INDIGENOUS PRIOR LEARNING, ASSESSMENT AND RECOGNITION: DISCUSSION PAPER

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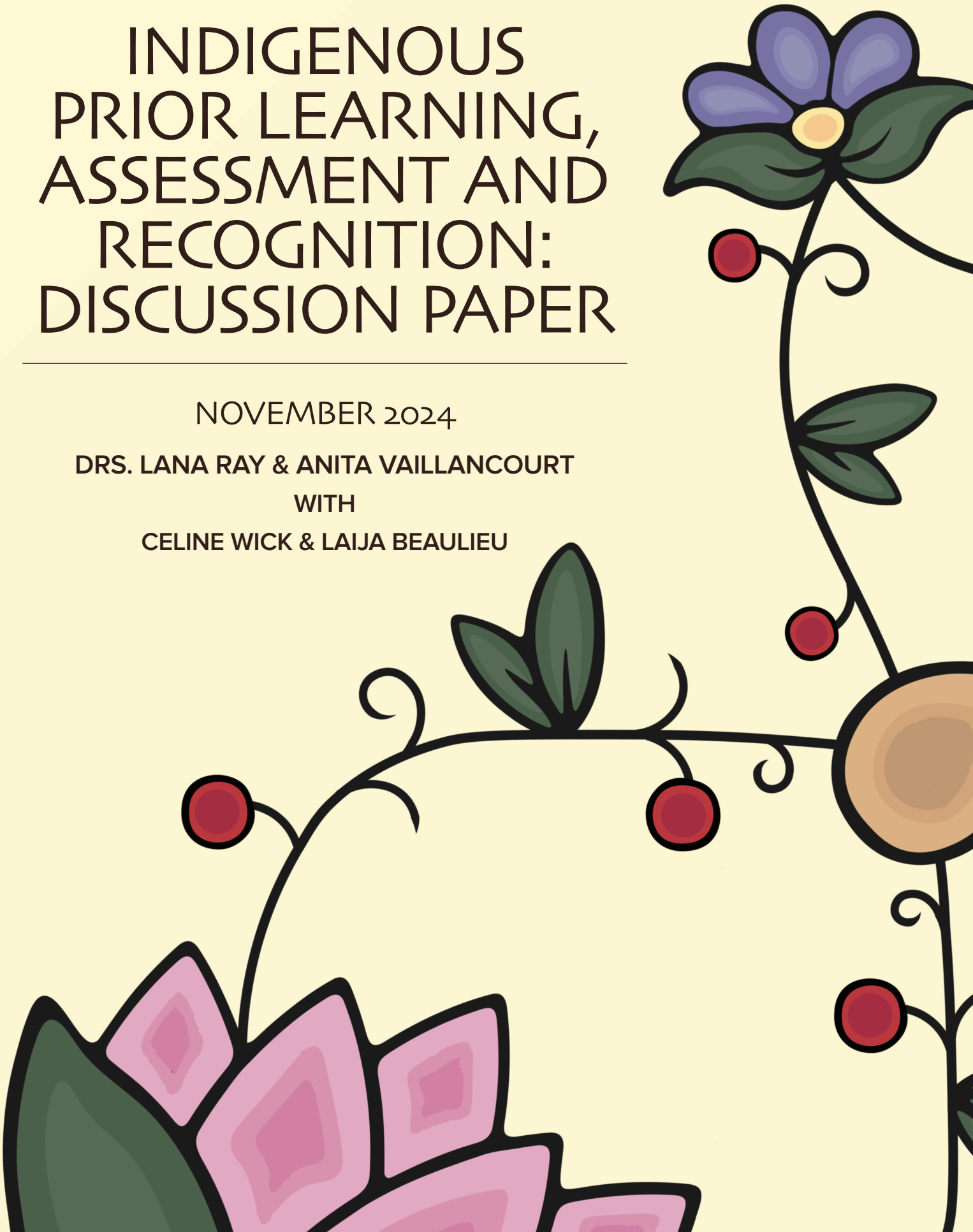

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INTRODUCTION

Prior Learning Assessment & Recognition (PLAR)[1] is the practice of acknowledging the information, skills, and understanding that adult learners' have acquired outside of an accredited institution in formal and non-formal learning environments (Wihak, 2006). The scope of prior learning is vast including paid work, employer training programs, military service, independent study, volunteer and community work and open-source courseware (Sherron et al., 2021). There are two main components of PLAR: equivalency and assessment. Equivalency refers to identifying prior learning that is akin to learning occurring within an accredited institution. Assessment refers to the process of evaluating if prior learning has met the threshold of equivalency. It is not enough to identify that someone has partaken in an experience; there must be a demonstration that this experience results in learning that satisfies certain requirements (Werquin, 2010).

Various studies have noted many benefits of PLAR including enhanced retention and graduation rates, shortened time to earn a degree and enhanced confidence and skill building (CAEL, 2010; Delleville, 2019; Stevens et al., 2010; Lee & Dapremont, 2020; Morrissey, 2008). PLAR is being pursued around the globe to fulfill a wide array of objectives including growing the workforce, addressing work shortages, fast-tracking qualifications and ensuring regulatory requirements are being met, providing access to higher education, and improving efficiency and flexibility in education through alternative learning pathways (Aggarwal, 2015).

> "I think the last count, like, I had, we have like it's like 85 Indigenous people have gotten their Master's degree in that through that [PLAR] cohort."
>
> -P2

Globally PLAR is promoted as a means of social justice for disadvantaged populations (Mottais et al., 2024). PLAR is a way to support equity and student success for marginalized populations by valuing their experiential learning and providing opportunities to obtain formal recognition for them (Aggarwal, 2015; CAEL, 2010). Early uptake of PLAR in the 1970s occurred to alleviate inequities and improve access to higher education. However, it has been argued that this practice has since shifted toward a focus on

[1] PLAR is referred to by many names including Assessment of prior experiential learning (APEL), Assessment of prior learning (APL), Recognition of acquired competences (RAC), Recognition of acquired skills (RAS), Recognition of current competences (RCC), Recognition of non-formal and informal learning (RNFIL), Recognition of prior learning (RPL), Recognition, validation, and certification of competences (RVCC), and Validation of non-formal and informal learning (VNFIL) (Aggarwal, 2015).

credits toward qualification (Kasola & Karalis, 2021). Wihak (2006) notes that PLAR is underutilized for marginalized students and that many learners who access PLAR already have some post-secondary education.

Indigenous peoples in Canada continue to have lower rates of educational attainment than their non-Indigenous counterparts (Gordon & White, 2013; Henderson & McCloy, 2019). In Ontario, non-Indigenous peoples are over twice as likely to obtain a bachelor's credit as their highest post-secondary education credential (Chatoor et al., 2023). A multitude of structural factors including racism and discrimination, lack of culturally safe education systems, and a lack of access to post-secondary education are among the reasons for these discrepancies in attainment. In Australia, there is evidence to suggest that PLAR offers an opportunity to enhance educational access and attainment for Indigenous students in a culturally safe manner (Wihak, 2006). Moreover, places around the globe have implemented PLAR at a systems level for the purpose of improving access. For example, The Complete College Tennessee Act (2010) mandates public higher education institutions in the state of Tennessee to implement actions that increase the number of citizens with a post-secondary credential. PLAR comprises part of this strategy in the college system (TPLATF, 2012). In South Africa, most higher education institutes accept PLAR for admission to undergraduate studies (Aggarwal, 2015).

> "And so, under our collective agreement, it is university level, deemed as a university service, but there is no remuneration for this. It's just part of the regular duties as a faculty member. So, when we dealt with this policy, we modeled it on transfer credit since faculty understood transfer credit. Sometimes transfer credit assessments [are] done either exclusively or primarily, by the chair of the department."
>
> -P7

Ontario has also recognized PLAR as a strategy to improve access, establishing a policy in 1996 which stated that a purpose of PLAR was to make colleges more accessible to a broad range of adult learners (Morrissey, 2008). Yet, the uptake of PLAR has been slow and non-systematic in Ontario and nationwide. Although PLAR has been in existence for half a century in Canada (Stevens et al., 2010), formal PLAR policies and supports are much more common among colleges than universities and these processes can vary by institution (Wihak, 2006). Most often, Canadian governments have supported PLAR as a means of increasing access to a college education, with very little support for awarding university academic credit and portfolio learning (Morrissey, 2008). Also, PLAR is rarely operationalized in Indigenous settings (Morrissey, 2008). The first account of Indigenous PLAR was in 1985 when it was introduced in a two-year social service worker diploma program that included Indigenous knowledges and cultural teachings at First Nations Technical Institute (FNTI) in partnership with Loyalist College (Thompson & Zakos, 2021). Despite FNTI's leadership role to advance PLAR, including the establishment of the Canadian Association for Prior Learning Assessment (CAPLA) in 1994, and given the underrepresentation of Indigenous peoples in the university system, little has been done at a systems level to advance Indigenous PLAR (Morrissey, 2008). When

universities do practice PLAR, it is frequently fragmented and occurs in pockets rather than systematically; and in both the college and university system, Indigenous students are underrepresented (Wihak, 2006). Indigenous learners are also underrepresented in North America as a whole. A study of 72 institutions in the United States found that Hispanic and White adult students were both more likely to have PLAR than Black and Indigenous adult students (Klein Collins et al., 2020). Further investigation of PLAR to improve post-secondary access and attainment for Indigenous peoples is warranted.

Informed by a scoping review, case study interviews and discussion circles with PLAR practitioners and administrators, this paper explores the possibilities and considerations of Indigenous PLAR in post-secondary institutions in Ontario. Although this discussion paper is relevant to all sectors of post-secondary education, there is an emphasis on PLAR in the university sector because of the significant knowledge and practice gaps present in the sector. For the purposes of this paper, Indigenous PLAR is defined as PLAR that includes Indigenous knowledge systems in design and implementation and/or recognizes Indigenous and community knowledges for use with Indigenous learners.

This discussion paper is divided into three sections: PLAR in Indigenous contexts, equivalencies, and assessment.

1. The first section addresses the question of, "Why PLAR in Indigenous contexts?" It seeks to understand how PLAR can improve access and attainment of post-secondary education for Indigenous peoples. It explores the potential benefits of PLAR for Indigenous students, convergences between the learning assumptions that underpin PLAR and Indigenous knowledge systems' assumptions about learning, and the convergences between PLAR, western learning theory and Indigenous learning theory.
2. The second section focuses on equivalencies and explores the question, "What types of prior learning in Indigenous communities are equivalent to accredited learning?" Types of prior learning that have received recognition or show promise of receiving recognition in a post-secondary setting and potential methodologies to map and confirm equivalencies are discussed.
3. The final section of this discussion paper focuses on the assessment of prior learning, including promising principles and methods to undertake assessment. It seeks to address the question, "What types of processes can assess equivalencies in a culturally responsive and effective manner?"

> "…It's off the side of this person's desk and that kind of thing. Something that I've been told from the people who kind of have been doing this work ongoing is a lot of the time you get this part of funding and then someone leaves, or the funding runs out, and it just kind of leaves everything in the stale state which is really upsetting to community. You know, when you've worked with Indigenous communities, and it can really jeopardize relationships and things like that. So that's really being kind of, I think the biggest barrier is the, you know, the longevity of-of these projects and making sure that whoever's behind it pushes it forward."
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> -P5b

METHODOLOGY

This discussion paper is informed by three methods: a scoping review, semi-structured interviews with Indigenous PLAR practitioners across Canada and discussion circles with a technical advisory committee.

SCOPING REVIEW

The purpose of a scoping review is to provide an overview of key themes in the literature and not a comprehensive account of the literature (Moher et al., 2015). The scoping review that informs this discussion paper sought to explore the research on key PLAR-related themes including knowledge assumptions, equivalency, and assessment specific to Indigenous contexts to outline key bodies of evidence and considerations to support the feasibility and practice of Indigenous PLAR implementation in post-secondary institutions (Arksey & O'Malley, 2005; Colquhoun et al., 2014). Due to the lack of literature on Indigenous PLAR, the scoping review is broad and cuts across interrelated and relevant themes of Indigenous PLAR, culturally responsive education, PLAR use for marginalized populations and global innovative practices for PLAR. Although appraisal of evidence is typically beyond the parameters of a scoping review (Ellison, 2014), due to the lack of Indigenous PLAR-specific literature, it was necessary for those conducting the review to engage in Indigenous knowledge translation. According to the Métis Centre of the National Aboriginal Health Organization, Indigenous knowledge translation includes an assessment of the assumptions of the research, the relevance of the research to Indigenous policy and practice and the perceptions of how the research will support or impact Indigenous communities (Allard n.d. as cited in Ellison, 2014). Two Indigenous researchers (Anishinaabe and Métis) with backgrounds in Indigenous knowledge systems carried out the review because they possessed the necessary knowledges to engage in the practice of Indigenous knowledge translation.

SEMI-STRUCTURED INTERVIEWS

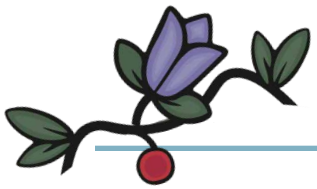
Ten interviews took place with 13 participants over a three-month period from February to April 2023. Interviews were conducted with practitioners and/or administrators of Indigenous PLAR primarily in the university sector (n=7). The remaining interviews were conducted with representatives from a polytechnic institute (n=3), community and organizational initiatives (n=2) and an Indigenous PLAR consultant with prior experience in the

college and polytechnic sectors (n=1). All but one interview was conducted virtually using Zoom technology, with one interview conducted in person. All 10 interviews were recorded for the purpose of transcription, and each interview lasted approximately one hour. Two of the interviews included more than one individual.

The project investigators and a research assistant manually coded the interview transcriptions utilizing a modified grounded theory analysis. Inductive coding was used to support categorization based on emergent categories and themes rather than organized under a pre-determined framework. Following the completion of open coding which identified concepts and labelled 'chunks' of data, axial coding was conducted to identify concepts and categories and links between emergent categories and sub-categories. Once the concepts, categories and sub-categories were identified, the coders met to compare and refine codes and categories to ensure consistency and overall trustworthiness. A second round of coding (second order coding) was conducted by all investigators to ensure appropriate theme development and alignment (Miles et al., 2020). This was followed by a meeting to discuss sub-categories and subsequently one investigator and the research assistant engaged in a round of selective coding to ensure that the overall themes and categories were reflective of the dataset. These findings are presented in text boxes throughout the discussion paper. Each semi-structured interview participant received a participant number (e.g. P1) and when there was more than one participant in a semi-structured interview each participant was identified via a participant letter (e.g. P1a).

DISCUSSION CIRCLES

A technical advisory committee was formed with representatives from the university (Lakehead University, Thompson Rivers University), college (Canadore College) and polytechnic (Six Nations Polytechnic) sectors of post-secondary education. Recruitment happened organically, with members from the advisory committee reaching out to the project team to express interest in the project because they were engaged in PLAR work at their respective institutions as practitioners and/or administrators. The technical advisory committee served as a community of practice for the members, with discussion circles happening bi-annually to quarterly throughout the project's duration. During these meetings, the project team brought forward draft research plans and tools (e.g. case study interview questions) for discussion and feedback and draft project deliverables.



SECTION ONE: PLAR IN INDIGENOUS CONTEXTS

Globally, many Indigenous educational institutions and organizations are active in PLAR and have been instrumental in its advancement (Wihak, 2006). In 2021, the International Indigenous Recognition of Prior Learning (RPL) Collective published an International Indigenous RPL Practitioner Manual that identifies promising practices and highlights PLAR's appropriateness and benefit for use in Indigenous contexts. The use of PLAR is longstanding for First Nation Technical Institute located on Tyendinaga Mohawk Territory in Ontario. They began their use of PLAR in the 1980s and have been an active member of CAPLA and its Indigenous interest group, the International Indigenous RPL (Recognition of Prior Learning) Collective since its onset. Also, Yellowhead Tribal College (2023) located in Treaty 6 Territory in Alberta has been offering PLAR to potential students for over a decade. Students can apply for PLAR before registration if they possess prior learning from volunteering, household responsibilities, hobbies, sports, job training, work, career, and/or personal development. Learners first complete an interview with a PLAR coordinator then create an education plan and identify equivalent courses and assessment methods; within which are several possibilities. A fee is charged based on the number of credits awarded (Yellowhead Tribal College, 2023).

Efforts to Indigenize PLAR have also occurred in settler institutions. Northland College in Saskatchewan and Vancouver Island University have Indigenous-specific processes for PLAR that utilize a portfolio assessment method. Northland College has introduced the "Holistic Portfolio PLAR" with the objective of building or strengthening Indigenous identity that has been impacted by colonization through reflecting on past experiences to create new understandings (Robertson, 2011, p. 459). At Vancouver Island University, the Canoe of Life Model of Prior Learning Assessment and Indigenous Portfolio is delivered as a mandatory course within the Aboriginal University Bridging Program Certificate. Fulfillment of the certificate requires Indigenous learners to critically reflect on past experiences to create new knowledge and understanding and formulate a strong sense of identity and appreciation for their Indigenous and experiential knowledge (Hobenshield et al., 2014). In Ontario, OCAD University (OCAD U) created a policy that permits learners to take OCAD U courses if they are not enrolled at the university but have an

intent to enroll later. As a result, they were able to create an Indigenous pathway with Six Nations Polytechnic that ladders learners into a second-year undergraduate program (Ray, 2017). They also have a course entitled "Indigenous Art & Design Studio Prior Learning Assessment & Recognition". Through this course, students who have undertaken training in Indigenous art or design can apply to receive credit for one qualifying course toward any certificate offered by the School of Continuing Studies. To obtain the credit, the student must have received at minimum 18 hours of training from an Indigenous artist, Elder, knowledge keeper or cultural institution (OCAD U, n.d.). From a student perspective, the McMaster University Student Union has also championed the use of PLAR (Hothi, 2020). Their "Indigenous Students" policy paper recommends that the university implement a PLAR program to increase Indigenous student access to undergraduate programs (Hothi, 2020).

PLAR is also being utilized to support certification and job placements in partnership with post-secondary institutions or outside of an accredited system. For example, the National Aboriginal Lands Management Association (NALMA) has partnered with Algoma University, University of Saskatchewan, Vancouver Island University, and Université du Québec en Abitibi-Témiscamingue to deliver the Professional Lands Management Certification Program (PLMCP). Obtaining a certification verifies that a Land Manager meets specific criteria, keeps current in the field, and adheres to a professional code of ethics. To receive certification, an individual must successfully complete Level I: Post-Secondary Training and Level II: Technical Training. If a student can demonstrate equivalency, they may receive credit for portions of PLMCP (NALMA, 2024). The Manitoba Government has also been involved in an initiative to build capacity and infrastructure in relation to PLAR. The program "Igniting the Power Within" offered certification workshops on Essential Skills and Prior Learning Assessment and Recognition (PLAR) for First Nations and Métis employment counsellors in the province. This work has focused on PLAR in relation to the Trades and business administration (WEM, 2017).

The interest in PLAR by Indigenous groups and stakeholders signals a need for further exploration of PLAR as a wise practice to support post-secondary attainment for Indigenous peoples. This section of the discussion paper explores the question, Why is PLAR worth pursuing as a strategy to improve access and attainment of post-secondary education for Indigenous peoples? This section explores three interrelated areas to answer this question: (1) The benefits of PLAR for Indigenous peoples; (2) PLAR's situatedness in relation to Indigenous knowledge systems; and (3) The interrelationship of western learning theories, Indigenous learning theories and PLAR.

BENEFITS OF PLAR

PLAR can result in a multitude of benefits to the learner and society including enhanced retention and graduation rates, shortened time to earn a degree, enhanced confidence and skill building, reduced tuition fees (CAEL, 2010; Cherrstrom et al., 2021; Delleville, 2019; Stevens et al., 2010; Klein Collins et al., 2020; Lee & Dapremont, 2020; Morrissey, 2008; Wihak, 2006), and addressing labour shortages (Woods, n.d). For example, a study of 72 institutions in the United States found that PLAR learners were more likely to complete college credentials than their non-PLAR counterparts regardless of race, ethnicity, and income level (Klein Collins et al., 2020). For non-traditional learners and underserved populations, these benefits can be even more pronounced (Cherrstrom et al., 2021) provided there are mechanisms in place to support full participation in PLAR. Bélisle & Mottais (2021) agree, asserting that PLAR can contribute to social justice through improving access to post-secondary education, but to do so, adults' initial schooling and other personal, social and environmental factors must be known (p. 162). The McMaster University Student Union has specifically called for the implementation of PLAR to enhance the educational experience of Indigenous students by improving the access and quality of credit transfer processes, reducing the duplication of learning, time and costs, and identifying areas of improvement and proficiency (Hothi, 2020).

