing centre for help or they don't tell me anything at all. P7 – yes P8 – no P9 – yes P10 - no	Not prepared Reading articles (newspaper/magazine) Newspaper Magazine Not prepared Not prepared Not prepared Prepared Writing needs improvement

10. Is there anything you would like to add?	
P1 - no	Not prepared Missing information Content not useful for other courses Lack of instruction No feedback Referred to writing support services
P2 – no	
P3- no	
P4- no	
P5- no	
P6- no	Prepared
P7- no	Not prepared
P8- no	Prepared
P9- no	Not Prepared
P10- no	

Appendix G, Emerging Themes from Semi-structured Interview Data

Codes	Themes
Missing content Literacy (Reading, Writing, Referencing) Irrelevant literacy content Lack of feedback	**Inadequate**
Confusion Regression of literacy skills Improvement but in need of additional skills Continued difficulty Underprepared for HEI courses No intrinsic motivation for reading Formal school instruction present Negative experiences	**Skill acquisition**
Unprepared for HEI Difficulty in literacy skills Unconfident in literacy skills	**Underprepared**

Appendix H , Measurement tool and matrix for assessing academic literacy courses

	Course Outline Learning Objectives	Course Outline Course Content	Online Survey Data	Semi-Structured Interview Data	Conclusions
Year 1 (2020-2021)	• **Read** a variety of texts actively to paraphrase and **summarize** accurately. • **Identify and analyze** strategies used by authors to persuade audiences. • **Evaluate** a variety of texts for reliability and effectiveness. • **Develop and apply a process for writing** well-structured texts that employ tone and language appropriate to their context. • **Demonstrate digital fluency** by locating and assessing online information and using conventional **citation practices.**	**Strategies for Effective Reading** • Read a variety of texts actively to paraphrase and summarize accurately. • Identify and analyze strategies used by authors to persuade audiences. • Evaluate a variety of texts for reliability and effectiveness. • Demonstrate digital fluency by locating and assessing online information and using conventional citation practices **Paraphrasing and Summarizing** • Read a variety of texts actively to paraphrase	Areas in need of improvement: • Spelling • Grammar • Sentence Structure • Vocabulary • Reading Comprehension • Composition/Essay Writing • Referencing	Participants note areas they found challenging, namely: • Readings • Writing • Referencing • Grammar • Sentence composition • Too much reading	**Gaps:** • Grammar • Spelling • Vocabulary • Critical Analysis/Thinking **Connections** • Reading comprehension • Sentence Structure • Composition/ Essay Writing • Referencing

		and summarize accurately **Critical Analysis** • Identify and analyze strategies used by authors to persuade audiences. • Evaluate a variety of texts for reliability and effectiveness. **Writing Process** • Develop and apply a process for writing well-structured texts that employ tone and language appropriate to their context. **Academic Integrity** • Demonstrate digital fluency by locating and assessing online information and using conventional citation practices.			

Year 2 (2019-2020)	• **Summarize** the claims and their support within a text. • **Critique a variety of texts** with attention to their purpose and rhetorical strategies. • Apply essential aspects of the **writing process** to the composition of academic essays. • **Produce essays** that effectively demonstrate academic tone, language, and structure. • **Cite sources** by applying consistent and conventional citation practices.	**Critical Reading** • Active reading and previewing techniques **Paraphrasing and Summarizing** • Accuracy, original language, and academic integrity **Critical Analysis** • Guidelines and analytical tools and strategies: e.g. rhetorical appeals, language, evidence, tone, patterns of organization, context, purpose, audience, etc. Tools and strategies for critiquing a variety of texts **Writing Process** • Pre-writing, outlining, drafting, and revising **Proofreading and Editing** • Grammar and mechanics **Documentation**	Areas in need of improvement: • Spelling • Grammar • Sentence Structure • Vocabulary • Reading Comprehension • Composition/Essay Writing • Referencing	Participants note areas they found challenging, namely: • Readings • Writing • Referencing • Grammar • Sentence composition • Too much reading	**Gaps:** • Spelling • Vocabulary • Critical • Analysis/Thinking **Connections** • Reading comprehension • Grammar • Sentence Structure • Composition/ Essay Writing • Referencing

		Academic integrity, APA style			
Year 3 (2018-2019)	• **Summarize** the claims and their support within a text. • **Critique an argument** for validity and persuasiveness. • Apply essential aspects of the **writing process** to the composition of academic essays. • **Produce essays** employing academic tone, language, and structure. • **Cite sources** by applying consistent and conventional citation practices.	**Critical Reading** • Active reading and previewing techniques **Paraphrasing and Summarizing** • Accuracy, original language, and academic integrity **Critical Analysis** • Guidelines and analytical tools and strategies: e.g. rhetorical appeals, language, evidence, logic, tone, patterns of organization, context, purpose, audience, etc. Tools and strategies for critiquing the	Areas in need of improvement: • Spelling • Grammar • Sentence Structure • Vocabulary • Reading Comprehension • Composition/Essay Writing • Referencing	Participants note areas they found challenging, namely: • Readings • Writing • Referencing • Grammar • Sentence composition • Too much reading	**Gaps:** • Spelling • Vocabulary • Critical Analysis/Thinking **Connections** • Reading comprehension • Sentence Structure • Composition/ Essay Writing • Referencing • Grammar

		validity of arguments **Writing Process** • Pre-writing, outlining, drafting, and revising **Proofreading and Editing** • Grammar and mechanics **Documentation** • Academic integrity APA style			

Appendix I, Academic Literacy Course in an Ontario HEI – Theoretical Evaluation Matrix

Key to Rating:

4 = Complete/ strong presence

3 = good/ satisfactory level of presence with minor variances needed

2 = fair/ satisfactory level presence with a great deal of room for improvement

1 = poor/ minimal presence

0 = not present/ no presence of this component

Criteria	**0**	**1**	**2**	**3**	**4**
Part A: **Content:** *Consider the following areas of academic literacy. On the scale provided (0 – 4), note the level of presence of these areas in the academic literacy course (in course outlines, materials and instruction)*					
Spelling					
Grammar					
Sentence Structure					
Vocabulary					
Reading Comprehension					
Strategies for Effective Reading					
Read a variety of texts actively to paraphrase and summarize accurately					
Identify and analyse strategies used by authors to persuade audiences					
Evaluate a variety of texts for reliability and effectiveness					
Demonstrate digital fluency and using conventional citation practices					
Composition /essay writing					

Develop and apply a process for writing well-structured texts employing tone and language appropriate to context.					
Paraphrasing and Summarizing Read a variety of texts actively to paraphrase and summarize accurately					
Referencing					
Part B: **Course Learning Outcomes (CLO):** *Consider the following CLO and how closely related are the CLO with labour market/National Occupational Classification markers. How likely are students to perform adequately (within the labour market) in the following areas after having completed the academic literacy course/post-secondary program:*					
Read a variety of texts actively to paraphrase and summarize accurately					
Identify and analyse strategies used by authors to persuade audiences					
Evaluate a variety of texts for reliability and effectiveness					
Develop and apply writing well-structured texts employing appropriate tone and language					
Demonstrate digital fluency by locating and assessing online					

information and using conventional citation practices					
Examine information, documentation and prepare intake reports and notes					
Conduct effective interviews and document information from interviews					
Communicate clearly, concisely and correctly in written and spoken form					
Ability to effectively communicate in written and spoken messages					
Ability to use document information in an appropriate manner					
Ability to use technology and information systems					
Ability to analyse and evaluate information using a variety of sources.					
	0	**1**	**2**	**3**	**4**
Totals					