> "I think the results speak for themselves. So, at the graduate level, all the students finished the program. Every single one of them graduated and they all did amazing and they're transforming the education system now."
>
> -P10

Financial Benefits. PLAR can save learners money and shorten the time needed to earn a degree (Klein Collins et al., 2020). For example, if an individual has a Google certificate, they can be accepted into Northeastern University's College of Professional Studies and can earn up to 12 credits and save more than $6,000 in tuition fees. (Fain, 2018). In 2006, the Gateways Project was undertaken to understand the impact of program-based PLAR in Alberta. One hundred twenty-four learners from universities and colleges enrolled in the study. Out of these learners, 60 had been awarded 620 three-credit courses at their institution, which totalled a savings of tuition for one year of full-time study and 4.3 years of part-time study for each learner. Additional savings could also be found in attendant living costs and the potential loss of income, with many learners reporting that they would not have returned to higher education without PLAR (Morrissey, 2008). For many Indigenous peoples, systemic barriers resulting from settler colonialism have led to persistent socio-economic disparities when compared to non-Indigenous Canadians (Chernoff & Cheung, 2023). Many Indigenous peoples do not have the privilege of pursuing post-secondary education at all or as their sole focus because of their individual and/or family's socio-economic status. Recognizing Indigenous peoples' experiences outside of the academy can be one mechanism to address this marginalization. However, to ensure that there are financial benefits,

> "…because a lot of our Indigenous students are part-time, and so if we can help recognize prior learning, that helps them to graduate sooner"
>
> -P6

the PLAR system must be designed in a way that accounts for the array of policies, procedures and circumstances to which Indigenous learners are subjected. For example, Status-Indian First Nation learners may need to maintain a certain course load to qualify for Indian Band funding.

Social Benefits. The focus on Indigenous student achievement has negated broader societal factors and structures that impact post-secondary retention and graduation rates, reinforcing a deficit narrative (Snow, Miller & O'Gorman, 2021). PLAR is an opportunity to address the Truth and Reconciliation Commission of Canada's (TRC) (2015) call to reevaluate pedagogy, values, and resources from Indigenous perspectives (as cited in Snow, Miller & O'Gorman, 2021, p. 62). A result of epistemological racism which has exclusively valued settler knowledges is that groups historically excluded from post-secondary education may not think of themselves as learners (Morrissey, 2008). Settler colonialism, racism, and a lack of Indigenous representation in higher education have created the circumstances in which Indigenous peoples do not see post-secondary education as a place where they belong or are worthy of being. This is sometimes referred to as imposter syndrome and its consequences include Indigenous peoples questioning themselves or holding themselves back (Biemesderfer, 2020) and/or being intimidated by formal learning (Morrissey, 2008). PLAR's philosophy that every place is a place of learning, and everyone is a learner demonstrates to students that they possess knowledge and skills that are valued and relevant to post-secondary education (Morrissey, 2008). When learners can see how their experience translates into expertise and when this is acknowledged in a postsecondary setting, it demonstrates to them that they are not just capable of but have a rightful place in higher education. PLAR can support self-awareness, self-esteem, confidence, and validation among learners (Thompson & Zakos, 2021; Wihak, 2006), especially among those most marginalized (Baker et al., 2021; Thompson & Zakos, 2021).

PLAR assessments can support Indigenous students to reconnect with Indigenous values and leverage these values as well as their own individual gifts into strengths (Thompson & Zakos, 2021; Williams & Perrone, 2018). This is particularly significant in a place where Indigenous knowledges remain marginalized or are seen as non-knowledge (Ray, 2024). A study of graduates from a professional doctorate program found that recognition of prior experience provides a mechanism for individuals to develop confidence as professionals which can mitigate feelings of negative self-confidence (Armsby, 2013, p. 416). Applying these findings within an Indigenous context, PLAR provides an opportunity for Indigenous students to understand and affirm the value of their own skills, knowledges, and attributes.

> "…I think all three of us would really like to see those barriers reduced and make it a lot easier for people to PLAR because for some it's not, it's not worth it… Something we do make sure that we are very clear about, and we ask our programs to be the same, is that if, especially for some of our international students, it does reduce their-their hours of study. So it could impact their status, also for student loans. We make sure that we're very clear about how PLAR may impact their eligibility for student loans."
>
> -P9c

> "…sometimes the PLAR process helps them rediscover who they are. One of our Indigenous colleagues developed a reflective process called, "looking back twice". The first time you look back you may uncover painful experiences and other challenges that you have faced in your life. When you take a second look you are helped to see the strength and courage that it took to survive those experiences, and you build on those strengths."
>
> -P4

Figure 1: Potential Benefits of Indigenous PLAR

On a societal level, PLAR provides a mechanism for communities to regain more control over the use of their knowledge systems for formal credit. Speaking about their involvement in a Rural Human Services university program in Alaska, Elders noted the importance of restoring their traditional roles as teachers when imparting Indigenous knowledges (Gifford & McEachern, 2021, p. 52).

> "Including the Elders, and who can be involved in the classroom and come on a regular basis even. So, yeah, that's definitely key to set up the staff member for success for doing any of this PLAR-related stuff."
>
> -P3

Workforce Benefits. Morrissey (2008) contends that PLAR can support the intrapersonal or internal indicators which are often overlooked when formal education and training are the identified course of action to address skill shortages. With a growing Indigenous population, Indigenous peoples are identified as an untapped workforce that can be critical to addressing labour shortages in Canada (Fiscal Realities Economists, 2016). However, there is a danger that Indigenous peoples are problematized if they do not conform to meet settler goals for the Canadian economy. If education and training programs are not culturally safe, rates of recruitment and attainment can be low, which reinforces a deficit narrative to Indigenous education and training.

PLAR can support succession planning, upward mobility, and address labour gaps through completion of qualifications in less time and with fewer financial resources, while also addressing emotional barriers (Morrissey, 2008). Its emphasis on understanding equivalency and transferability also

supports career pivoting, upskilling and reskilling, which is another strategy to address labour gaps (Morrissey, 2008; Woods, n.d.). For example, in South Africa, PLAR was used to address labour and qualification gaps in the grain silo industry. PLAR was undertaken with more than 1000 workers, and was reported as improving the confidence, self-esteem and motivation to learn among workers. It also heightened compliance with food hygiene and safety standards and increased access to relevant programs in higher education (Aggarwal, 2015). More recently, the Australian Council of Heads of Social Work Education's (ACHSWE) 2023 submission to the Australian University Accord identified prior learning as a strategy to address the shortage of qualified social workers (Crisp et al., 2023). The ACHSWE assert that the current social work education model that includes compulsory placements are resulting in student poverty which is causing students to delay placements and withdraw from courses at a Bachelor's and Master's level (Crisp et al., 2023). They advise that the availability of prior learning recognition to experienced practitioners be increased, and prior learning be more readily available for the placement component. They also recommend that priority be given to "students who experience the highest levels of disadvantage yet are the ones that higher education providers aspire to reach out to in an equitable manner, such as Indigenous students, those from low socioeconomic backgrounds and rural students" (Crisp et al., 2023, p.2).

Recognition through PLAR can also be a motivation for lifelong learning and investments in ongoing training. PLAR increases the visibility of relevant and transferable skills which in turn positively influences perceptions of value to the learning outcomes and competencies of workers in the labour market (Werquin, 2010). In this climate, workers and employers may be more apt to invest in further on-the-job training, knowing that it will be formally documented and can be built upon (Werquin, 2010).

These potential benefits can also be considered using the medicine wheel as a framework. The medicine wheel is an all-encompassing model of life and living that includes teachings about the interconnected physical, spiritual, emotional and mental components of learning. As seen in Figure 1, organizing the potential benefits in the medicine wheel framework demonstrates the wholistic impact of Indigenous PLAR on the emotional, physical, intellectual and spiritual well-being of the learner and post-secondary institutions, Indigenous communities and overall society to some extent.

"…the other piece we talked about is looking forward at community projects, at what's coming up, and what the labor needs will be. Number one, so there's work available in communities which was a huge issue but also so people can stay, work close to home and not have projects that are being built on reserve, by people from off reserve; trying to keep the jobs local."

-P1

"She is a grandmother, she has years of experience in the world of work, and some university making her go back into an undergraduate program before she can do a Master's program? I mean she should do a Master's program and be teaching. Universities are desperate for Indigenous scholars and language teachers. Why is someone making her do an undergraduate degree? It infuriates me. She should be doing a Masters, and then let's just hire her and, pay her what she deserves. This is the other thing that really irritated me is that many Indigenous people in the city are asked to take on huge responsibilities without adequate supports or compensation. So for example people tell me 'Oh, I'm the director of Indigenous initiatives for the [organization] and …I am still getting paid an entry level salary.' The salaries people are being paid is so insulting. Because they didn't have an undergraduate degree, or they didn't have a master[s] [degree] they could be underpaid."

-P2

PLAR AND INDIGENOUS KNOWLEDGE SYSTEMS: EXPLORING EPISTEMOLOGICAL ASSUMPTIONS

According to Loyalist College (2014), the following assumptions underpin the practice of PLAR:

1. Significant learning can and does take place outside of the classroom.
2. Adults acquire important knowledge, skills and abilities through working, training, reading, travelling, television, parenting, community involvement, etc.
3. Such learning can and should be evaluated for credit by educational institutions.
4. Evaluation policies and procedures should be documented, clearly articulated and available to the public.
5. Practices which force adults to repeat learning which they have already mastered are inefficient, costly and unnecessary.
6. Adults who qualify for PLAR credits must be provided with sufficient information to enable them to make informed choices about whether to pursue the PLAR option.
7. Sufficient opportunity and resources must be made available to candidates to demonstrate and document their learning.
8. PLAR assessors must be given the resources and training to assess the PLAR documents authentically.
9. If successful, a candidate must reasonably be able to achieve their educational goals. (p. 1)

Some of these principles are operational while others are philosophical, speaking to the underlying reasons to pursue PLAR. When the philosophical assumptions are examined in relation to the knowledge assumptions of Indigenous knowledge systems and learning there are many congruencies present whereby congruencies are defined as points of convergence which can be places for collaboration, integration, and innovation.[2] The many congruencies between PLAR and Indigenous knowledges and learning are discussed below.

Significant learning can and does take place outside the classroom. Overall, PLAR and Indigenous knowledge systems share the epistemological assumption that learning can happen anywhere and at any time. The First Nations Holistic Learning model asserts that knowledge from a variety of sources can be learned in a variety of formal and informal settings, such as through home and community life, formal education, and the workplace (Canadian Council on Learning [CCL], 2007; Thompson & Zakos, 2021, p. 33).

The assumption that teaching and learning can occur outside of an accredited institution frames learning as a lifelong process. The Canadian Institute for Recognizing Learning (CIRL) (2005) states, PLAR supports a variety of pathways to lifelong learning. Post-secondary education is an important part of, but not an exclusive site for learning (Kasola & Karalis, 2021). This understanding of life long-long learning is also reflected in Indigenous models of education (CCL, 2007). For Indigenous peoples, learning is not compartmentalized from the day to day. Thompson and Zakos (2021) relay that education is part of an interrelated web whereby people build their knowledge, skills, and abilities to fulfill ongoing responsibilities to family, community, and nation (p. 11).

In an Indigenous context, the notion of lifelong learning encourages humility. This is evident in the prefaces that many Indigenous knowledge holders give prior to sharing knowledge. Sometimes it is very direct with a statement like, "I only know a little bit," and other times the statement may be less direct, such as sharing the exact source of the knowledge. Yet both of these common protocols express humility. One purpose of statements such as these is to demonstrate that although Indigenous knowledge holders possess a depth of knowledge, they would not consider themselves experts, recognizing there is still knowledge that can be learned from other sources. In this way, knowledge holders do not view themselves above others but see themselves in a web of relations where they can be learners as well as teachers. Many assessment processes in PLAR also encourage the same humility, as they ask an individual to truthfully examine strengths (that "bit" that they do know) and to identify areas where they can build upon their knowledge base. Working from this understanding, post-secondary education is a stop along the journey of continually learning and applying knowledge.

"…something that's popular here is communities need stewardship training to be like guardians of their territory. So, where we have orchestrated an 'Indigenous Guardian Training Program' that operates in community. So, they need people to be trained. We take the courses to them, and of course there's way-way higher rates of success. When, when the not-the courses come to students in community rather than doing all the work to bring them here. So that's another successful thing that then many people have gone on to continue their education at [the university], through that really specific training that they've received in community."

-P3

Adults acquire important knowledge, skills and abilities through working, training, reading, traveling, television, parenting, community involvement, etc. Consistent with the epistemological assumption of PLAR that knowledge can be derived from a variety of sources, the First Nations Holistic Learning model asserts that there are many sources of knowledge including language, traditions and ceremony, the natural world, ancestors, family, self, community, clan and other nations (CCL, 2007; Thompson & Zakos, 2021, p. 33). PLAR can provide an opportunity for a wide array of Indigenous knowledges gained in formal and informal settings to be recognized including cultural knowledge, language learning, land-based practice, and work experience (Hill, 2002; Ray, 2017).

2 While congruencies exist, it is important to note that PLAR philosophical assumptions and those present in Indigenous knowledge systems remain distinct, entrenched in their own respective knowledge systems, and as such their philosophical assumptions should not be seen as one in the same (Ray, 2012).

Quintessential to the assertion that knowledge can be acquired in day-to-day life, is valuing experience as a form of learning. Experiential knowledges are highly valued in Indigenous contexts (e.g. Battiste, 2002; Castellano, 2000; CCL, 2007; Cormier, 2016; Ray, 2012, 2015; Ray & Cormier, 2012; Simpson, 2011; Thompson & Zakos, 2021). Mohawk scholar, Marlene Castellano (2000) imparts that Indigenous knowledge systems are comprised of three main sources of knowledge: intergenerational knowledge, empirical knowledge and revealed or spiritual knowledge. Experience is a fundamental characteristic of these sources of knowledge. Anishinaabe scholar, Paul Cormier (2016) expands upon this understanding through an explanation of the term "Kinoo'amaadawaad Megwaa Doodamawaad" which best translates to the concept of "They Are Learning With Each Other While They Are Doing." Cormier (2016) explains learning to be all-encompassing, whereby we can learn from one another, but also from the land, and through spirit. This process of learning while doing (through experience), while metaphysical, is also very pragmatic and occurs as a relational and dynamic process (Cormier, 2016).

Moreover, while PLAR is not explicit in its commitment to wholistic learning that includes physical, emotional, mental and spiritual dimensions, space for wholistic learning is present through a valuing of experience which can embody these 4 dimensions (Thompson & Zakos, 2021, p. 33). Learning can take place through various experiential activities such as ceremony and day-to-day community work. For example, through the experience of hunting, an individual learns empirical knowledge about many things including animal migration, tracking, and climate. As they hunt, they may hear stories or have other knowledge imparted. This intergenerational knowledge transfer will continue when in the future, they teach others to hunt. Also, by following hunting protocols such as making a tobacco offering, more intergenerational teachings and potentially revealed knowledge is learned.

Through PLAR, instead of learning solely in the university, Indigenous students engage in experiential place-based learning that is enacted in and relevant to community contexts:

> …the PLAR approach, particularly in its portfolio learning variations, seemed to link directly to some deeper Aboriginal cultural and learning traditions that had been severely damaged by the impact of colonization and its devastating effects on First Nations individuals and communities. These PLAR methodologies respected what people learned through their experience — from mentoring, peer learning and

"So, this is the issue about PLAR, it came in because of the idea, the recognition that people come loaded with experience. Much more than they realize, and it really is sort of drawing attention to that. And so, in my courses, I don't let them use the library for the first two essays as a means of drawing on their own experiences, on topics that are well within their-their range of discussion. Find a topic that's easy, and then step into it and-and explore it from your own perspective as a means of bringing those ideas into the essay. The first essay is all about comparison and defining, and so on an assignment like define family, and they said, 'Well, I know I have a family, but I don't know anything about a family,' and I say, 'Well, no, you do. You have a family. So that's good enough.' And so, it's letting them dig deeper into their own paths and then their shared experience. Not within themselves alone, but their shared experience with family members and friends, who also count as family, so that they have more to offer than they realize."

-P7

> practice. A PLAR perspective on learning seemed connected and holistic rather than mechanistic and compartmentalized. It resonated with the cycles and stages of life and nature central to Aboriginal perspectives and values. (Morrissey, 2008, p. 33)

Approaching knowledge from the assumptions that (1) learning can occur anywhere and at any time; and (2) that we can learn from a variety of sources, creates the circumstances to meet individuals where they are at, in their own distinct contexts. In post-secondary education, this is often referred to as being student-centred, whereby in Indigenous contexts these same concepts are applied to support relational and place-based learning (Kennedy, 2013). While there can be a tension between the emphasis on the individual in post-secondary education's focus on student-centred learning compared to a more collective viewpoint amongst Indigenous pedagogies, PLAR provides one mechanism to bridge student-centred, relational, and place-based learning. Snow, Miller & O'Gorman (2021) communicate that Traditional Inuit learning occurs first by observing and then by eventually trying. If, upon trying, an individual does not complete the task properly, they would be corrected and provided an opportunity to repeat the attempt until they are able to correctly complete the task. Through this process of mastery, the learner is met where they are at. For one individual, it may take weeks to master a particular task, while another individual may require months to master the same task. This approach to learning differs from the standardized model in settler post-secondary education which requires all students to demonstrate achievement of course learning outcomes within a set period of time. In contrast, PLAR does not place time restrictions on the occurrence of an experience but rather focuses on whether the learning has occurred.

> "I try to do the prior learning assessment not by me through like a Eurocentric testing or write me a paper on your experiences, I do it with partners, with the community, so then they have a say knowing that these people are 99% going to teach in their schools, they're not going to want them, somebody who can teach, right?"
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> -P10

While much of post-secondary education is theory-based, occurring in the classroom, PLAR is focused on learning that is happening in real world settings. For Indigenous peoples, learning is about maintaining good relations while addressing interconnected community goals (Kennedy et al., 2020). In this model, the learner and learning occur in relation to the community and community responsibilities. This understanding of self-in-relation (Graveline, 1998) is well represented in the medicine wheel. The teachings about learning in the medicine wheel position the individual in the middle of the circle, interconnected to all other aspects of the circle. As the individual makes meaning of knowledge, they do so in relation to the rest of the circle. Thompson & Zakos (2021) relay that a key component of Indigenous PLAR is for an individual to be reflective and thoughtful regarding their strengths and how they relate to day-to-day activities. Overall, this relational mode of learning can be recognized and exercised in post-secondary education through PLAR.

Such learning can and should be evaluated for credit by educational institutions. Post-secondary education remains a site of settler colonialism as it gatekeeps who can hold knowledge and what knowledge is valued. Indigenous knowledges remain marginalized in academe (Hart, 2002) and when included, these knowledges are usually contained, existing within the frameworks and under the control of the institution (Ray, 2024). Moss (2011) contends that through PLAR, the student is not viewed as an empty vessel by the institution but instead as a learner with acquired competencies and experiential knowledge. By doing so, the notion of the institution as the site of and thus gatekeeper of all worthwhile knowledge is challenged (Moss, 2011). Thus, PLAR can be a mechanism to shift the locus of control, recentering Indigenous peoples and communities as the progenitors and keepers of their own knowledge systems. This approach to Indigenous education which centers Indigenous ways of knowing and being stands in stark contrast to the predominant mode of "inclusive" education which expects an Indigenous learner [and Indigenous knowledge systems-emphasis added] to adapt to the university system and structure (Gaudry & Lorenz, 2018).

> "I view PLAR as an act of reconciliation in itself. PLAR is open to anyone at the institution, and we try to offer it for every one of our courses because we think recognizing prior learning is the right thing to do. It's about giving students credit for what they know, and I think that's so important from a societal perspective."
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> -P9b

One of CAPLA's (2015) nine guiding principles for quality prior learning practice in Canada is to ensure that the PLAR process is accessible. PLAR seeks to be inclusive of differences and abilities by ensuring unbiased processes to recognize a wide array of ways people learn and respectful by being non-discriminatory, culturally appropriate, and inclusive (CAPLA, 2015). Evidence of PLAR's ability to address epistemological racism can be found in the resistance to it within the post-secondary sector. An Australian study by Pitman and Vidovich (2013), argues that some universities reject the recognition of prior learning to demonstrate their power and maintain status through their refusal to mobilize prior learning knowledge. The study found that some students are attracted to such institutions and the mobility of these students is attached to the institution's refusal to mobilize prior learning. These students are found to enjoy more socio-economic privilege (Pitman & Vidovich, 2013). Thus, PLAR is one way to break down the colonial logics that see Indigenous knowledges and other forms of traditionally marginalized knowledges as non-knowledge. Overall, PLAR can ensure institutions are non-prescriptive in their approach to leaning, recognizing and validating the different ways learners demonstrate what they know and can do (Baker et al., 2021).

> "A challenge that we faced was ownership of community languages and language learning, and how to do PLAR while respecting language sovereignty. We had some feedback from communities about them having concern about us giving credit for knowledge that's not ours to teach, that the community had given to the student. Language carriers spoke of local ownership, and language teaching as a sacred exchange and questioned whether or not the University has the right to be crediting that."
>
> -P6

Practices which force adults to repeat learning which they have already mastered are inefficient, costly and unnecessary. Tied to the notion of non-accredited knowledges as valid and valuable is accessibility. Arguably, the core philosophy of PLAR is that everyone has a right to learn and possess knowledge and be recognized as holding this knowledge.

Baker et al. (2021) agrees, noting that PLAR positions learners for success based on what they know and can do and not on their ability to fit into the mold of traditional post-secondary institution systems. Thus, the purpose of PLAR is to remove barriers that limit or deny access. Often, these barriers serve to reproduce the whiteness of the institution. The PLAR process has failed if it recreates the same hegemonic and elitist structures that it seeks to address.

> "But I do think that we are always looking for ways to reduce those kinds of diversity-related barriers."
>
> -P9c

Indigenous knowledge systems are collective knowledge systems, that are spiritually and socially constructed. Unlike, social construction of knowledge alone, which can serve to reinforce and reaffirm social structures (often colonial structures), spiritual knowledge systems operate beyond the human world in which power is everywhere and socialized into the everyday (Foucault, 1991). As such, they include protocols and processes to support access. For example, a common protocol when approaching a knowledge holder for help is to bring a gift. The gift should be substantial and meaningfully based on the background and circumstances of an individual. For example, a $10 gift may be acceptable relative to one person's circumstances but less acceptable for someone who possesses much more socio-economic privilege. Yet, no matter the gift, people are not turned away and one's means, or lack of, is not a barrier to accessibility. While PLAR may not be as relational in its approach, it does seek to ensure that it is accessible through affordability (CAPLA, 2015).

LEARNING THEORIES AND PLAR

Castellano (2000) asserts that Indigenous modes of learning through doing can be integrated into a transformed curriculum. The findings of this discussion paper support Castellano's (2000) argument, noting that popular and emerging western learning theories increasingly advocate for experiential and reflective learning practices which have been foundational to Indigenous learning systems for centuries. This section examines several popular and emerging western theories of learning, followed by their intersections with the epistemological assumptions of Indigenous knowledge systems and PLAR. In doing so, it is demonstrated that Indigenous PLAR can be a mechanism to implement emergent and wise practices in learning theory.

Situated learning theory. Situated learning theory acknowledges both cultural and professional knowledge (Shahid et. al, 2019) whereby learning is recognized as *in situ*, "embedded in everyday activity, context, and culture; fundamentally social; often unintentional rather than deliberate; and progressive with respect to learners' participation" (O'Brien & Battista, 2020, p. 484). Brown and colleagues (1989) establish the importance of learning *in situ* by explaining that people often pick up much of the

intricacies of a culture or system of knowledge only through being immersed in "the ambient culture rather than of explicit teaching" (p. 34). They explain that it is necessary to implicitly and deeply understand the worldview from which a concept derives to apply that concept most effectively and appropriately (Brown et al., 1989, p.. 33), such as the example of teaching vocabulary in a classroom setting versus acquiring new vocabulary through the context of everyday communication. As the authors state, learning vocabulary through everyday, informal communication allows learners to quickly and effectively pick up new words in the context in which the words are intended to be used while vocabulary taught in the classroom is slow and largely unsuccessful (Brown et al, 1989, p. 32).

Identity formation is a core concept in situated learning theory as, through this lens, learning is understood as "a process of enculturation" (Brown et al, 1989, p. 32). Brown et al. (1989) expand upon the way the situated learning process fosters identity formation by explaining, "people who use tools actively rather than just acquire them, by contrast, build an increasingly rich implicit understanding of the world in which they use the tools and of the tools themselves" (p. 33). Lave and Wenger (1991) affirm this by arguing that participation is not simply an event, but instead involves the way individuals understand and absorb the social norms, behaviours and values of the communities in which they participate. Ultimately, situations or communities co-produce knowledge in that we cannot separate "what is learned from how it is learned and used" (Brown et al., 1989, p. 32).

Flexible learning theory. Flexible learning theory is the theory behind the practice of flexible delivery (Barnet, 1999 as cited in Bridgland & Blanchard, 2001). Flexible learning recognizes the different needs of learners and empowers students to envision the process that best suits their unique goals. It emphasizes the important ways in which educators can create responsive and inclusive learning environments (Ryerson University, n.d. p. 6) which place learners at the centre supported by resources to suit their needs (Bridgland & Blanchard, 2001). Characteristics of flexible learning include: being student-centred; flexibility in the development and delivery of programs; learning at different times, in different places and in different ways; recognizing student diversity; understanding the many contexts in which teaching and learning occur; maintaining a commitment to social justice and quality in education; and a reliance on a variety of teaching and learning resources (Bridgland & Blanchard, 2001). Ian Hart (2000) outlines the following eight ways in which principles of flexible learning are operationalized through flexible delivery: (1) flexible access; (2) recognition of prior

learning; (3) flexible content; (4) flexible participation; (5) flexible teaching and learning methods; (6) flexible resources; (7) flexible assessment; and (8) ongoing evaluation (as cited in Ryerson University, n.d. p. 3).

Transformative learning theory. Transformative learning is the idea that as learners receive new information, they also evaluate their past ideas and understandings and shift their very worldview through critical reflection (Western Governors University, 2020). Essentially, the focus is on how learners change through a local or global educational experience (Taylor et. al, 2012, p. 728). This includes critically evaluating how the competitive marketplace has been prioritized over planetary needs and concerns (Barker, 2020). Through this transformative process, "learners start to question all the things they knew or thought before and examine things from new perspectives in order to make room for new insights and information … this kind of learning leads to true freedom of thought and understanding" (Western Governors University, 2020, para 4).

Jack Mezirow is credited with founding the theory of transformative learning after studying adult women learners who went back to school. As Mezirow noted, adult learners don't generally apply old thinking to new situations, they instead adopt new perspectives to obtain a new understanding as they evolve (Western Governors University, 2020). Transformative learning has been described through the typical phases which adult education learners progress. First, the learner encounters a dilemma or something which contradicts a previously held belief. Then the learner goes through a period of self-examination or self-reflection before transitioning to a critical assessment of their prior held assumptions on this subject. The learner then will plan a new course of action, learn new skills to carry out this plan and begin exploring their new roles in relation to this new information. Finally, the learner must "[build] self-efficacy in new roles and relationships," meaning the learner must have confidence in practicing this transformative cycle moving forward (Western Governors University, 2020, para 14). Often this process involves interacting with people with different perspectives and in practice can take the form of cultural immersion programs for higher education learners to gain practical training in community settings. Overall, transformative learning is reflexive and emancipatory through its focus on redefining the learner's perspective of self and supports the idea of lifelong learning and learning for community development rather than solely for capitalist gains (Barker, 2020). Relationality is privileged, valuing narrative, mentorship and wholistic knowing as pathways to transformation (Barker, 2020).

Experiential learning theory. Experiential learning refers to the approach of learning by doing and reflecting on that process. It places emphasis on the importance of contextually rich concrete experience, critical reflective observation, pragmatic active experimentation (Kolb, 2015, p. 49 as cited in Morris, 2020). For experiential learning theorists, life experience is a necessary and central component of learning (Morris, 2020). In higher education, this type of learning often manifests as work-integrated learning, co-op placements, internships, community placements, study abroad experiences or cultural immersion programs.

Place-based community learning theory. As defined by Roumell (2018), "place-based learning, is learning through experience that is self-sustaining and localized within the space that people occupy" (p. 48). This approach to learning is attributed with improving "the ability of people to interact with the space and place in which they reside – a form of lived, experiential learning that has an impact on the sustainability of the space" (Roumell, 2018, p. 48). Place-based community theory, akin to Indigenous approaches to learning "works to reconnect education, enculturation, and human development in a way that contributes to the well-being of community life" (Roumell, 2018, p. 48). Community learning theory "combines community, service, and environment as sources from which the community looks locally for information and learning" (Roumell, 2018, p. 48).

Culturally responsive theory. Culturally responsive theory recognizes the importance of students learning in ways that reflect and are connected to their local cultural contexts (Kana'iaupuni et al., 2017; McLoughlin & Oliver, 2000). It acknowledges education institutions as sites for power negotiation and emancipation and understands education as essential to identify development and self-determination (Kana'iaupuni et al., 2017). An underlying principle is that students learn best when they do not have to conform to a foreign education system. For example, evidence suggests that "science learning outcomes for minoritized students are enhanced when learning experiences provide opportunities for students to 'be themselves,' contribute to the production of knowledge, draw from community practices as intellectual resources for science learning, and receive appropriate scaffolding while engaging in complex and meaningful academic tasks" (Tolbert, 2015, p. 1325). In an Indigenous context, the Te Kotahitanga educational reform project in Aotearoa has demonstrated positive impacts on the participation, achievement, and retention of Māori students in secondary schools (Tolbert, 2015). This model of co-learning or situating knowledge in the learner's experience

that the program employs has the potential to decolonize sciences in a post-secondary setting. As well, programs like these may better prepare students for post-secondary learning in terms of confidence, preparedness, etc. This may also help to bolster the transmission of intergenerational cultural/ecological knowledge transmissions and support Indigenous stewardship practices (Tolbert, 2015). Indigenous culturally responsive approaches might also include wholistically supporting Indigenous students beyond individual classroom practices through the use of Indigenous pedagogies (Kana'iaupuni et al., 2017). One such approach might be implementing a visioning process for Indigenous students to plan for their success in university (Parent, 2017) Visioning is linked with wholism in an Indigenous knowledge framework (Parent, 2017, p. 158) and respects the understanding that an individual's learning process is "lifelong and life-wide by encompassing the physical, emotional, mental, and spiritual aspects of the self and community" (Parent, 2017, p. 158).

Interrelationships between Indigenous epistemological assumptions of learning, western learning theories and PLAR: Table 1 summarizes the synergies that exist between western learning theories and theoretical assumptions about learning in Indigenous knowledge systems.

As demonstrated in Table 1, Indigenous learning systems have many synergies with western learning theories. In Indigenous knowledge systems, concepts such as wholistic modes of learning and learning in critically reflexive ways that are situational to family, community and land are not emergent but instead longstanding and well-established practices. However, despite these convergences in addition to the commitments made by post-secondary institutions to introduce Indigenous content into their learning systems, there has been a lack of Indigenous community control, use and recognition of Indigenous pedagogies to do so (Ray, 2024). Moreover, western theorists have failed in their diligence to explore and acknowledge the bodies of knowledge on experiential-based learning that exist in Indigenous communities and academic scholarship. When Indigenous knowledges are engaged it is largely as a product for western consumption. For example, cultural immersion programs have become a popular mechanism to implement transformative learning, yet the end users of cultural immersion programs are mostly non-Indigenous learners. Also, transformative learning theory has almost exclusively been applied to formal higher education settings which erases the similar learning processes which have been nurtured in Indigenous community settings for generations (Taylor et. al, 2012, p. 729).

Table 1: Connections between Western Learning Theories and Indigenous Epistemological Knowledge Assumptions

Western Learning Theory	**Theory Overview**	**Main Connections to Indigenous Epistemological Assumptions**
Situational Learning Theory	- Learning is not compartmentalized from life and happens "in situ" - Learning in situ provides the necessary context to promote deep understanding - Learning cultivates enculturation & identity formation	- Learning is relational - Learning is place-based - Learning is personal
Flexible Learning Theory	- Learners have diverse needs & learning styles - Learning should be student-centered - Learning should be flexible to meet the diverse learning needs of students	- Learning is personal - Learning is wholistic
Transformative Learning Theory	- Learning alongside reflection can challenge perceptions and shift worldviews - Learning cultivates personal growth, emancipation, & identity formation - Learning builds awareness of & values relationality - Learning should be tied to action	- Learning is personal - Learning is responsibility-focused - Learning is action-oriented - Learning is relational
Experiential Learning Theory	- Learning occurs through cycles of doing & reflection - Learning should be contextualized, relevant and accessible - Learning cultivates personal growth - Learning should be tied to experimentation	- Learning is experiential - Learning is place-based - Learning is personal - Learning is relational
Place-based Community Learning Theory	- Learning should be experiential, naturalized & localized - Learning should enhance the ability to interact with local places and spaces - Learning should contribute to community well-being - Service, environment, & community are key sites for learning	- Learning is place-based - Learning is a lifelong process - Learning is experiential - Learning is relational - Learning is responsibility-based
Culturally Responsive Theory	- Learners have diverse learning styles influenced by culture - Students learn best in culturally relevant environments - Learning cultivates enculturation & identity formation - Indigenous & minority pedagogies are valuable - Education can be emancipatory & is a site for power negotiation	- Learning is personal - Learning is relational - Learning is wholistic - Learning is responsibility-focused - Learning is place-based

Yet, transformative learning and other forms of experiential pedagogy can occur in many informal community settings without oversight from post-secondary institutions. For instance, the theme of learning through transformation is ever present through traditional stories, ceremonies and in Indigenous relationships with human and more-than-human kin. Indigenous learning systems are complex, combining experiential learning, simultaneously with additional pedagogies like storytelling which promote transformative reflection. For example, Leanne Betasamosake Simpson (2021) shares Michi Saagiig Nishnaabeg stories to demonstrate how the relative Amik (beaver) teaches the Nishnaabeg about worldbuilding, resilience, resistance and futurity. Through storytelling, Simpson encourages the audience to reframe blockades as traditional, lifegiving and as a gift from our relative and teacher taking them through the transformative learning phases present within the theory: dilemma, self-reflection, critical assessment, new course of action, learning new skills and exploring new roles in relation to new information (Western Governors University, 2020).

> "Our Elders are masterful of that, like, they'll tell you a story today and, you know, you might be thinking about 10 years from here. And you're like, 'Oh, yeah, that's good.'"
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> -P10

Other examples also exist beyond Turtle Island that demonstrate how wise practices and innovation in experiential pedagogy are being implemented outside of the walls of the academy. A Farmer-Field Schools in East Africa provides local farmers with a platform to "meet regularly to study the 'how and why' of farming and engage in an experiential learning process imbued with local knowledge expressed through song, dance and theatre" (Taylor et. al, 2012, p. 726). By engaging participants through other ways of knowing which are culturally significant (music, dance, storytelling), the learning process is community-led and culturally responsive. Through the program, learners can engage in experiential learning, or learning by doing, and are exposed to new ideas and approaches to farming. To make "sense of these new practices, they engage in discussions exploring previously held assumptions and experiences, sometimes challenging their held beliefs, and based on this reflection, discarding, or accepting new information" (Taylor et. al, 2012, p. 727). These discussions occur in smaller peer groups which often spur shared planning to implement or test these new ideas. As the authors point out, the development of critical consciousness and decision-making skills helps the participants not only with their farming endeavours, but to become more confident, informed, and active members of their community (Taylor et. al, 2012, p. 727).

Within the university system, Gainsford and Robertson (2019) outline the use of Indigenous pedagogy to advance transformational learning in a cultural immersion program. Charles Stuart University in Australia aimed at developing law students' Indigenous cultural competency. The authors discuss the importance of "relational learning through the authentic engagement with Indigenous cultural narratives to deepen

academic and student knowledge about Traditional cultural practices and Indigenous legal systems" (Gainsford & Robertson, 2019, p. 500). The students engage in Wiradyuri storytelling practices which "enables students to link prior knowledge and skills from previous curriculum content that has been pedagogically embedded and to apply learned skills directly to the experience" (Gainsford & Robertson, 2019, p. 502). In this way, the university acknowledges the value in 'on-Country' learning, of learning through local, community partnerships and in employing Indigenous pedagogies like storytelling as assessment tools.

Regarding experiential learning, Roumell's (2018) research demonstrates how Indigenous ways of learning and teaching at Standing Rock were based on experimentation, reflection and hands-on learning processes that served to activate and advance experiential learning theory. As Roumell (2018) states,

> John Dewey put forth the following principles as central to sound educational practice: the expression and cultivation of individuality; the freedom to actively participate in learning; the opportunity to learn through contextualized experience; the acquisition of knowledge and skills that have direct and vital appeal; and learning goals that make the most of present life while cultivating continual growth and the ability to interact with and solve problems in an ever-changing world. Indigenous educational activism reflects these same principles (p. 54).

Dewey's philosophy for learning "extends far beyond the classroom to broader social realities" (Roumell, 2018, p. 50) which is consistent with Indigenous activism as education. As Roumell (2018) so aptly stated, "Indigenous educational activism is rooted in a community's historical knowledge and roots, where learning is embedded in everyday living and experience" (p. 55).

Overall, there are commonalities between experience-based learning theories and Indigenous knowledge systems however, it should not be assumed that they are one in the same. For example, experiential learning theory and Indigenous learning systems differ in their understanding of wholistic ways of knowing. Experiential learning theory employs a linear process of experience followed by a period of reflection, and it is at this point the learning is considered to occur. Michelson (1998) challenges this assumption, which she sees as part of a cartesian philosophy that separates the mind from the body. Michelson (1998) instead asserts that learning can occur through the experience itself, whether that be emotions, physical responses or other aspects of the experience (As cited in Lawrence, 2008). Indigenous learning systems acknowledge the connections between the physical, spiritual, emotional, and intellectual and do not see their

"Most significantly, I draw on theories of experiential learning. While these students have not done their learning in academic institutions, they've done a lot of experiential learning, wherever they've been situated, I draw on that heavily when I write rationales for students. I draw on critical Indigenous pedagogy to inform, those rationales. It is important that we don't blame Indigenous students, racialized students for not having successfully navigated institutions of formal schooling when institutions of formal schooling have not been responsive to the students themselves."

-P2

interactions as linear but instead as dynamic and interrelated. Returning to the example of storytelling, there are also pedagogies which promote simultaneous reflection while the doing is occurring. Moreover, assumptions cannot be made about the significance and common experience of place in transformative learning. Barker (2020) notes that global learning generally orients the learner's experience to broad or physically remote locations and Indigenous learning tends to orient the learner's experience to the immediate vicinity of the land which possesses spiritual dimensions and is understood from a kinship lens.

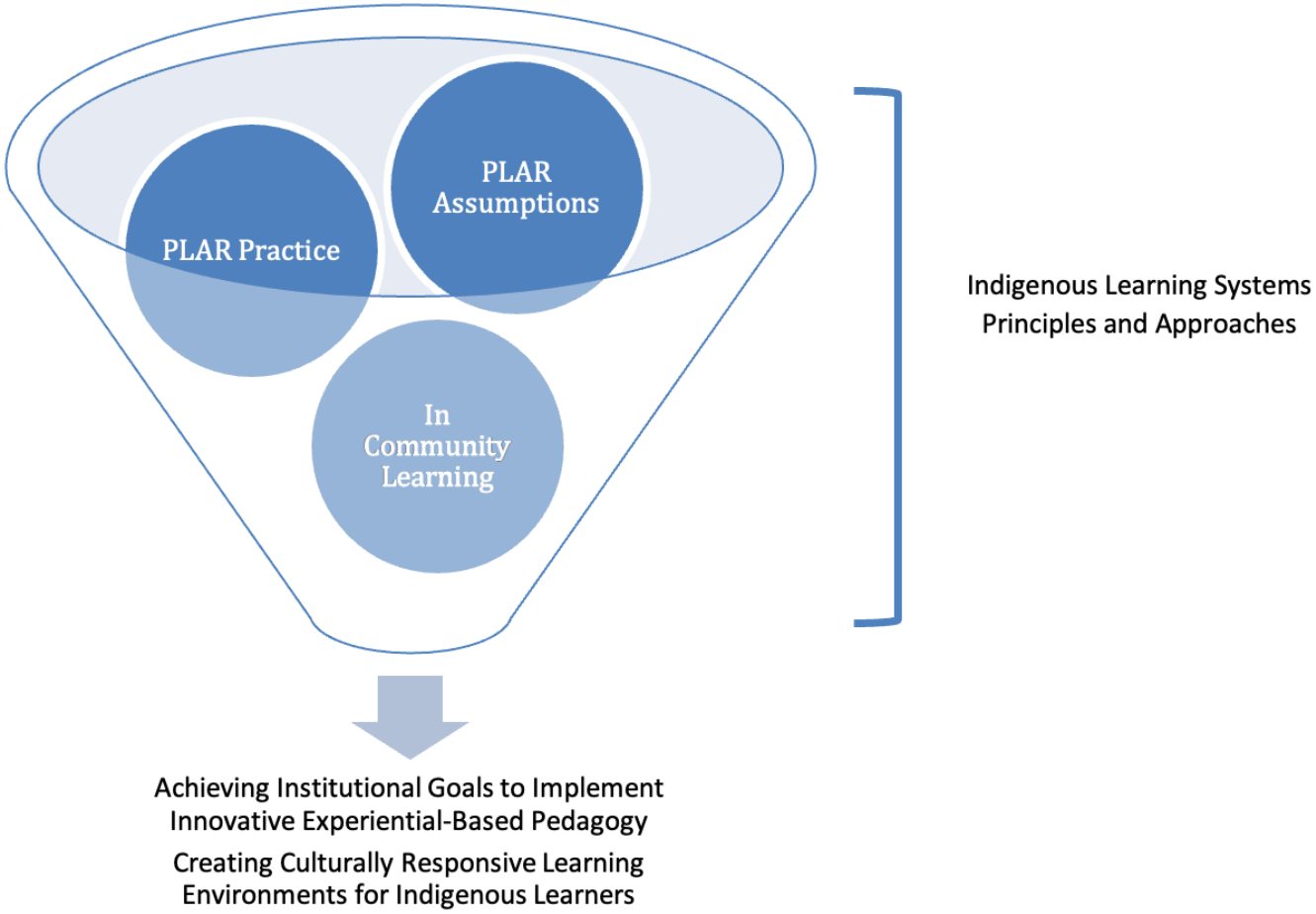
As Figure 2 illustrates, PLAR, designed from Indigenous ways of knowing, can be a way to respectfully bridge Indigenous community learning with western learning theory in ways that create culturally responsive learning environments for Indigenous learners and advance institutions' visions for dynamic experience-based curriculum. What this diagram demonstrates is the necessity of privileging Indigenous learning systems in the creation of Indigenous PLAR to grow the goals and understandings of western learning theories that are being pursued by post-secondary institutions. Returning to the critique of the cartesian divide within experiential learning theory, PLAR informed by Indigenous learning acknowledges that learning can happen through the experience itself, and PLAR processes can be a way to articulate, not create learning.

For Indigenous peoples, learning is about maintaining good relations while addressing interconnected community goals (Kennedy et al., 2020). In this figure, the learner and learning occur in relation to the community and community responsibilities. As previously stated, this understanding of self-in-relation (Graveline, 1998) is well represented in the medicine wheel which includes teachings that position the individual in the middle of the circle, interconnected to all other aspects of the circle. As the individual makes meaning of knowledge, they do so through and in relation to the rest of the circle. Thus, Indigenous PLAR does not assume that western institutions are necessary to convert experience to learning. This is an important distinction because while for some learners PLAR reflective processes can result in learning, it does not assume that Indigenous learners are incapable of doing this beforehand. For some learners, a more linear process may occur, while for others, the experience is the learning and PLAR is a way to demonstrate the learning to the institution.

"We have this Elder in residence many years ago Auntie Ellen White, who talked about like moving forward with both hands full, so honoring the Indigenous and the Western knowledge. And that's kind of the role of the Indigenous university student to-to walk forward with those both hands full of the knowledges and I think the university as a whole is working towards that. Like, as I said, many universities are, but of course nobody knows how. So, everyone's kind of trying that in their own different ways. And, yeah, this is the-the portfolio course is one great example of that."

-P3

Figure 2: Utilizing Indigenous PLAR to Implement Experience-Based Learning in Post-Secondary Institutions

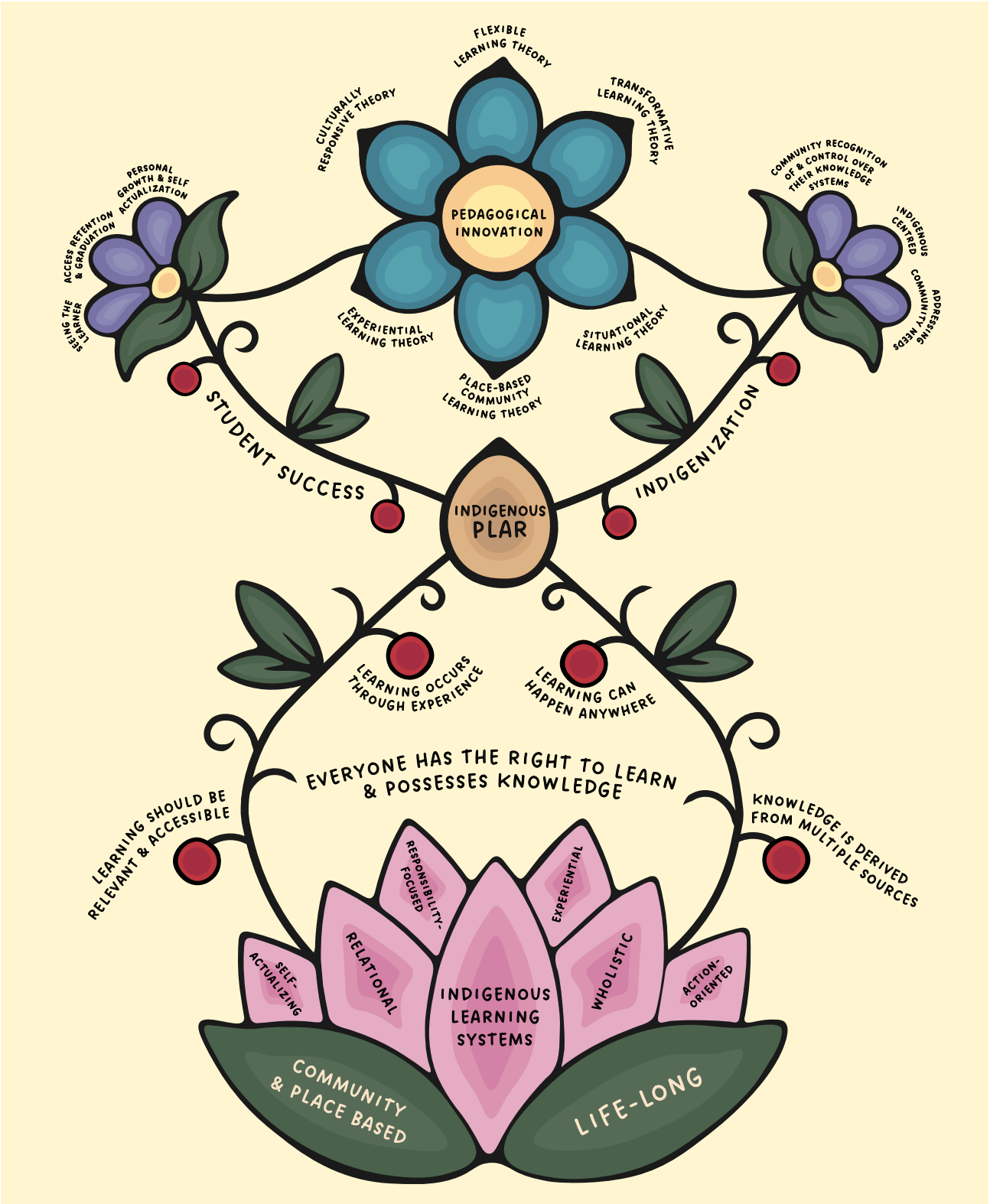


Overall, this section has demonstrated that Indigenous PLAR is a means to provide enhanced access to post-secondary education for Indigenous learners by way of post-secondary credentialing and/or admission, destabilizing Eurocentricity through the recognition of Indigenous learners and the knowledges they possess and support for Indigenous learners to reflect upon and build connections between prior experience, individual growth and community responsibilities. Unique to Indigenous PLAR is the emphasis on the spiritual benefits that can be derived. Critical reflection by Indigenous learners of their skills, knowledges, and attributes and recognition by post-secondary institutions can support processes of self-actualization for Indigenous learners which is in stark contrast to the historical and ongoing ways in which western education systems have been utilized to devalue and dehumanize Indigenous peoples as part of the settler colonial project.

Moreover, this section of the discussion paper has established that Indigenous PLAR is also beneficial for post-secondary institutions which are attempting to push their pedagogical boundaries through the implementation of more experiential education and engage in efforts to Indigenize their institutions. Indigenous PLAR merges these two objectives, providing a way to expand the uptake of Indigenous experiential learning in a way that is respectful of and responsive to Indigenous learners and communities.

Additionally, Indigenization efforts in post-secondary education have been critiqued for the burden they place on Indigenous peoples inside and outside of post-secondary institutions because of the overemphasis on educating settlers with Indigenous content (Gaudry & Lorenz, 2018; Ray, 2024; Ray et al., 2019). Indigenous PLAR has the capacity to centre Indigenous needs in the Indigenization process through its focus on Indigenous learners and through PLAR programming to address community-defined training and credentialing gaps (Ray et al., 2023). Figure 3 provides a summary of what Indigenous PLAR is and how it is positioned to build capacity in post-secondary institutions to respond to the needs of Indigenous learners and communities and enhance overall pedagogical approaches.

Figure 3: Positive Impacts of Indigenous PLAR for Post-Secondary Institutions



SECTION TWO: EQUIVALENCY

This section explores the question, What types of non-accredited formal and informal learning in Indigenous communities are equivalent to accredited learning in post-secondary environments? Types of prior learning that have received recognition or show promise of receiving recognition in a post-secondary setting and potential methodologies to map and confirm equivalencies are discussed.

INDIGENOUS KNOWLEDGES, COMMUNITY-BASED KNOWLEDGE, AND POST-SECONDARY EQUIVALENCIES

Many Indigenous students come to post-secondary education with a strong foundation of skills and knowledges that remain unrecognized in post-secondary environments. This sub-section explores equivalency in relation to four main groupings of prior knowledge: (1) cultural, language and land-based; (2) creative works; (3) community building and participation; and (4). work experience, volunteerism and corporate training. Noteworthy is that these categories are not mutually exclusive, with overlap existing between different groupings. For example, many creative works are also considered cultural knowledge.

Cultural, language, and land-based. Many Indigenous students come to post-secondary education with cultural knowledges and languages (Wilks et al., 2020). These knowledges are not an "add-on" but rather are respected bodies of knowledge (Gifford & McEachern, 2021, p. 51). Although post-secondary institutions have largely failed to recognize the skills, knowledges, and competencies Indigenous students possess from cultural, language and land-based practices, these same institutions have created experiential learning opportunities in Indigenous communities and on Indigenous lands for the non-Indigenous student population (Ray, 2024). Otherwise put, extensive efforts have been made by post-secondary institutions to deliver and recognize in-community learning tailored for white and racialized settler students.

Experiential learning initiatives are tied to strategic mandate agreements that call for an increase in experiential learning and are part of a growing culture to close the gap between education and employment through experience. For example, the Ontario Premier's Highly Skilled Workforce

Expert Panel recommended that all postsecondary students have at least one work-integrated learning opportunity before graduation (HEQCO, 2024). However, a recent report by HECQO found that certain students, including women and those living with disabilities are not experiencing inclusive, high-quality work-integrated learning experiences (Chatoor & Balata, 2023). Indigenous-specific data was unavailable. Additionally, many Indigenous-specific experiential learning initiatives are responses to the TRC's Calls to Action for increased Indigenous content in post-secondary education. This includes Call to Action 24 which requires medical and nursing students to take a course dealing with Aboriginal health issues (TRC, 2015). There has been a tendency to overemphasize cultural components of Indigenous content despite the TRC stipulating that Indigenous content should also include education on anti-racism and Indigenous rights (Ray, 2024).

The range of Indigenous experiential learning opportunities and Indigenous content delivered in post-secondary for credit demonstrates that equivalencies exist between Indigenous cultural and land-based knowledges and accredited learning and thus there are vast opportunities for Indigenous PLAR in this area. Yet, to date, recognition of cultural and land-based knowledges for Indigenous students through PLAR remains minimal despite holding great potential (Bodkin-Andrews et al, 2019).

Indigenous experiential learning opportunities delivered by post-secondary institutions can be separate from or part of mandatory Indigenous course content to ensure Indigenous cultural competencies. Cultural competencies usually fall under the umbrella of graduate attributes which refers to soft skills or attributes to increase employability after graduation (Bodkin-Andrews et al., 2019). Much of this work is emerging under the umbrella of health humanities yet, pockets exist in other fields as well. For example, Gainsford and Robertson (2019) outline an Indigenous cultural immersion program for future lawyers delivered in Wiradyuri communities in Australia.

Cultural and land-based knowledge can be recognized as equivalent to mandatory Indigenous content courses, electives, or as learning outcomes or attributes at a course or program level. Studies have found that cultural immersion programs for health care trainees can improve physician care and enhance observational and communication skills, critical self-reflection, culture of medicine and clinical encounter assessment skills, empathy, and related clinical skills (Bleakley & Marshall, 2013; Kumagai, 2017 as cited in De Leeuw et al., 2021). De Leeuw and colleagues (2021) report on one such program. In 2013, the University of Northern British Columbia's (UNBC) Northern Medical Program, the First Nations Health Authority (Northern Region), and the Northern Health developed

> "I don't think that we currently have any prior learning recognition specifically geared towards Indigenous ways of knowing. That community knowledge piece, the oral traditions, the on-the-land learning can all play a key role in the RPL processes at our institution. Many of our programs honour various forms of cultural learning but because PLAR is centred around the established learning outcomes, sometimes it can feel a little bit daunting for those who may not have the formal education to say, 'You know what? I have this knowledge."
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a pilot project for early undergraduate medical students to visit northern rural and remote First Nations communities to participate in a cultural immersion program. Program developers anticipated the program would foster deep, experiential, and place-based learning about northern First Nations people and communities, provide opportunities for medical students to understand northern and rural First Nations people and communities from a strengths-based perspective; and enhance medical students' social accountability and responsibility competencies, including cultural sensitivities and capacities toward northern First Nations people and communities (De. Leeuw et al., 2021, p. 93). Drawing from the experiences and insights of 48 students, it was found that the program was generally an effective approach to meeting its intended goals (De Leeuw et al., 2021).

Learning from Indigenous knowledge systems also results in discipline-specific competencies. Post-secondary institutions have demonstrated that equivalencies exist through the integration of Elders into western learning environments. For example, Elders are members of the instructor team for the Rural Human Service program which ladders into a bachelor's social work program at the University of Alaska Fairbanks. The Elders prepare Indigenous adult students for positions in behavioural health in their home communities, integrating Yup'ik knowledge, practices, and ways of learning in the curriculum (Gifford & McEachern, 2021). Similarly, the Kaska First Nations and the University of British Columbia partnered together in 2002 to deliver the Kaska credit-based language course that was held in Kaska territory in the Yukon. Kaska Elders structured the course with formal language instruction in the mornings and cultural activities (experiential learning) in the afternoons because the Elders asserted that cultural practices were an essential component of language learning (Moore, 2003). Many of the Elders teaching the course were parents and grandparents of students in the course. This meant family members were able to camp together while on the land, facilitating further mentoring time (Moore, 2003, p.129) and demonstrated how equivalent learning can happen within the family structure.

The Wuyagiba Bush Uni in Northern Australia does provide one example of a cultural immersion program developed for Indigenous learners that is recognized in the university system for credit. The Bush university was developed to close the educational attainment gap for local Indigenous peoples, provide land-based higher education, create a two-way higher education model and foster the next generation of local leaders to facilitate endogenous development (Jaggi et al., 2024, p. 125). The Bush university delivers two cultural units over four to five-week

> "…we recently in terms of recognizing Indigenous knowledge at the University, we've recently been able to hire my co-instructor, who's a community-based instructor. We've always co-taught together, but she's been paid by like an external funder. And this year we've been able to advocate for the need for her Indigenous knowledge in the classroom and so got the faculty to hire both her and myself as instructors."
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blocks each year and these are formally recognized and accredited as first-year university subjects through Macquarie University under a Memorandum of Understanding (Jaggi et al., 2024, p. 130). The Bush university also addresses Indigenous intellectual property whereby all curriculum and resources remain the property of the Corporation and the Indigenous knowledge providers (Jaggi et al., 2024, p. 130). Beginning in 2021, these cultural units were paired with existing, locally adapted, first-year Macquarie University academic units to create two micro-credential qualifications accredited through Macquarie University: Wuyagiba Bush Uni Program 1 and 2. Specifically, these micro-credential qualifications are recognized as the equivalent of one semester of study at MacQuarie University. Alternatively, students could utilize the micro-credentials to gain skills for employment in the community or undertake study elsewhere (Jaggi et al., 2024, p. 130). Between 2018 and 2022, 66 Indigenous students graduated with micro-credentials and 28 students proceeded to enrol in Bachelor level degrees with the first cohort graduating in 2023 (Jaggi et al., 2024, p. 130). The Wuyagiba Bush University was initially open to only local Indigenous students and has since expanded to include students from other Indigenous communities in Australia and it also employs about 50 local Indigenous people a year (Jaggi et al., 2024).

Creative works. Lawrence (2008) asserts that we engage in experiential learning when we participate in and observe creative expressions such as dance, drama, poetry, music, literature, and film. Higher education has formally acknowledged the ways in which we learn through creative expression, with many disciplines offering creative projects scaffolded throughout curriculum or as an alternative to capstone research projects. For example, students enrolled in Lakehead University's Master of Social Justice program can choose one of three streams: course-based, creative project, or research project. Creative projects replace one full credit equivalent, and students must produce a creative project accompanied by a 20-page artist/project statement (Lakehead University, n.d.). Offering another example, the Civic, Liberal and Global Education undergraduate program at Stanford University bestows a Creative Project Award which exists to promote creative ways of demonstrating required learning (Stanford University, n.d.) Instructors can nominate a student whose creative work was submitted to fulfill a program requirement. The nature of both these projects recognizes how creative works can be a way to engage in community building and participation.

"The idea is that we could use PLAR for admission both to support non-traditional learners entering the University, as well as to give students some advanced standing. So, the kinds of expertise that we would be recognizing for admission or for advanced standing would be proficiency in the language. Any language learning that they've done, whether it's growing up with the language or having learned the language in a non-formal setting, like a community-based course or master-apprentice or any other formal learning that they might have done with the Indigenous language, as well as language, policy and planning work or language education work. That could be teachers who have been doing this all along. It could be people who have been involved in developing language strategies or language materials at the community level. Anything along those lines."

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Indigenous knowledge systems are wholistic or "full bodied" (T. Hart as cited in Lawrence, 2008, p.66). Wholistic ways of knowing include activities such as beading, basket making, storytelling, weaving, quillwork, painting, and mask making. Often labelled as creative pursuits because of the artistry involved, in Indigenous contexts, these practices are interrelated with cultural, land-based, language and community building, contributing to individual and community health, governance, history and social processes. As Cajete (1994 as cited in Lawrence, 2008) explains, creative expression is a prominent mode of education and is practiced to some extent by everyone. These modes of learning can be transformative, resulting in critical and deeply reflective learning (Lawrence, 2008). For example, Ray (2016) imparts that through beading, individuals learn in ways that foster personal growth within the context of relational accountability. Through the act of beading and common patterns and aesthetics, values of respect, balance, harmony, centeredness, and repetition are central to the learning process. Essentially, these creative pursuits represent more than simply experiential learning, but can provide ways to connect with spirit, helping students to establish a connection to their real selves and learn how to bring their knowledge and skills to bear in their lives" (Cajete 1994 as cited in Lawrence, 2008, p.75).

Like cultural, language and land-based, creative works also possess equivalencies to accredited learning to support acquiring broad graduate attributes in addition to discipline specific knowledge. For example, if someone is a basket maker, they can learn many things from making baskets that are equivalent to graduate attributes but also discipline-specific content necessary for an environmental or forestry degree. Regarding graduate attributes, they may discuss how they learned how to make baskets from others in their community demonstrating deep listening and communication skills. From a course level perspective, the learning from the practice of basket making can be equivalent to an ethnobotany course. Many universities include such a course in forestry, environmental science, biology and/or general arts and science programs. For example, Queens University (2024) lists five learning outcomes of their ethnobotany course. The following table demonstrates how the practice of birch bark basket making can result in equivalent learning. Moreover, it illustrates the interrelationships between the different categories of knowledges discussed.

"And so, we have one student... He graduated with a Bachelor of Fine Arts. He received I think 18 credit hours, most of them were in fine arts, but he also had some in music and others in the English Department in creative writing.... he's a musician by trade and also writes his own songs, and so he was able to receive credit for a course on song lyrics and composing songs. Because of his experience in music, he got credit in recording. As a practicing artist he received credit for painting and multimedia design."

-P7

Table 2: Equivalent Learning between an Ethnobotany Course and Birch Bark Basket Making

Ethnobotany Course Learning Outcome	**Equivalent Learning from Birch Bark Basket Making**
Describe how the science of ethnobotany is applied in the understanding of relationships between plants and indigenous/traditional cultures.	Follows Indigenous harvesting protocols which deepens understanding of and relationships with land.
Describe how botany and biochemistry are used in identifying and understanding the ethnobotanical value of a given plant species.	Identifies what plants to harvest for use to make baskets, including when and where to harvest birch bark.
Develop the skills and methods used to collect, classify and preserve plant materials.	Harvests birch bark in the Fall, stores the bark and soaks the birch bark to prepare for use.
List the main categories of plant use by indigenous/traditional peoples and identify how plant value depends on cultural context, both material and spiritual.	Describes own use of birch bark and use by others in the community. Shares creation stories and other stories that speak to the origin of the birch tree and other trees and plants and their use by Anishinaabe people.
Present examples illustrating how traditional plant knowledge derived from ethnobotanical investigations have been applied in our modern world and the positive and negative implications of this.	Shows completed birch bark baskets and speaks to how the baskets are a source of knowledge, promote intergenerational knowledge transfer, tell stories and can provide economic benefit. Discusses the health of the birch trees and overall forest from time spent harvesting, and how this is impacted by conservation and resource development.

Community building and participation. Community building and participation refers to fostering a sense of belonging and cohesion in community and engaging in activities to address community needs. Due to settler colonialism, racism, and discrimination, community building, and participation is often pursued in Indigenous contexts to address inequities and disparities. Many post-secondary institutions have identified social justice as a priority area through commitments to the Sustainable Development Goals, the TRC's Call's to Action, and the Scarborough Charter, among others. Social justice-oriented learning outcomes are often pursued through experiential service-learning pedagogies which bring attention to social change and power relations and show students how to develop authentic relationships (Mitchell, 2013).

Recognizing Indigenous community building and community participation in its many forms is a way for post-secondary to further the objectives of experiential pedagogies with social justice aims. One such example is participation in the Standing Rock (No Dakota Access Pipeline or DAPL) youth grassroots-initiated movement to stop the construction of the Dakota Access Pipeline:

> Standing Rock has been one of the most comprehensive gatherings of Native peoples … in over a century. The camp was extremely organized with a school for children, a kitchen that served three meals a day to hundreds of attendees, medic tents, daily meetings and trainings for direct-action preparedness. The collective learning, although place-based, was also expanded through use of digital networks; the effect of social media on what truly became the learning spaces within the movement was significant. (Roumell, 2018, p. 53)

"If you are, for example, an Indigenous student who does tons of volunteer work within your community, at the funerals or the feasts, or you know, summer camp but all those sorts of things, document it. Keep track of it. And that's so, they-they could start keeping a portfolio."

-P8

Roumell (2018), found that participation in the Water is Life movement at Standing Rock engaged learners in problem and issue based learning approaches, advancing experiential learning objectives like critically examining conventional social and educational ideas and improving an individual's ability to engage their world (Roumell, 2018). Additionally, through participation in the Standing Rock movement, Roumell (2018) explains that individuals learned about Lakota knowledge systems, civic and legal rights, methods and tactics of democratic dissent, and to liaise with the media and stakeholders (p. 54).

Indigenous learners, through their community involvement have already demonstrated their competencies in these areas, and post-secondary institutions simply need to recognize this learning. For example, learning outcomes of the no DAPL movement align with discipline specific content in several fields including Indigenous studies and political science. Jacob and colleagues (2019), who examined how Indigenous student activism in the No DAPL movement contributed to the development of personal and graduate attributes had similar findings. Indigenous students' participation in No DAPL camps allows for the development of "a clear understanding of their social, political, and cultural responsibility to the collective well-being and self-determination of Indigenous people" (Jacob et al., 2019, p. 4). Competencies such as these have also been identified by Universities Canada as necessary components to fostering inclusive and anti-racist leadership practices (Shaibah, 2022). More specifically, Universities Canada outlines affective, cognitive and behavioural capacities including bravery, humility, allyship, self awareness, awareness of political and historical contexts, cultural intelligence, empowering, listening,

communicating and conflict resolution (Shaibah, 2022, p.18). All of these capacities can be learned through community building and participation.

The South African Worker's College provides one model that demonstrates how learning from community building and participation can be acknowledged by post-secondary institutions. Established in 1992 as an alternate education organization for trade union and community activists, the Worker's College fostered much learning and attributes including development of a culture of commitment to struggle for change; sense of collectivity, critical and objective thinking, self-reflection and continuous learning (Thompson & Zakos, 2021, p. 62). The Worker's College offers four one-year diploma courses (e.g. labour studies, gender, political and social development) that is recognized in the Bachelor of Social Science Degree at the University of KwaZulu-Natal for access and limited credits. Each diploma consists of six modules, which includes a fieldwork and activism module with the purpose of facilitating in-class recognition of prior learning through a process for learners to draw on their experiences, skills and knowledge acquired through life experience and activism.

Work experience, volunteerism, and corporate training. The use of PLAR in this area is well-established. In Canada, PLAR has been active in the health care sector to address workforce shortages (Morrissey, 2008). Through the Building Capacity in Long-term Care project, colleges and institutes worked together with College and Institutes Canada (CiCan) to develop the free micro-credential Supportive Care Assistant Program in 2021. The program, funded by Employment and Social Development Canada, is comprised of six weeks of online training and upon completion a four-month paid work placement that is fully subsidized for students and recognized by colleges and institutes (Amyot, 2021). Also, the Cancer Care Ontario's Medical Radiation Therapist Project launched in 2004 used PLAR to assess the knowledge and skills of medical radiation therapists to support them in filling advanced roles as clinical specialists in radiation therapy (Morrissey, 2008). Individuals are assessed against pre-established occupational competencies through portfolio assessment, case study examinations, and structured interviews (Morrissey, 2008). In addition to their current competencies being identified through the competency assessment form, they also utilized a competency development plan template to develop a pathway to grow necessary competencies. A mixed methods study concluded that the advanced positions provided needed relief to existing health care system pressures and recommended further research into the transferability of the project to other areas of health care (Harnett et al., 2014).

"Doing specialty pizzas. He likes making them and is incredibly passionate about that. I said well, that's a skill that could also be used as knowledge to apply towards being a chef. And then you could see, his brain start going but he initially thought when he walked in, okay, I did a welding course once upon a time so that's what I have to use for RPL because it was in school and I have the credit. Whereas he had this other set of skills that he had learned from making these pizzas and he is incredibly passionate about it and would much rather be doing that. So that helped a lot, just with him understanding what we meant about learning skills wherever they came from."

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"…we've had students go through prior learning assessment that they've had really ill children and living with ill children, whether it's terminal or you know, other conditions. The learning that they experience living through that is profound and, or, increasingly, we notice students taking learning online like through Coursera, our massive open online courses, or that self-study piece. And, so we've come up with a way in our institution to help students think about what it is that they, what the experiences they've had and what they've learned from them."

-P5a

Pockets of PLAR that recognize work experience also exist outside of the health sector in Canada. For example, a prior partnership between Humber College of Applied Arts and Technology, the British Columbia Open University (now part of Thompson Rivers University), and DaimlerChrysler Canada developed a degree pathway with onsite learning to support the implementation of the company's policy which required managers to have degrees. The pathway included laddered credentials whereby a manager could earn a Humber College General Arts Certificate (30 credits), a Humber College General Arts Diploma (60 credits), and for 120 credits, a Bachelor of General Studies from Thompson Rivers University using a combination of credit transfer, DaimlerChrysler training courses, work experience, and trade certification to meet up to 95% of degree requirements (Morrissey, 2008). The program was very successful, expanding to other locations and graduating over 150 employees with degrees and several hundred with college diplomas or certificates (Morrissey, 2008, pp. 214-215). There are also limited examples of workplace PLAR in Indigenous contexts. The Council for the Advancement of Native Development Officers (CANDO) has a PLAR process (http://www.edo.ca/certification/index.htm) for certifying Indigenous economic development officers linked with formal education programs at colleges and universities across Canada (Wihak, 2006).

Noteworthy is that there is a growing shift in how we conceive of education and how it is delivered, with education and training increasingly recognized as having a simultaneous relationship in place of the traditional linear relationship where a degree leads to employment. This shift in thinking has given rise to education structures that are more flexible and conducive to PLAR development, including the development of shorter and more targeted educational opportunities such as micro-credentials which are "formal, short duration competency-based learning experiences that can be assessed and recognized for employment or learning purposes" (BCcampus, 2021 as cited in Woods et al., n.d). For example, prior CiCan president, Denise Amyot (2021), suggests that PLAR be considered in the design of micro credentials such as the Supportive Care Assistant, which certify assessed competencies that are additional or a component of a formal qualification, to ensure greater flexibility in the education system and provide learners with more fulsome recognition of their learning. Doing so would allow for microcredential credit to be given for courses taken anywhere (Amyot, 2021).

However, there is some skepticism regarding the values and beliefs underpinning this approach towards education and training. This has given rise to some specific tensions, namely, competence versus excellence; competence versus capability; education versus training; and education for employment versus education for knowledge (Day,

> "They say I worked at Tim Horton's; I need a Record of Employment or I need a T4 or pay stubs to verify the hours work and a credit in secondary is a 110 hours worth of work. So, we're looking for a Con-Ed program, so that's a regular day program, a Con-Ed is 90. We're looking for a 90 to 110 hours worth of verified experience. If somebody's eligible that girl, let's say, I don't know why I made her a girl, but let's say she had 0 credits. She writes all the assessments she passes. She has 16 credits. She can get 10. She hands in that application, and she provides a T4 from Tim Horton's that shows she's worked 400 hours. I'd be able to give her 3 credits."
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2000, p. 51). A recommendation from Elders for an Indigenous service-learning course called for the replacement of the term service-learning to relational learning, which was identified as more respectful and focused on maintaining good relations through humility, respect, honesty, and reciprocity while responding to the interconnected priorities of the land, traditional ways, Elders, and common language (Kennedy et al., 2020). While competency-based learning is commonly attached to employment outputs, there is an opportunity to pivot the value of competency-based learning in relation to transparency and accountability, providing a clear understanding of how learning will support community goals and visions. As Taylor and Soares (2020) note, transparency of credentials conveys information that is easily understood so informed decisions about the value and relevance of a credential to achieving future goals can be made by learners and other stakeholders.

There are also many work-integrated learning (WIL) programs that exist. In Australia, community and workplace-integrated learning are common, providing a bridge between academic work and professional environments, engendering in students a sense of social responsibility, connectedness, and leadership and developing employability skills (Muldoon, 2009, p. 244). Stewart and colleagues (2012) insist that WIL programmes can impart communication, teamwork and interpersonal skills as well as specific outcomes, particularly in practice-oriented disciplines such as journalism (p. 57). Workplace experience has also been recognized at the highest level through professional doctorates. For example, the Public Works Professional Doctorate Program in the United Kingdom uses an in-depth reflective and critical analysis of prior high-level work-based learning with attendant evidence as its main product for assessment (Armsby, 2013). A qualitative study involving the first cohort of program graduates found that an RPL focused doctorate enabled the learner to recognise their needs and areas of expertise and increased confidence and planning in their professional environment (Armsby, 2013). The study concluded that,

> The post-hoc analysis of this knowledge production process may provide a unique opportunity to analyse the professional learning process and related implications for professional identity. Other doctoral awards may not provide such a focused opportunity; however, this work would suggest that some recognition of the candidate's prior experience would provide an effective mechanism for them to integrate with their programme of study and develop their confidence as a professional. be more confident in their abilities and move forward in planned ways. (Armsby, 2013, p. 428)

Volunteer experience can be a stand-alone way or be paired with work experience and/or corporate training to engage in learning and fulfill equivalency requirements. The volunteer sector through experiential learning and organized training is also a huge driver of knowledge and skills development for adult learners in a variety of areas such as health promotion, public safety, arts and culture, environmental enhancement and protection and crime prevention and community development activities and community activism on local issues (Morrissey, 2008, p. 182). Abykanova and colleagues (2020) advocate for more integration of volunteer experiences in universities, asserting that through volunteer work, individuals can develop cultural and professional competencies, while increasing their community connections and social capital and contributing to cost savings and economic growth for organizations (Abykanova et al., 2020). Taking the direction further, Morrissey (2008) recommends that a PLAR strategy for youth-at-risk and Indigenous peoples be developed with the voluntary sector considered as the primary delivery agent (p. 183).

Paid and voluntary work can be an effective means to learn and develop non-disciplinary specific graduate attributes (Muldoon, 2009) as well as discipline-specific knowledge, skills, and attributes. Ramsaroop and Petersen (2020) explored the practice of environmental volunteering as a recognized component of the curriculum in Australia. Specifically, through a pass-or-fail grading scheme, students complete two practicums before graduation: a volunteer placement in the first year with a portfolio of extra-curricular activities designed to build a professional network and enhance career prospects and a more formal 10-day work placement in the third year which serves as the capstone project for their work integrated learning (p. 247). The first-year practicum requires them to complete at least five days of volunteering so that they can learn about the structures of various environmental groups, their sources of and reliance on funding, and their links to government and other organizations, as a means of understanding the broader context of environmental work (Ramsaroop & Petersen, 2020, p. 248). As part of their capstone project students complete a reflective evaluation guided by specific questions (Ramsaroop & Petersen, 2020, p. 247). Whereas the University of New England (UNE), Australia recognizes concurrent learning in non-accredited learning & training; community contribution; and professional development including part-time paid and voluntary work through an institutional award (Muldoon, 2009, p 239). Students must record their skills development during their participation in retail sales, catering/food preparation, office administration, customer service, farm work, abattoir work, event management, work in professions (law and accounting) and work with charitable/humanitarian organizations, with reference to the university's graduate attributes, which

includes communication skills, global perspective, information literacy, lifelong learning, problem-solving, social responsibility, and teamwork in an electronic portfolio; reflective journal; and through a signed statement from their employer or work supervisor attesting that they have satisfactorily carried out their duties (Muldoon, 2009). Students can employ video or audio presentations or an interview option for their reflective component (Muldoon, 2009).

There are also some examples of the recognition of learning from corporate training in Canada. Since 2016, McDonald's Canada has partnered with post-secondary institutions in Ontario in which a manager-in-training could enter a business program in second-year, potentially saving up to $4,500 in tuition (Lewington, 2016). The agreement closely resembles the articulation agreement model with block credit transfers between post-secondary institutions. All Ontario colleges will grant PLAR for first-year business credit, allowing students to commence in year two of the two-year Business Diploma or three-year Advanced Business Diploma program provided that McDonald's Second Assistant Managers have completed the Management Development Program Level 2 (MPD) through McDonald's and meet prerequisites in math skills, english skills, and one General Education Elective course that can be completed concurrent to other courses (Centennial College, 2024). Although some post-secondary institutions have many block credit transfers, (e.g. Thompson River University currently has over 50 of these agreements in their credit bank), it is less common and under-researched in PLAR, compared to course matching which matches PLAR credits to specific courses or learning outcomes (Sherron et al., 2021). In New Zealand, there is also a partnership between McDonald's and the Auckland University of Technology, which was found to be a pathway most used by Maori employees (Wihak, 2006, p. 96).

Although limited examples of PLAR for corporate training exist in Canada, the United States has a multitude of opportunities. For example, Greenville Technical College has recognized the Carolina Code Schools 12-week program with up to 12 Prior Learning Assessment credits that can be applied to their technology programs, with Facebook offering 25 scholarships for Greenville residents to attend the code school (Smith, 2018). Developed through the Educational Quality through Innovative Partnerships (EQUIP) initiative, Northeastern University, GE Aviation, ACE co-designed a Bachelor of Science in advanced manufacturing systems in which most of the instruction and assessment occurs onsite at GE aviation sites (Taylor & Soares, 2020). This learning is recognized through sub-degree credentials of a bachelor's degree (Taylor & Soares, 2020).

> "People came to me and saying, 'I don't have an undergrad degree but I've worked at this organization for eight years, and this is the work that I've done. Here are 6 reports that I co-wrote but I don't have an undergraduate degree.' And I responded, there's no way that it makes sense for this person to have to go back and do a four-year undergraduate degree. So we have a system at [University] where, ..when the student applies to a Master's program, the graduate program director, can write a letter. It's called a 'rationale.' The rationale explains why the applicant should be accepted to the program."
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Beginning in 2017, Northeastern University and IBM announced a partnership agreement to recognize IBM corporate training toward graduate degree programs and certificates (Northeastern Global News, 2017). The recognition process employs a digital badge methodology. Digital badges provide an electronic record of specific competencies and can store an array of information including program descriptions, specific skills, and assessment outcomes (Leaser et al., 2020). Digital badges are increasingly being recognized for academic credit in courses and degree programs (Leaser et al., 2020, p. 39). In the case of IBM, digital badges were organized around occupational roles with activities grouped into knowledge, skills, and abilities with required assessments for each (Leaser et al., 2020). Employees from Northeastern University and IBM worked together to map equivalencies, resulting in the awarding of three courses or ten graduate credits in data analytics, project management or portfolio management (Leaser et al., 2020).

While the partnership between IBM and Northeastern University focused on identifying and recognizing equivalencies in graduate business programs, the methodology could be utilized across all levels of programming in various disciplines (Fain, 2018). For example, beginning in 2018, the University has also recognized Google's IT Support Professional Certificate for academic credit in its Bachelor of Science degree in information technology (Fain, 2018). Google developed a competency-based curriculum utilizing the Massive Open Online Courses (MOOCs) platform Coursera which includes 64 hours of web videos, online lab work, and assessments to demonstrate mastery in the areas of troubleshooting, customer service, networking, operating systems, system administration, automation, and security (Fain, 2018). Google certificate holders can earn up to 12 credits toward the degree, shortening their time to their degree and saving more than $6,000 in tuition fees (Fain 2018). Since then, through the efforts of the not-for-profit organization, Jobs for the Future, Google's certificate has been recognized by community colleges across seven states (Jobs for the Future, 2018). The California Institute of Arts has also partnered with Coursera, offering self-directed courses and specializations for professionals in Graphic Design, UI/UX Design, and Game Design: Art and Concepts and Building Your Freelance Career. Individuals who complete a specialization can apply for PLAR at the Institute to be awarded one course towards any Certificate from CalArts Extended Studies (CalArts, n.d.). Additionally, in 2020, Coursera partnered with the University of North Texas to offer an online Bachelor of Applied Arts and Sciences. The program is geared toward learners with some formal education whereby students can gain the equivalent of 12 credit hours

for a dozen topics through Coursera and they can also transfer up to 84 credits earned at other accredited institutions provided at least 34 of the total 120 credit hours required for the online B.A.A.S. degree have been completed at the University of North Texas (McKenzie, 2020).

There is an opportunity to increase access to post-secondary for underrepresented groups, including Indigenous learners, through the recognition of non-accredited training within corporate but also community sectors. The Alternative Credit Project, which ended in 2018, was a national effort by the American Council on Education in the United States to recognize courses offered by not-for-profit organizations and private companies (Goldstein & Eaton, 2020). The program allowed students to earn up to 64 credits through 104 online and on-demand courses (Goldstein & Eaton, 2020). Stemming from this initiative are post-secondary institutions that have also developed educational options. Fayetteville State University (FSU) has integrated recognition for this corporate and not-for-profit training into their structures through "Alternative Credit Courses." FSU is a historic Black university that still has a significant Black student population, with most of its students from underrepresented populations in post-secondary institutions. Noteworthy is that six additional historically Black institutions have also continued the program in a similar fashion (Goldstein & Eaton, 2020).

Currently, there are many courses on MOOC platforms such as Coursera delivered by universities around the globe that have Indigenous content in a variety of subject areas. There is an opportunity for post-secondary institutions to partner with MOOCS, Indigenous organizations and/or communities, and potentially other partners to develop online learning that can be recognized for credit. This can benefit all parties involved. For example, a First Nation can develop a MOOC on the history of their community using a site like Coursera which recognizes the content creator as the owner of their intellectual property. This course can be recognized toward a history or Indigenous studies degree at a post-secondary institution, allowing local First Nation students, and potentially others to increase their access to relevant and local Indigenous content in their field, while providing the post-secondary institution with a potential learner who may not have enrolled otherwise. In another scenario, the First Nation could also partner to obtain access to relevant content that they themselves cannot generate. For example, they could partner with a not-for-profit or an industry partner to create a specific course that is then recognized by the post-secondary institution.

Work, volunteer experience and corporate training are already being recognized in the Ontario post-secondary system and beyond and these practices are transferable to Indigenous specific contexts. Acknowledging the tensions of corporations as educators (Wihak, 2006), the design and delivery model an be adapted to drive community-based opportunities, including job roles that are somewhat standard or unified across communities (Ray, 2017). While Morrissey (2008) has called for employers to develop their own certification processes and partner with sector councils and colleges to establish PLAR to recognize achievement of occupational competencies through use of the National Occupational Classification system or sector councils' competencies (p. 178), this recommendation, viewed through the lens of Indigenous self-determination, expands the scope to include processes of community recognition and certification.

> "…we're going to start by going to band offices and telling them a little bit about PLAR and then asking, "What do they need from it?" ... somebody gave me a brilliant idea... what if we gave the Elders the knowledge keepers, the bands, the decision-makers, the rubrics to develop the competencies, to develop - how are we gonna assess these? And so [colleague] and I have been talking about what would that look like."
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For example, there are over 700 National Native Alcohol and Drug Abuse program (NNADAP) workers across Canada, and while there is some variation based on community need and size, job duties fall within three main areas: (1) prevention activities, aimed at preventing serious alcohol and other drug abuse problems (e.g. public awareness campaigns; public meetings and speaking; developing content for schools on alcohol and drug abuse; school programs; news media work; and cultural and spiritual events), (2) intervention activities, aimed at dealing with existing abuse problems at the earliest possible stage (e.g. recreation activities for youths; discussion groups and social programs; and spiritual and cultural programs), and (3) aftercare activities, aimed at preventing alcohol and drug abuse problems from reoccurring (e.g. counselling, sharing circles; support groups; crisis intervention; support visits; outreach visits and various service referrals (ISC, 2019, para 4). Overlap exists between job duties (i.e. demonstrated competencies) and various program learning outcomes at post-secondary institutions. This includes multiple vocational learning outcomes of the Social Service Worker Ontario College Diploma such as planning and implementing accessible and responsive programs and services, developing the capacity to work with Indigenous individuals, families, groups, and communities while respecting their inherent rights to self-determination identifying and addressing systemic barriers that produce ill-effects, developing appropriate responses using approaches such as trauma-informed care practice, and identifying the diverse needs and experiences of individuals, groups, families, and communities, and meeting these needs (MTCU, 2018). Learning outcomes and/or competencies such as provincial vocational learning outcomes and the Canadian Council of Social Work Regulator's (2012) Entry Level Competency Profile for the Social Work Profession can be mapped against NNADAP worker's job descriptions, experience, and training requirements.

PLAR for work experience could also be combined with corporate or community training. For example, a PLAR initiative was designed in the United States under the American Council on Education (ACE) which under its learning evaluation program (previously CREDIT) has assessed competencies based on faculty expertise and recommended credit equivalencies to post-secondary institutions for numerous occupations and training opportunities. The Training Center Program of the Indian Health Service operating under the umbrella of the Public Health Service, Department of Health and Human Services, partnered with ACE to further their objectives of developing training programs designed to meet the needs of Indigenous peoples in the areas of health awareness, health skills, and health management to support tribal health capacity and self-determination. Specifically, a community health representative training course and a health service personnel administrative training course were designed for tribal members (ACE, n.d.). The ACE assessment included a site visit comprised of introductions and presentations, administrative reviews, tours and exit briefings. Once deemed satisfactory, a course summary with recommendations including a number of semester hours, level, and subject area was entered into the ACE National Guide (ACE, n.d.).

Similarly, a partnership could be struck with First Nations, Health Canada and post-secondary institutions to grant advanced standing in various social services programs (Ray, 2017). This aligns with Morrissey's (2008) recommendation to extend and strengthen occupational profiles and competency grids, emphasizing areas of high priority which can include Indigenous health and the environment due to the shared goals and current undertakings by First Nations to be self-determined in their health care through health transformation in Ontario, United Nations declarations, and conventions such as the United Nations Declaration on the Rights of Indigenous Peoples and the Sustainable Development Goals (Ray et al., 2024). Moreover, the recruitment strategy for the Florida International University's (FIU) Bachelor of Arts in Disaster Management could be adapted to support awareness building and recruitment (Valdès, 2019). The university visits first responders and local government agency offices to provide a one-hour workshop on the opportunity which includes spot transcript reviews, enrollment advising, and onboarding support (Valdès, 2019). The workshops were effective with 35 students admitted to the university six weeks post-workshops and 80 students completing laddering college credentials.

ASSESSING EQUIVALENCY

Tools to support recognition and assessment already exist. Cultural experiences, like the one described by De Leeuw and colleagues (2021) include the same components required to formally recognize Indigenous students' learning in their communities. Firstly, there is the development of cultural or land-based learning opportunities which identifies key knowledge, skills, and competencies developed through experience and practices such as journalling to assess if the learning has taken place. In the case of the UNBC medical program learnings, learners were assessed through reflective practice, including a final critical reflection paper (De Leeuw et al., 2021). Providing an example from a different discipline, the Republic of the Philippines Early Childhood Care and Development (ECCD) council has created assessment tools to identify cultural, linguistic, and Indigenous competencies of teachers within the Competency Standards for Child Development Workers and Child Development Teachers. The assessment includes a supervisor and self-assessment component for each stream and predominately focuses on the human resource component of ECCD (Biana et al., 2021). The assessment is administered in the spirit of continuous learning and includes seven domains: Child Growth, Development and Learning, Health, Nutrition, Safety, and Well-being, Curriculum, Learning Environment and Experiences, Assessment and Reporting, Family Involvement and Community Linkages, and Personal and Professional Development. Within the domains exist cultural, linguistic, and Indigenous competencies such as those that support "Plan[ning] and implement[ation of] learning experiences (activities and practices) that recognize diversity (culture, language, and social factors)," as well as those, "Demonstrat[ing] non-discriminatory treatment to children from diverse cultural, linguistic, and social backgrounds" and "Articulate[ing] ideas using English, Filipino, and Mother Tongue (Biana et al., 2021, p. 145-146).

In the environmental sector, Demissie's (2020) PhD dissertation examined competencies required for sustainable development and learning approaches to support the development of these competencies in Ethiopia. Part of Demissie's research involved conducting a Delphi study with sustainability and industry experts to identify sustainability competencies. Overall, 15 key competencies in sustainability were identified: systems thinking competence to understand complex sustainability issues; disciplinary competence in sustainability-related fields; interpersonal competence to facilitate collaboration of sustainability stakeholders; action competence for sustainability interventions; anticipatory competence to predict future sustainability issues; strategic competence to devise sustainability interventions; normative competence for sustainability goals; transdisciplinary competence to collaborate with diverse sustainability

> "…there's some essential outcomes and one of them was including Indigenous content in the curriculum. So, there's been a process where all the programs have been making sure that they meet that standard. For some of them, what it looks like is they add the course on Indigenous content. Specifically, others will, embed it throughout all of the courses. So we had hair stylist went through revision recently and I thought they did a brilliant job. They made it gender inclusive, which I thought was lovely, but they also in the learning outcomes, included understanding, like Indigenous perspectives on hair and genetic things about Indigenous hair. And how you care for it, how you style it, and all the rest of it. So, you know, for those students that are Indigenous and have worked with Indigenous hair, those outcomes would be really aligned to their past experience.
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> -P9a

experts; flexibility and continuous learning competence for sustainability; communication and information acquiring competence for sustainability; stakeholder and policy coordination competence for sustainability; resource utilization competence for sustainability; social justice and inclusion competence to promote sustainability; competence to balance sustainable development dimensions; and, competence to utilize indigenous resources for sustainability (Demissie, 2020, p. 37). Direct linkages were made to Indigenous knowledge systems with the social justice and inclusion competence defined as "the ability to consider the needs and values of diverse groups (including future generations)" (Demissie, 2020, p. 37) and utilizing Indigenous resources for sustainability competence which is defined as, "appreciating one's own local competence, value, culture, history, languages, and natural environment" (Demissie, 2020, p. 27). These two competencies, and Indigenous knowledge systems as a whole also crosscut across other competencies such as systems thinking, transdisciplinary and disciplinary-specific competencies. For example, Demissie (2020) provides the example of how the Konso peoples' water and soil conservation practice, including the construction of stone terraces, is a sustainable environmental engineering practice. The study also conducted focus groups with experts in sustainable development and education to identify ways in which students can develop these competencies through Indigenous knowledge systems. While prior learning assessment and recognition were not categorized as such, the study highlighted the importance of learning by doing, including mandatory extracurricular activities, field trips, real-world learning, and apprenticeship whereby students may learn from community and come back to the classroom for reflection (Demissie, 2020).

Work experience has been mapped against specific post-secondary credits as well as occupational competencies. Driven by labour force issues, several countries have developed national qualifications frameworks that include occupational profiles and standards which support PLAR development (Morrisey, 2008, p. 158). In the United States, the American Council on Education (ACE) have utilized credit equivalent and competency-based methodologies to support PLAR. For over 70 years, military training has been evaluated by ACE for credit and it has been 50 years since the ACE's College Credit Recommendation Service (CREDIT®) has been evaluating learning acquired through nonaccredited course providers and in the workplace for college-level transfer credit (Taylor & Soares, 2020). Beginning in 2018, ACE also began utilizing competency frameworks developed by associations and industry stakeholders (Taylor & Soares, 2020). In Canada, the National Advanced Placement

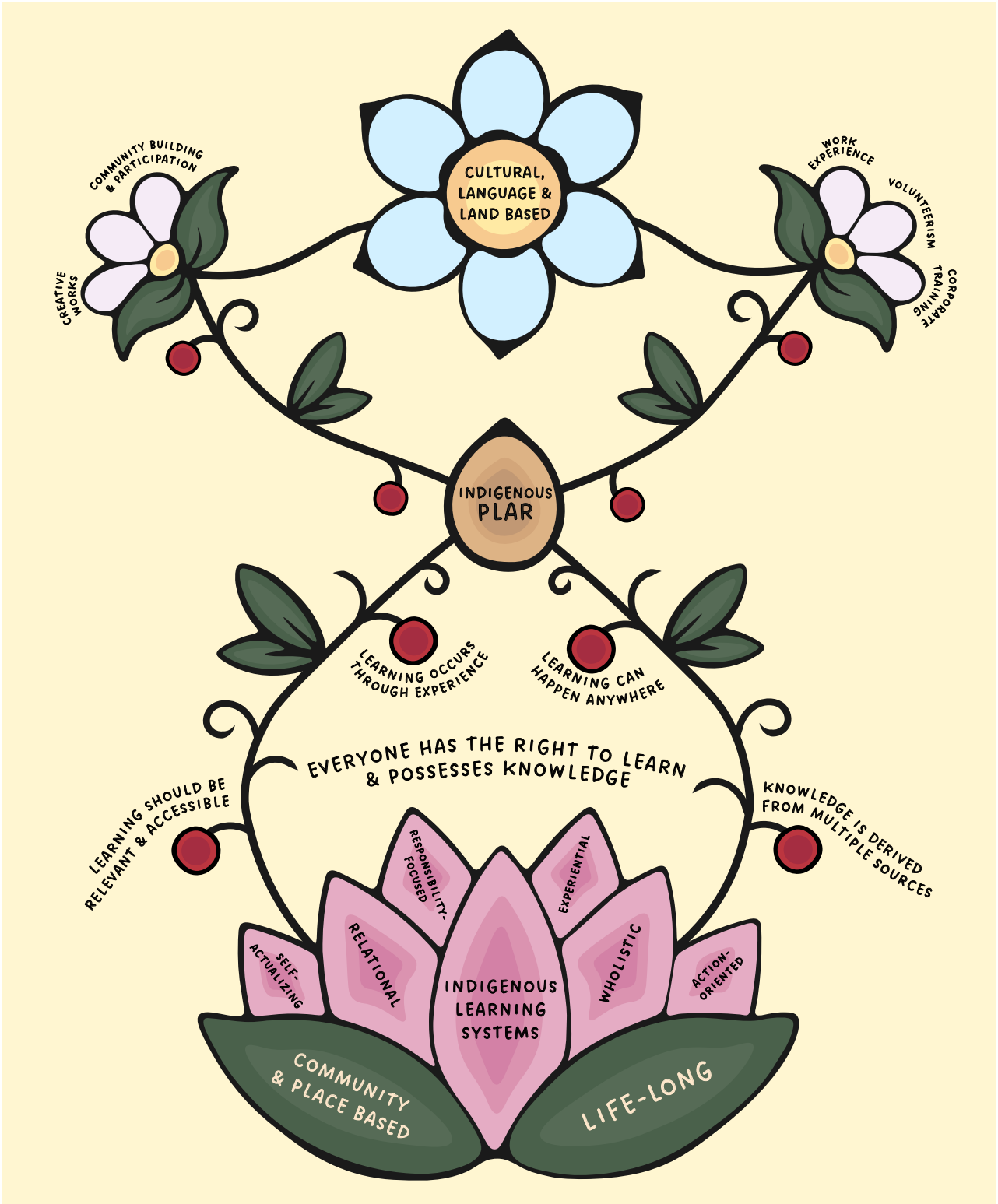
& Prior Learning (N-APPL) Program facilitates advanced placement opportunities for those with Canadian Armed Forces training and work experience so that they can obtain a degree in as little as two years in the

following areas: accounting, business information technology management, business management, construction management, finance, financial planning, general insurance and risk management, geographic information systems, human resource management, international business management, operations management, sustainable business leadership, technology teacher education, forensics (crime and intelligence analysis option), occupations health and safety certificate and ecological restoration (BCIT, n.d.).

Overall, this section demonstrates that many equivalencies exist between Indigenous and community knowledges and post-secondary education, especially as non-western knowledges are increasingly recognized within institutions due to commitments to social justice and the TRC. Specifically, there are a multitude of opportunities to recognize Indigenous PLAR not only in Indigenous-specific programs and graduate attributes but also in a variety of programs and disciplines. Moreover, although there are very limited examples of Indigenous PLAR, much can be gleaned from the inclusion of Indigenous knowledges in post-secondary education, despite their primary purpose of educating settler students. These initiatives serve as proof of concept that equivalencies do exist and can be recognized. This reasoning also extends beyond Indigenous-specific examples. Although considerations must be made for the distinctions of Indigenous knowledges systems and Indigenous-community based knowledges, a multiplicity of non-Indigenous PLAR examples exist which serves to demonstrate the capacity and flexibility of the system to implement Indigenous PLAR if there is an impetus to move it forward.

Regarding assessment, this section of the discussion paper has highlighted exemplars of how to assess equivalent knowledges, skills, and competencies. Akin to equivalency methodologies, considerations must be made for assessment in Indigenous contexts; however, what is presented in this discussion paper is an opportunity for institutions and communities to grow what they know. Various assessment tools and methodologies, including competency frameworks, reflection-based assessments, and verification letters, are already being used to support efforts to recognize the equivalency of Indigenous knowledges and community-based knowledges. These can be adapted, refined, and built upon to support the development of a robust infrastructure and toolset to assess equivalency. Figure 4 provides a summary of equivalency areas between formal and informal learning delivered in-community, online, and on the land and accredited learning in post-secondary institutions. Blank spaces are provided in the model to support use by post-secondary institutions and Indigenous learners to identify potential equivalencies in the areas of creative works, community building and participation, cultural, language and land-based learning and work experience, volunteerism and corporate training delivered in a variety of formats.

Figure 4: Equivalence between non-accredited formal and informal learning in Indigenous communities and accredited learning in post-secondary institutions



SECTION 3: PLAR ASSESSMENT

This section of the discussion paper examines Indigenous and culturally responsive assessment design principles and methods to consider when implementing Indigenous PLAR. Hamer (2011) contends that if we are to effectively connect with and draw in marginalized learners, PLAR assessment must recognize the learner in a manner that supports "ontological security" (p. 105). In Indigenous contexts, ontological security must include the recognition of Indigenous worldviews. This is often referred to as culturally responsive education and can be understood as using cultural knowledge, prior experience, and diverse learning techniques to ensure learning is appropriate, effective, and allows students to maintain their cultural identity while pursuing higher education (Slee, 2010, p. 249).

"In those cohorts too, we also actually had the community involved in the assessment of the students' learning. So, when we finished the graduate program, they had to do presentations to the community on their major projects. And the community had to say, 'Yeah, this is really good or not.'"

-P10

There is a lack of culturally responsive education in post-secondary environments, and many teaching and assessment modes are biased and center whiteness (Martin et al., 2021; Williams & Perrone, 2018). Carjuzaa and Ruff (2010) rightfully question the ethics and fairness of settler assessments of Indigenous work considering the significant tensions that exist between assessment methods for western classroom-based learning and traditional learning in a variety of cultural contexts (Carjuzaa & Ruff, 2010; The Pauktuutit Inuit Women of Canada as cited in Snow, Miller & O'Gorman, 2021, p. 71). For example, an Indigenous learner may have a difficult time expressing their skills in writing due to linguistic and/or socio-cultural differences, but they may have a portfolio of work that demonstrates learning, or they may be able to clearly express their abilities spatially, visually, or orally (Baird & Dooey, 2017; Baker et al., 2021).

For post-secondary institutions to meet the needs of Indigenous learners, the standards and assessment tools being used to evaluate student learning must be critically examined and expand beyond western worldviews (Carjuzaa & Ruff, 2010). Martin and colleagues (2021) agree, arguing that it is imperative to think about assessment as pedagogy to enable us to be better positioned to decolonize learning, employ culturally responsive pedagogy, and decenter whiteness in the assessment process. Wilks and colleagues (2020) contend that building on Indigenous knowledges in the design of assessment of student learning outcomes recognizes cultural backgrounds and prior knowledges as student strengths. Through PLAR there is the possibility to design assessments that are informed by Indigenous practices, ontologies and values.

"'You wanna talk about rigour' he goes, 'trying to satisfy all your ancestors and the next seven generations, that's rigour.' And, you know, when you hear those thoughts, it just puts so much in perspective."

-P5

CULTURALLY RESPONSIVE ASSESSMENT

The literature on PLAR assessment in Indigenous contexts is sparse. Thompson & Zakos (2021) are among the few who have published on the topic and call for PLAR to be relational by recognizing the significance of place and identity as a component of learning, to be flexible, and to privilege Indigenous ways of knowing in assessment design and methods. These principles are consistent with the growing body of literature on culturally responsive assessment which provides additional insights on how to implement PLAR assessment. For example, building on the work by Kirkness and Barnhardt (1991) on the 4 R's, Carjuzaa & Ruff (2010) put forth an interpretation of the principles of respect, relevance, reciprocity, and responsibility to inform the development of culturally responsive standards for assessment. These principles of relationality state that practicing respect entails a repositioning of the instructor from interpreter to listener and an evaluation from within the paradigm of the work. Regarding relevance, Carjuzaa and Ruff (2010) argue that enacting relevance begins with considering the intersection of scholarly practice and the cultural landscape, as well as calling into question the tacit assumptions contained within Western standards. Next, reciprocity implies a give-and-take within the teaching and learning process which begins with interrogating the power differential, collaboration and an interchange of ideas, sharing power, and learning from the "other." Lastly, the authors suggest that the most important responsibility for assessors in academe is a willingness to learn from rather than about those who primarily think and operate from a non-Western epistemological system (Carjuzaa & Ruff, 2010).

Martin and colleagues (2021) highlight similar necessities to employing a culturally responsive assessment process. Specifically, valuing Indigenous ways of knowing in assessment methods, advancing community-defined assessment criteria, and meaningfully including Indigenous peoples in the assessment process. They refer to the operationalization of these assessment principles as an empowerment approach to evaluation and champion self-evaluation as part of the process (Martin et al., 2021). Likewise, Nelson-Barber and Trumbull advocate for the use of Indigenous knowledges and active community involvement to make assessment practices valid for Indigenous learners (as cited in Williams & Perrone, 2018). Govender and Mudzamiri (2022) who worked with African Elders to identify appropriate assessment methods for physics education also conclude that assessment tools and procedures must be relevant, as well as community-centered by accounting for the specific contexts of place and through linkages to the everyday experiences of the community.

"But what we knew was that in order to make the program work we had to hire Indigenous faculty. So as soon as we could, we found Indigenous faculty who had a background in the work and they began to make the program fit the needs and circumstances of the learners. We changed the curriculum and the portfolio process to reflect Indigenous teachings. We had Elders who travelled with us and we did healing circles. These practices became key components of the program. It was an adult friendly framework that enabled participants, who were scattered throughout Ontario, to work and study- taking into account on their work schedules and life demands. So right away we were looking at innovation. It really shouldn't be innovative but (laughs) in our systems it is innovative. That's how we got started. We continued to work with participants and after the first two or three intakes they wanted to move from a two year diploma to a bachelor's degree. We were able to find a university partner and jointly offer a bachelor's degree in social work with a strong Indigenous component. A few years later participants were anxious to pursue a master's degree and we were able to find a partner and make it happen. We always consulted with participants and their communities."

-P4

"And so, by coincidence, this year under our collective agreement, we actually signed an MOU designed for this and it's possible to appoint an external expert to serve as a PLAR assessor. When I saw that language I was just tickled pink because it opens the door to include Elders or Knowledge keepers."

-P7

PRINCIPLES OF CULTURALLY RESPONSIVE ASSESSMENT DESIGN

In this sub-section, several principles of PLAR assessment design that align with Indigenous worldviews and learner preferences are explored.

Indigenous learners are assessed in their community. The use of in-community delivery should be considered when designing PLAR assessment. Delivering assessments in community is a way to minimize cultural alienation (Slee, 2010) and reduce additional barriers such as fear (DeDominicis & Zablotney, 2020). There are already examples of program delivery in community in partnership with Indigenous peoples. For example, 'Growing Our Own,' is an initiative between Charles Darwin University and Northern Territory Catholic Education to prepare Indigenous teacher assistants for teacher qualification in the remote communities in which they work and live in the Northern Territory, Australia (Slee, 2010).

Nicola Valley Institute of Technology uses a variety of assessment processes including a non-academic assessment through their Community-Based Assessments (CBAs) (Government of British Columbia, 2022). Assessors travel to communities to assess multiple prospective learners at once and help involve the whole community in the process. The CBA process requires two days. The first day revolves around building community trust through sharing food, cultural activities, and reviewing key concepts and language used in the assessments. On the second day, the assessment is conducted. Through their use of in-community assessment, Nicola Valley Institute of Technology have identified wise practices for the implementation of in-community assessment. Prior to assessment, community partners participation is supported by inviting Elders and other community members and providing the community with practice materials in advance. During the assessment, they call for the integration of cultural elements into the assessment and diverse assessment methods, relaying to the learner that the assessment process is the first step and not the final step, providing the learner with in-person feedback, and developing an individual learning plan with them. Post assessment, it is recommended that learners be provided with the opportunity to explore other assessment methods and are aware of the wholistic supports available (Government of British Columbia, 2022). Debriefs on the effectiveness of the assessment are also conducted, and ongoing communication at an individual and community level occurs (Government of British Columbia, 2022).

Eagles et al. (2005) explored using online PLAR delivery in a culturally responsive way to reach Indigenous learners. Specifically, Indigenous learners from remote communities were given the option to express their knowledge in an oral format online as an alternative assessment method

> "We didn't do a formal prior learning assessment in the way that it would be written about or the way that it would be discussed because it was driven by the community, I really just tried to accept them as part of the process. So, it wasn't like the university making the selection but we did it together, knowing that those students are gonna be in there working for them, working in their schools, working. So they have such a vested interest in ensuring success. So I really kind of trusted the Director of Education. And actually, oh that's something interesting about what we did too is, we initially offered other students to come into the cohort as well, and we did a prior-PLAR on them but not a Eurocentric one."
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> -P10

to written expression and all Indigenous learners chose this option (as cited in Wihak, 2006, p. 95-6). Although not PLAR-specific, Ibáñez-Carrasco et al. (2020), highlight a flexible, student-tailored blended program that could provide a structure for online PLAR delivery. University Without Walls is a non-credit training program for emerging HIV researchers in Canada that tailors tools and activities to each student for their context/background/prior knowledge while still pushing their disciplinarian and professional boundaries. The program's curriculum is co-designed between student and faculty which promotes reciprocal or co-teaching, and the unique delivery model of the program allows for connection and support to be built between otherwise isolated students in varied disciplines (Ibáñez-Carrasco et al., 2020).

PLAR is Circular. Indigenous PLAR should reconsider the "P" and provide more than one opportunity for informal learning to be recognized. Generally, PLAR is conceived of in a linear manner. Learners have prior learning; this is assessed for credit and then learners begin their post-secondary education program at the appropriate level based on credits awarded. They then carry out the remainder of their learning in a post-secondary institution to degree completion. However, learning is dynamic and relational and can happen concurrently to learning in post-secondary environments. This understanding is especially significant amongst Indigenous peoples whose worldviews are circular (Morrissey, 2008). PLAR assessment processes which are not prior but instead ongoing facilitate an ongoing connection between post-secondary education and real-world environments. This helps to further break down misconceptions about valid sites of learning, demonstrate the relevance of post-secondary education to everyday life, and integrate all types of ongoing learning into learners' future plans.

> "So if you have a student who's 17 [and] they're supposed to graduate in June, but [if] they're not on track to graduate in June, they can now apply for PLAR."
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> -P8

Although not Indigenous-specific, a study in the United Kingdom on a Professional Doctorate by Public Works (PDPW) programme also identified the need to reexamine the linear approach to PLAR. They suggested that PLAR be not only about looking backwards but also looking forward (Armsby, 2013). In addition to having the learner reflect on past learning, the portfolio process also places emphasis on future potential, differentiating it from many other PLAR processes (Armsby, 2013). The assessment method put forth by Thompson and Zakos (2021) for Indigenous PLAR also has a forward-looking element, asking learners to reflect on how a learner's gifts and the ongoing development of these gifts fit within the family and community context. This approach is informed by Indigenous circular relational and responsibility-based systems, such as the Anishinaabe practice of looking forward and backward for seven generations to support decision-making.

Other examples of PLAR which extend their focus beyond prior learning also exist. For example, the South African Worker's College includes a learning module for students to engage in social activism and articulate how learning has occurred through current and prior experience (Thompson & Zakos, 2021, p. 62). Also, the College of Dieticians uses portfolio development in its continuing competence program which includes a practitioner self-assessment relative to the occupation's standards of practice (Morrissey, 2008). The portfolio is not only about documenting prior learning but also requires learners to identify at least three goals and establish a professional development plan, with annual progress tracking to address these goals (Morrissey, 2008).

Flexible recognition of learning. Learning outside of the classroom is dynamic and wholistic. Although similar learning outcomes and demonstrated competencies may be achieved through informal learning, it is unlikely that skills, knowledges, and attributes developed will be neatly scaffolded because life is not linear. Flexibility in how assessed learning is recognized will ensure that a student's informal learning is valued to its fullest potential and student-centred approaches to PLAR which fully see the capabilities and potential of learners, can be implemented.

Choice of program structure, recognition methodology and conceptions of PLAR all influence the flexibility of PLAR recognition. For example, programs which include micro-credentials or other smaller units have a greater capacity for flexibility (Woods et al., n.d.). Woods et al. (n.d.) note,

> It would be a lost opportunity if post secondary institutions and industry training merely considered micro-credential learning as new learning. Simply breaking existing post secondary learning into smaller chunks would also minimize the potential. Industry and post secondary need to be alert to emerging and hidden learning-chunks and optimize them by building in prior learning assessment for those employees and potential employees who have already gained the desired knowledge and skill base. (para 11)

Also, the use of broad recognition methodologies that operate at a program learning outcome or competency level allows for more flexibility in recognition as opposed to a course-matching approach. For example, a learner may meet many of the learning outcomes for a program however, they may not have met all of the learning objectives of a particular course. Learning outcomes, for example, effectively allow those assessing transfer credit to work outside of the usual boundaries created by standard learning units; standard learning units are normally given transfer credit to recognize a variety of equivalencies and combinations of equivalencies (Kennepohl, 2016).

"I would like the community-based programs that aren't university credits and just transferring them at the admissions level without charging a PLAR fee. So, the PLAR would be charged when there's an instructor assessing the proficiency or the portfolio or whether they've reached the learning benchmarks."

-P6

Conceiving PLAR in a circular fashion also supports flexible approaches to recognizing non-accredited learning, increasing the capacity of PLAR to respond to and address rigidities in post-secondary learning units and equivalency methodologies. PLAR may not only be a tool for initial recognition of credit, but also a tool to address any gaps that are not easily responded to in the post-secondary environment. For example, the learner may demonstrate that they meet a variety of learning outcomes; however, if the learning outcomes they meet fall into courses where there are unmet additional learning outcomes and are not addressed elsewhere in the curriculum, credit may not be awarded in a course matching methodology. Concurrent learning instead of prior learning assessment and recognition could occur to address any gaps. In the example of the South African Worker's College, one of six required modules focuses on activism through experience and reflection. An in-classroom type PLAR opportunity could be built into the curriculum and used to target any gaps in a course-matching methodology. Additionally, a second wave of PLAR could take place prior to graduation.

Relational assessment of learning. Much of the learning in Indigenous education systems is competency-based. For example, in Traditional Inuit education, learners were mentored until they achieved task mastery (Snow, Miller & O'Gorman, 2021). They first would observe and then they would be supervised while undertaking the task, receiving guidance and correction until they were able to properly execute it (Snow, Miller & O'Gorman, 2021). This competency-based assessment style is necessary in real-world situations, particularly if engaging in land-based activities. For example, if somebody passed a written test about navigating Arctic waters, fishing in a kayak on their own would be a much more precarious situation than for someone who demonstrated their ability to navigate Arctic waters to an experienced fisherperson before departing for a solo fishing trip.

In Traditional learning systems, there are typically two main components to assessment: demonstrating competency and individual and/or community recognition of the competency. Returning to the example of the learner and the kayak, the learner would have to demonstrate to the experienced fisherperson that they are able to navigate waters. Secondly, for community members to know that the learner is competent in the area, they would ask the experienced fisherperson who is recognized for holding that knowledge if the learner is in fact competent in the area. This would occur until the learner themselves received broader community recognition for their competency. In the future, they themselves might be referred to as a Traditional knowledge holder and assess others' abilities.

Efforts should be made to envision how Traditional assessment methods which are relational, can be employed in Indigenous PLAR. Pitman & Vidovich's (2013) explanation of PLAR demonstrates that there may be natural alignment, with PLAR having the capacity to be a very relational practice. The authors explain that through the PLAR process, socio-cultural capital is converted into academic capital (p. 510). They provide the example of a university that requires a statement of duties and responsibilities, including an official title and an employer statement describing duties and responsibilities if their PLAR application is based on work experience (Pitman & Vidovich, 2013). In this example, the assessment is on the demonstrable evidence of the learning that is based on symbolic signifiers such as work title and the cultural capital of the attestor of learning. Thus, social capital is crucial to assessment (Pitman & Vidovich, 2013, p. 510).

> "In the Master's cohort ... we had an intake every other year, and so probably at least, 40 to 50 percent of the students I would be writing rationales on their behalf. And it would just be a matter of them meeting with me, explaining their work experience, what they wanted from the master's program, what they were bringing to the master's program, and then I would write the rationale. The Admissions Office would receive the rationale and then they would admit the students to the program. And I did that for students who didn't have undergraduate degrees."
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Some post-secondary institutions are already implementing this relational-based assessment design in their PLAR programming. For example, Athabasca University (2024) accepts attestation letters as evidence of learning. An individual who knows and/or has worked with a learner can write an attestation and they are supported in this process through an attestation letter template, instructions and attestation letter example. The attestation letter must include the title and background of the attestor, an explanation of the relationship between the learner and attestor and a discussion on the learner's skills, knowledges, and competences which includes examples and a discussion on how well they have grasped this learning. The PLAR learner will populate the first half of the attestation letter template with learning statements to support the attestor in filling out the remainder of the template and drafting the attestor letter (Athabasca University, 2024). Returning to the example of navigating waters, the experienced fisherperson, like the assessor in Pitman and Vidovich's (2013) example and Athabasca University's attestation process, possesses socio-cultural capital and through speaking for the learner about their competency, this capital is evoked and converted into academic capital. In the future, the learner may become known for their advanced knowledge and skills to navigate Arctic waters and may be bestowed a symbolic signifier, such as a title, like a Traditional knowledge holder by their community.

Wholistic assessment methods. Within Indigenous knowledge systems, spatial/relational, visual, and oral methodologies are widely utilized (Baird & Dooey, 2017; Govender & Mudzamiri, 2022) and not integrating them into assessment processes disadvantages Indigenous learners. For example, research conducted on learning in Australia and North America with Indigenous adults found that solely cognitive-based approaches have

much less success than those that are interactive and dialogic (McLoughlin & Oliver, 2000). Moreover, another study found that students in remote locations are impacted by language restrictions (Wilks et al., 2020).

Providing wholistic options for student assessment better aligns with Indigenous worldviews and can result in a fuller picture of the student's abilities and knowledges (Wilks et al., 2020). Popova-Gonci and Lamb (2012) introduced concept mapping as a PLAR tool for non-traditional students with an array of professional experiences. A concept map visually prompts students to organize and demonstrate relational connections among learning elements. Gleiman (2023) also documents the use of mapping for PLAR whereby students visually map out their career autobiography and use this knowledge map to address and identify connections for their learning narrative. Janice Brant has utilized a similar methodology while working with Indigenous learners. She asks learners to name one activity that they can successfully execute and then asks them to break this down into smaller tasks and list knowledge, skills or attributes associated with each. This "circling out" methodology provides a visual and relational way for the learner to identify their competencies and how they interrelate (Brant, 2023).

Additionally, there are other ways to incorporate visual elements such as through exhibits, artistic performances, story boards, and posters incorporating visual or symbolic illustrations, cultural knowledges, and photo collages (Williams & Perrone, 2018). These assessment methods could also be combined with an in-community component where members of the community recognized for their knowledge are invited to witness and speak to the accomplishments (knowledge, skills, competencies gained) of the learner. This could also include an Indigenous language component (Williams & Perrone, 2018).

Baird and Dooey (2017) describe the use of a visual approach to assessment design of the Post-Entry Language Assessment (PELA) in a post-secondary environment. PELA is an academic writing test that is designed to assess the academic writing abilities of research degree candidates in which English is not their first language. The authors describe a visual PELA, using images as a writing prompt to improve comprehension and inspiration. As the authors state, "the aim was to stimulate student writing using a variety of images, with minimal written instructions, rather than through the use of fully text-based instructions" (Baird & Dooey, 2017, p. 161). In this example, a visual component is paired with a written component whereby the learner is still required to articulate their learning in writing; however, this practice could be expanded to include a visual component both in assessment instruction as well as in

> "…a lot of other people were working with a student to decolonize our PLAR process. And he'd been struggling with the competency-based PLAR for years. And he would approach us and he would start the process and then he would disappear. And he'd come back, and he'd get a little bit further, and he'd disappear. And finally, I sat down with him and I asked, what is the challenge here? And this is an Indigenous male and he was pretty straight with us, and he said, 'I'm not a writer.' Everything we do is highly written and if you don't have confidence in writing or you don't articulate yourself in writing, PLAR is a very difficult thing to do. And so over 2-3 years we really sat down and worked with him and thought about what does he need to really share his learning in a way that meets that rigour?"
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the learner's response. Furthermore, Baird and Dooey (2017) explain how the visual component allows for more flexibility in the interpretation of the assessment criteria, "by removing the written language component, we allow students to make their own meaning and thereby be creative in expressing what they see in the image" (p. 161). In utilizing visual prompts, the assessment tools do not assume each student has a universal experience and will be able to answer the written prompt. Using images allows each student to make their own meaning based on their lived experience, prior knowledges, and worldview.

Storytelling is an assessment method that has the capacity to include indirect, relational and circular communication (Carjuzaa & Ruff, 2010; Ray et al., 2021). Humility is a valued trait amongst many Indigenous cultures, and it can be difficult or uncomfortable for some Indigenous learners to communicate (or what may be interpreted as boast) about their knowledge skills and attributes. Storytelling provides a way to communicate this information in a more indirect way and can also connect personal accomplishment to community responsibility. Carjuzaa and Ruff (2010) recall an example of a Crow/Northern Cheyenne Indigenous doctoral student whose research proposal, while including all of the necessary components, was not written in the typical proposal style. Instead, her research proposal described a personal journey that connected her relationship with her ancestors, her personal experiences, and her topic, with references used as a bridge seeking to transform "a personal context to a multicultural understanding of that personal context" (p. 70).

Gainsford and Robertson (2019) outline an Indigenous cultural immersion program for future lawyers delivered in Wiradyuri communities in Australia. The program is rooted in Indigenous methodologies including being hosted by Wiradyuri Elders and employs a video storytelling assignment for assessment. As the authors state, the "assessment mode was implemented to directly reflect the value of traditional ways of knowing and being and to give justification to Indigenous storytelling as a legitimate basis for formative assessment that has academic respect equal to that given to written forms of Western evaluation" (p. 502). The video storytelling assessment process was implemented so that students could demonstrate their knowledge in different ways and be focused on key learnings and not on grammar, footnotes, and over-editing for academic writing. The assessment mode was deemed successful, with students making direct connections between emotional knowing and critical analysis and expressing that complex concepts like Indigenous sovereignty, reconciliation, self-determination, and land rights were now meaningful and made sense through Wiradyuri storytelling and immersion in place (Gainsford & Robertson, 2019, p. 510). Additionally, Gainsford and

> "From the students' perspective when they have those conversations with students, it was really interesting because there was always so much humility on the part of the students. They did not necessarily recognize what skills they had and what skills they were bringing to the program."
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Robertson (2019) provide an example of how one student demonstrated a high level of description and critical analysis through the storytelling assessment when they had not been able to articulate the same levels solely through writing.

Developing a community of learners. Within Indigenous worldviews, working together is highly valued (Ray, 2021). Indigenous peoples work together to engage in knowledge building, problem-solving and for personal growth through a variety of processes including sharing circles, ceremony, witnessing and in more informal ways. McLoughlin and Oliver (2000) assert that a fundamental Indigenous instructional design principle is that learners should be able to share what they have constructed with others to reinforce the social, collaborative focus of learning and community.

> "…lots of collaborative work happens in the cohort where people... bring different areas of expertise together. And do assignments together and support each other, and that also helps to address some of the fears and the worries that students have about, their skill level, "How do I write a literature review?.. And am I allowed to miss a class? And am I gonna get in trouble if I have to leave early?"
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A study of Indigenous adult learners in five Adult Learning Centres (ALCs) in Manitoba, which included interviews with 74 Aboriginal Adult Learners and 20 staff members found that wholistic and learner-centred approaches to instruction, strong social, emotional and practical supports, a warm, highly personalized and non-hierarchical atmosphere and the friendly, nonjudgmental and respectful manner in which adult Aboriginal learners are treated by dedicated staff all contributed to a successful learning environment (Silver, Klyne & Simard, 2003). Recommendations from the study included the development of a cohort model that could integrate with the learner-centred approach that was valued by learners (Silver, Klyne & Simard, 2003. This would include taking in 10-12 learners at similar levels at the same time, and then working with them as a group so that the members of the group become "a really cohesive community" able to support each other in a variety of ways, including practically with things like transport and childcare, academically through study groups and emotionally (Silver, Klyne & Simard, 2003, p. 12).

Collectivism is a common value among Indigenous peoples around the globe. Taylor et al. (2012) describes an Afro-centric perspective of transformative learning that values community participation, cooperation, shared knowledge construction, and spirituality and interconnectedness whereby, "individual transformation rests on the support and confirmation of others, with an expectation that change includes a deeper connection to his or her community" (p. 728). Thus, a community of practice model has been utilized globally to support adult learners. For example, the Farmer Field Schools employs a cohort model where "farmers meet regularly to study the 'how and why' of farming and engage in an experiential learning process imbued with local knowledge expressed through song, dance, and theatre" (Taylor et al., 2012, p. 726). The program employs song and

dance to "compliment the problem-based learning and to engage with local ways of knowing" and in addition to agricultural problem-based learning, farmer learners participate in small group sessions to address a range of other relevant topics (e.g., HIV-AIDS, domestic violence) (Taylor et al., 2012, p. 727). In Ghana, an alternative school for adult learners facilitates the connection between participants' and faculty's experiences (Martin et al., 2021).

Additionally, there are also examples of communities of practice in online delivery which recognize students' capacity to construct their own knowledge, bring prior experience, and culturally preferred ways of knowing to learn tasks and develop a sense of ownership and pride in their own knowledge (McLoughlin & Oliver, 2000). Williams and Perrone (2018) impart that one way to make the PLAR process more collaborative for learners is through scaffolding. They suggest learners begin with silent reflection, assemble into groups of two or three to promote listening and reflection and then have the learner engage in an independent process whether that be through writing, orally or in some other way. As part of the PLAR seminar at the American Public University, students can choose to take part in voluntary peer-to-peer feedback discussion and mentorship in which they assume the role of educator. In doing so, the learner's own learning is validated and they are provided with an opportunity to interact with their peers to continue to identify, acknowledge, and recognize how learning is mutually constructed (Gleiman, 2023).

ASSESSMENT METHODS

This sub-section continues the discussion of current assessment methods and provides a more detailed discussion on the use of the portfolio assessment method in Indigenous PLAR.

According to the European Centre for the Development of Vocational Training (CEDEFOP) (2009 as cited in Aggarwal, 2015) there are eight assessment methods for PLAR: (1) debate; (2) declarative methods often signed by a third party to verify assessment; (3) interviews which are often used in as supplementary evidence; (4) observation; (5) portfolio which uses a mix of methods to produce a coherent set of documents or work samples; (6) presentation; (7) simulation and evidence extracted from work; and (8) tests or examinations. The type of evidence included within the methods includes certificates and awards; letters of recommendation; samples of work; videos, audio and/or photographs of work activities; timesheets, committee meeting notes, skills logbooks, demonstration observation notes; details of formal training, records of seminars, conferences and workshops attended; resume and performance appraisals; employer testimonials and letters of support, job descriptions, and prior course work (CEDEFOP as cited in Aggarwal, 2015).

PLAR assessment methods vary in popularity depending on context and place. For example, Greece still favours credit by written examinations (Kasola & Karalis, 2021) and credit by examination has become commonplace in most U.S. universities with portfolios also being popular (Sherron et al., 2021). The United Kingdom also makes common use of learning portfolios alongside workplace observation and questionnaires (Aggarwal, 2015). Assessment tools range from standardized tools to approaches developed in-house at a specific institution (Sherron et al., 2021).

Portfolio assessment method. Portfolios can be competency-based or evidence-based, matched or not matched to a course, can be a stand-alone assessment tool or used alongside other assessment modes including interviews, context-based observations, 360-degree assessments, simulation and questionnaires, and can be used and adapted by learners as they pursue additional learning and career objectives (Day, 2000; Sherron et al., 2021). Moreover, portfolio assessment can be administered individually or through a course format in which a small group of students (usually less than 12) meet with a trained PLAR practitioner for approximately 10-15 hours a week to support learners to systematically and comprehensively identify, articulate, provide evidence for and present the complete range of skills and knowledge they have acquired through their work and life experience as well as training and education (Morrissey, 2008, p. 25).

Many institutions and practitioners prefer portfolios for PLAR because through their emphasis on both process and product, they incite reflection on the part of the learner (Day, 2000; Sherron et al., 2021; Thompson & Zakos, 2021). Gill (2014) found that the process of developing a portfolio through 40-hour course prepared individuals with disabilities to re-enter the workplace by identifying alternative or untapped strengths and skills for transferability to the workplace. This helped learners to think differently about their ability to engage in the workforce, build confidence and set new goals (Gill, 2014). Similar findings were noted regarding a professional doctorate programme which found that the combination of portfolio development and a follow-up oral examination helped learners "facilitate new links between achievements and bolster confidence" (Armbsy, 2013, p. 422). Tewa educator, Gregory Cajete (1994 as cited in Parent, 2017) expands upon this understanding, sharing that visioning is an important part of education in which students find a role, skill or experience that will enable them to express their truest selves and bolster confidence to complete university.

Thompson & Zakos (2021) assert that portfolios are a preferred PLAR assessment mode in Indigenous contexts. Specifically, Indigenous PLAR is often deeply personal, connected to identity and place (Thompson &

> "The cohort that we're looking at might be a carpenter, a welder, and a plumber; not necessarily the same trade, but people who are going through the same process and working alongside each other for support and doing the portfolios as a group... if someone tells you their story, you can, as an outsider, help pick the skills out. One of the examples is, if you take someone who's been a stay-at-home parent, the 'soccer mom', and they manage the kid's soccer team but haven't gone to school for management. They have the management skills they've learned from the soccer team, the budgeting skills, the time management etc., all of those different skills that are picked up in your daily life. And so once we started to talk about that when I was explaining RPL, you could see it made more sense. And then the portfolio work is just a deeper dive."
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> -P1

Zakos, 2021). The reflection component of the portfolio successfully assists Indigenous learners to reframe or reassess their experiences as Indigenous peoples in addition to identifying, documenting, and validating skills and practices (Thompson & Zakos, 2021). Moreover, Indigenous peoples deeply respect and value experience as a wholistic, relational, and circular form of learning and portfolios have the capacity to account for this (Morrissey, 2008), recognizing Indigenous knowledges and translating ceremony, language and other activities into value and skill sets (Thompson & Zakos, 2021). Portfolios can be created in respectful collaboration with Indigenous communities and privilege Indigenous ways of knowing and language use, and Indigenous participation in design and as evidence (Thompson & Zakos, 2021).

There are several examples of the use of portfolio assessment for Indigenous PLAR. Northland College in Saskatchewan had introduced the "Holistic Portfolio PLAR." The portfolio process is very personal with the objective of building or strengthening Indigenous identity that has been impacted by colonization through reflecting on past experiences to generate new understandings (Robertson, 2011, p. 459). What differs is that unlike a challenge for credit approach, Holistic Portfolio PLAR provides learners with the opportunity to build knowledge off their pre-existent foundation (Robertson, 2011, p. 461). Vancouver Island University's Canoe of Life Model of Prior Learning Assessment and Indigenous Portfolio also has a strong personal component. Developed with the local Indigenous community and delivered as a mandatory course within the Aboriginal University Bridging Program Certificate, like Holistic Portfolio PLAR, it asks Indigenous learners to critically reflect on past experiences to create new knowledge and understanding and formulate a strong sense of identity and appreciation for their Indigenous and experiential knowledge. As part of the course, learners develop education and career goals and create a learning plan and personal Indigenous portfolio (Hobenshield et al., 2014).

More recently, the International Indigenous Recognition of Prior Learning RPL Practitioner Manual provides portfolio development models and applications to document prior learning from an Indigenous lens (Thompson & Zakos, 2021). The Practitioner Manual puts forth five basic elements of portfolio design: chronological record, life history, education and career goals, competencies, and documentation (Thompson & Zakos, 2021). Noteworthy is that according to Thompson and Zakos (2021), there should be a personal component that includes a narrative describing important life events and how they helped shape a learner's personal, cultural, and occupational situation (p. 46). This stems from the assertion that the portfolio process is "grounded in the belief, expression, understanding and application of the relationship with one's self, one's family and community and with the land, language, and culture" (Thompson & Zakos, 2021, p. 82). Furthermore, Thompson &

> "Instead of getting them to come up with an image, or something that's gonna fit with every community, they get to decide what goes in there. And then how can we tie assessments and outcomes and all of that to what they've put in there?"
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Zakos (2021) relay that nation specific portfolio frameworks exist, including a Canoe of Life portfolio framework developed for Coast Salish use, a Longhouse portfolio framework developed for Haudenosaunee use and an Igloo portfolio framework developed for Inuit use. Although nation specific, they share the commonality of being relationally based. For example, the Longhouse framework asks learners to explore their relationships with the eight rafters of the longhouse: self, family, clan, community, nation, confederacy and the universe over a 10–12-week period to identify learning (Thompson & Zakos, 2021, p. 112). Whereas the Canoe of Life model begins by directing learners to spend time on the land and write a story of their relationship to land. This is followed by students exploring the questions of Who am I? Where do I come from? Where am I going? And, How do I give back? These questions encourage the learner to situate their strengths, gifts and learning in a broader interconnected web of community (Thompson & Zakos, 2021).

Williams-Cooper and White (2017) describe the Borderless Artistic and Creativity Assessment (BACA) which measures creative and artistic experiential learning acquired by adults for credit toward a college arts degree through a portfolio credentialing. Although not Indigenous-specific, the portfolio method is utilized as an umbrella assessment to create space for an array of wholistic assessment methods. This measuring tool offers a "system for measuring the artistic competency of adult creator artists who are marginalized from unbiased evaluations of prior learning because of ethnicity, race, age, gender, sexual orientation, religion, poverty, and other facets of human experience and social identity" (Williams-Cooper & White, 2017, p. 145). The process involves the disclosure of ethnicity during registration; submission of original artistic works for prior learning assessment referred to as a portfolio; a scholarly essay that explains reason for applying for credit; describes the artwork and states academic, personal, and professional goals and accomplishments; explains why portfolio credit should be awarded; and a personal interview to have a further opportunity to explain the portfolio (Williams-Cooper & White, 2017, p. 148). The portfolio requirements are structured yet flexible, providing an "innovative system for validating the intricately diverse threads of artistry, ingenuity, and creativity embedded in ethno-cultural expressions of humanity beyond institutional borders" (Williams-Cooper & White, 2017, p.133). Learners submit portfolios to BACA evaluators who are professionals equipped with knowledge and skills that provide insight into the cultural realities of the learner and can identify attitudes, behaviours, and practices that privilege whiteness that could bias the assessment (Williams-Cooper & White, 2017, p. 135). Through the portfolio process, students document the learning they acquired through the workplace, personal affairs and social justice work, and ethno-cultural aesthetic expressions through a methodology that meets

> "…by doing the portfolio course, it's that immersive, facilitated experience that begins to change the way that you see the world as a settler or an Indigenous person, right? So then you have that kind of that like conceptual shift. Maybe some of them do, and they're and then see the world a whole different way and approach their teaching and learning in a different way. It takes so much more than just a couple workshops right to be able to do that. "
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> -P3

the Council for Adult and Experiential Learning prior learning assessment standards; and that has the capacity to include "spirit, life force, divine energy, and the soul of art objects," (Williams-Cooper and White, 2017, p. 137) which relates to the understanding of art as ceremony as it is understood in many Indigenous worldviews.

Numerous other examples of non-Indigenous specific PLAR portfolios also exist. For example, at the American Public University students first complete an application process which includes a short essay to outline their academic goals, knowledge, skills, abilities, and specific courses they would like to complete as part of the PLAR program. This is followed by portfolio development which includes an educational goal statement, resume, career autobiography, narrative, supporting documentation, and rubric for evaluation (Gleiman, 2023). Equivalency is determined by a subject matter expert reviewing learning objectives in a course-matching methodology and students are provided an opportunity to resubmit alongside feedback before a pass or fail recommendation is issued (Gleiman, 2023).

This section has put forth a variety of Indigenous PLAR assessment principles including community-based, circular, flexibility, relationality, wholism and collectivity that are consistent with Indigenous worldviews and learning principles. While many of these principles underlay PLAR assessment processes, there remains additional opportunities to fully implement PLAR from Indigenous perspectives. This includes a component which asks learners to not only look backwards but also forwards in relation to self, land and community, and to conceive of learning in a circular and iterative way in which formal and informal learning continue to interact throughout a learner's post-secondary education journey.

Moreover, this section has explored specific assessment methodologies and has identified that PLAR assessment is already being conducted in ways that are consistent with Indigenous principles and worldviews. The portfolio method provides the flexibility and capacity to incorporate Indigenous and culturally responsive assessment principles and an array of wholistic assessment methods. Whereas, attestation letters, which are a relational-based practice consistent with Indigenous assessment methods can be part of the portfolio process or provide a stand-alone way to demonstrate evidence of learning. Figure 5 provides a summary of the discussion on Indigenous PLAR design principles and methods. It demonstrates how broader principles of culturally responsive assessment which acknowledge, and privilege local socio-cultural contexts can be paired with specific Indigenous learning principles to design and develop assessment methods couched within institutional processes that are responsive and relevant to Indigenous learners.

> "We also got interested in portfolio development. Portfolio work is not only for proving skills and getting credit but also as a self-discovery process. We are looking at hosting a conference on how to build portfolios and teach portfolio building to all ages, from elementary school kids to adult learners. Portfolio building is something that high school students or elementary students can do to learn about the skills they already have and to understand that you can learn skills outside of school, how to articulate and present these and to get them started in that mindset a little bit younger. It's a point of pride as well, having a nice portfolio of all your certificates and things in it."
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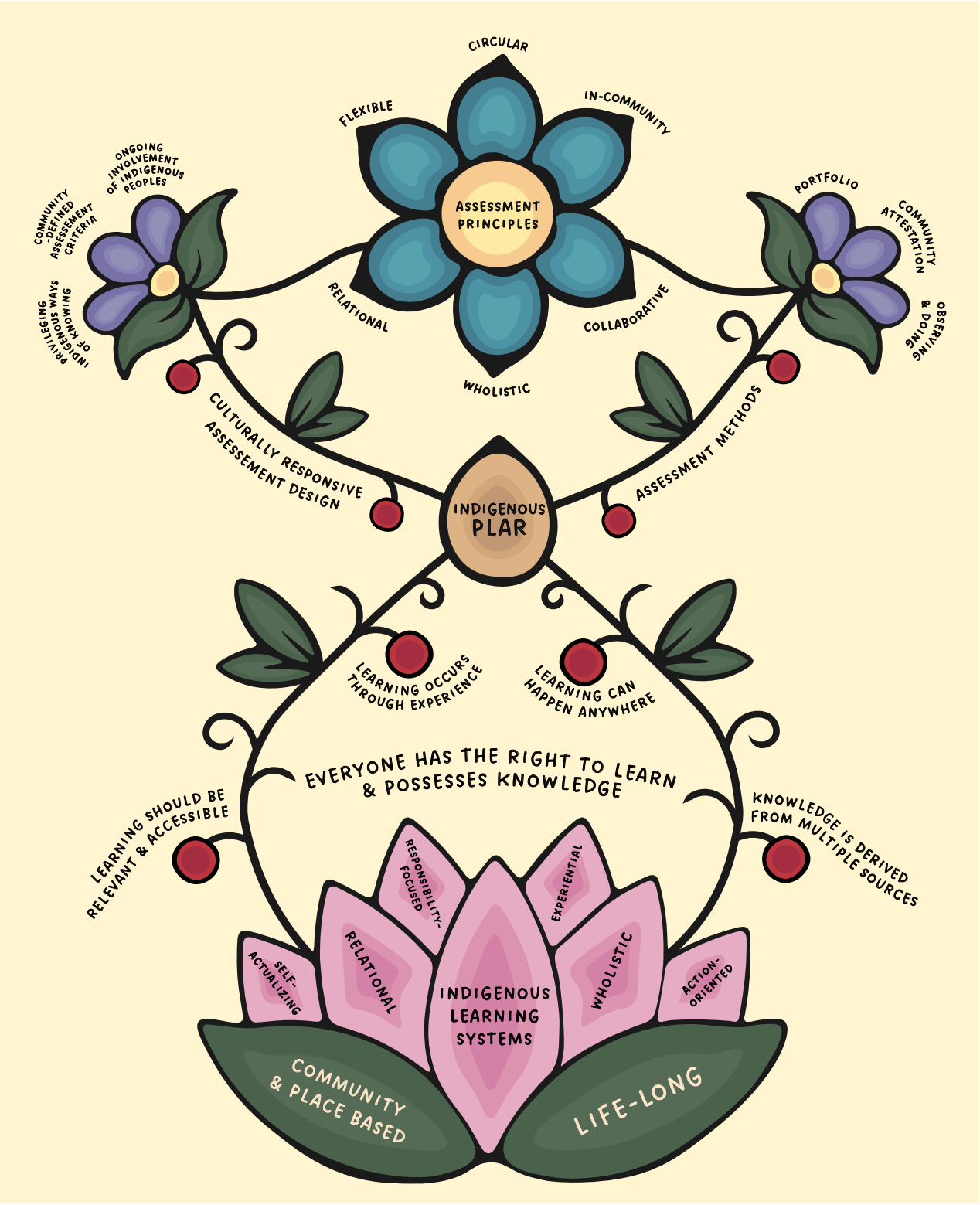
> -P1

Figure 5: Indigenous and culturally responsive assessment design principles and methods for PLAR



CONCLUSION

Indigenous PLAR is the practice of acknowledging the information, skills, and understanding that Indigenous learners have acquired outside of an accredited institution in ways that include Indigenous knowledge systems in design and implementation and/or recognize Indigenous and community knowledges as equivalent to accredited knowledges. Indigenous PLAR, as with other forms of PLAR, include two main components: equivalency and assessment. Equivalency refers to identifying prior learning that is akin to learning that occurs within an accredited institution and assessment refers to the process of evaluating if prior learning has met the threshold of equivalency.

This discussion paper has explored aspects of equivalency and assessment in relation to Indigenous PLAR, addressing a significant gap in the Indigenous PLAR literature. Informed by a scoping review, case study interviews, and discussion circles with PLAR practitioners and administrators, this discussion paper has sought to answer three main questions to foster a deeper understanding about Indigenous PLAR and support a critical dialogue about the possibilities and considerations for Indigenous PLAR implementation:

1. Why PLAR in Indigenous contexts?
2. What types of prior learning in Indigenous communities are equivalent to accredited learning?
3. What types of processes can assess equivalencies in a culturally responsive and effective manner?

The motivation to undertake this study was threefold. First, there is a body of evidence which demonstrates a multitude of potential social, financial, economic and spiritual benefits of PLAR (e.g. Aggarwal, 2015; CAEL, 2010; Delleville, 2019; Stevens et al., 2010; Lee & Dapremont, 2020; Morrissey, 2008; Thompson & Zakos, 2021). Yet, the uptick of PLAR is slow and non-systematic in Ontario and other parts of the country, with Indigenous learners underrepresented in current practice. If PLAR is implemented in Indigenous settings these benefits could extend to Indigenous learners. Secondly, since its inception, PLAR has been identified as a way to address inequities in post-secondary access and student success for marginalized populations (Kasola & Karalis, 2021). Indigenous peoples continue to experience disparities in post-secondary education and PLAR can be part

of a wholistic and comprehensive strategy to address such disparities. Lastly, Indigenous knowledges and pedagogies remain marginalized in the academy and despite the increase of Indigenous content in post-secondary environments Indigenous peoples continue to be underrecognized as the keepers of their knowledges and pedagogies. Through Indigenous PLAR, Indigenous communities and the land are recognized as legitimate sites of learning, supporting the restoration of longstanding community-based educational practices that were disrupted by settler colonialism.

> "…the process is fairly straightforward. It's not the process that's the problem. It's getting the universities and colleges to change the way they look at learning, what they consider to be valid learning and to broaden their definition. That's the issue. The tools that are available to us now can do what you have identified in your paper without question."
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> -P4

This discussion paper has identified many points of equivalency between accredited and Indigenous and community-based learning, yet these are rarely mobilized to implement Indigenous PLAR. Instead, Indigenous and community knowledges are often utilized in post-secondary institutions to advance the learning of settler students in response to the TRC Calls to Action and other commitments. Many synergies between PLAR principles and practices, and Indigenous principles and practices of learning were also identified, highlighting that PLAR can be one avenue to implement education opportunities for Indigenous learners that are more culturally responsive. Also noteworthy is that there is a growing PLAR toolkit comprised of principled approaches to Indigenous assessment, case study examples and resources such as competency frameworks and assessment templates to help envision and implement Indigenous PLAR and achieve these goals. Otherwise put, with a genuine commitment to implementing Indigenous PLAR, institutions can ensure its successful adoption and create meaningful change.

Overall, Indigenous PLAR presents an opportunity for settler institutions to shift the direction away from the deficit approach of reporting on Indigenous student achievement to one that reevaluates how they engage with Indigenous learners, communities and Indigenous knowledge systems (Snow, Miller & O'Gorman, 2021). Historically education systems performed a key function of the settler colonial project, excavating the locust of control away from communities to settler governments and indoctrinating Indigenous children into western worldviews. As an extension of this history, post-secondary institutions continue to have a stronghold on the education sector, with settler educators and western theories and methodologies comprising the majority of these institutions. Pitman & Vidovich (2013) assert that if the strategic [read as colonial] function of post-secondary supersedes its epistemological function, then there are implications for lifelong learning agendas whereby prior learning is viewed as a threat and policies will be undertaken to restrict the practice. However, if post-secondary institutions' main function is epistemological then post-secondary institutions can be viewed not as the authority of learning but rather as part of a community of learning, being

> "But then, that money piece, how that gets dealt with. And how do you ask? How do you ask institutions to accept someone's knowledge and prior learning because what's in it for them?"
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> -P1

both producers and mobilizers of knowledge (Pitman & Broomhall, 2009 as cited in Pitman & Vidovich, 2013, p. 513). Indigenous PLAR provides an opportunity for post-secondary institutions to grow their knowledge mobilization role and forward innovation and inclusion in pedagogy.

Lastly, these results should be read in the spirit of "policy learning and not policy borrowing" (Aggarwal, 2015, p. 29). There is no "one size fits all" approach to PLAR, (Aggarwal, 2015, p.29) and this discussion paper should be received in relation to the unique and distinct socio-cultural, political and economic contexts of different Indigenous communities and territories. We invite those with a genuine commitment to Indigenous access, retention, and graduation, Indigenization and diverse learning and knowledge mobilization to utilize and adapt the findings and models presented in this discussion paper so long as the underlying meaning and purposes are honored, respected and remain uncompromised.

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