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# Play-based learning as a context for culturally responsive teaching for young Indigenous children: Insights from a bounded case study

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Play-based learning as a context for culturally responsive teaching for young Indigenous

children: Insights from a bounded case study

by

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# Abstract

Despite the growing urgency for the preservation and revitalization of, and education in Indigenous languages, very little research has been done on effective pedagogical practices that promote strong bilingual development for early learners. This study investigates the effects of an early bilingual play-based intervention among Chakma youngsters in a small rural community of Bangladesh. A case study research approach is adopted to glean deep qualitative insights into various dimensions of the program and its implementation. Photographic evidence, field notes and a reflective journal, interview data, and artefacts of children's learning constitute the data, analyzed holistically for emergent themes. Three key themes are identified in the findings: (1) the centrality of the teacher, (2) the value of the first language and culture in accounting for a number of outcomes, and (3) the importance of play as a space for engaging children in purposeful, meaningful 'work' that promotes the goals of early childhood learning – especially in setting the foundations of language and early literacy learning yet to come. Five promising practices evolve from the data, most important of which are early intervention and a play-based approach that provides a context for culturally responsive practices. Cautions include the transitional nature of the program that threatens the stability of the children's first language. This may lead to subtractive bilingualism, leaving these children linguistically and, in turn, educationally vulnerable for life.

*Keywords*: indigenous education, bilingual education, play-based learning, culturally responsive teaching

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**Chapter 1: Introduction**

How does a small but densely populated, ethnically and culturally diverse country ensure the access, participation and benefit for democratic life among its youngest and most vulnerable minority groups? It starts with their education from an early age.

Bangladesh is my home country. It is comprised of 165 million people, the vast majority of whom speak Bengali. I count myself as one of this majority. A small minority – the remaining 1.8% (Government of the People's Republic of Bangladesh, as cited in Chakma & Chakma, 2021), are Indigenous groups representing some 40 different languages. Bangladesh is described as a developing nation with an economy that is diversifying and competitive in pharmaceuticals, shipbuilding, steel and ceramics, food processing and most notably garment manufacturing, where labels as recognizable as Joe Fresh and Walmart and as exclusive as Prada, Gucci, Versace source their products.

The Chakma people are Bangladesh's single largest Indigenous community, living today in the Chittagong Hill Tracts area in the southeast region of the country. They follow Buddhist traditions, sustaining themselves by small-scale rice, vegetable and fruit farming, living a family-oriented tribal life. Besides religious and medicinal texts, folk music and woven tapestry are central to community and social remembering. The women are skilled in textile crafts of waist loom weaving, including spinning and dying the cotton yarn. Few among the rural community, especially women and girls, are literate. Although a section of the population has transitioned into an urban lifestyle, like other Indigenous communities of the country, they are socioeconomically disadvantaged and have scarce professional opportunities in the mainstream, largely due to a lack of quality education (Mohiuddin, 2021).

Today, like many Indigenous peoples across the globe, the Chakma lifestyle is diminishing. Tribal life has become fragmented and scattered -- many are taken by the lure of urban centers and the work opportunities in the factories, though the yearning for a prosperous and peaceful life on the homeland is still central to many. The phenomenon of language shift, language loss and the interest and need for language and cultural revitalization is gaining international attention and traction including among the Chakma peoples (Chakma, 2008). The Elder population of Indigenous peoples – the traditional knowledge keepers, is rapidly aging across the globe and with their passing the world community risks the loss of their language, wisdom, knowledge and rich cultural legacy. Among the next generation, increasingly fewer numbers are proficient in their Indigenous language. In Bangladesh, for example, we can take a look at the Rengmitca language, which was found to be critically endangered around 2009, and whose number of speakers dropped from 22 to only 6 between the years of 2013 and 2021 (Marma, 2021; Peterson, 2013). For many Indigenous people, the dominant culture language (whether Bangla or English for example) is the only language they have, and academic achievement in the dominant language and culture of the mainstream settings where they are typically schooled poses immense challenges.

There is a growing scholarship that addresses these concerns, especially in Canada (Khawaja, 2021; McIvor & McCarty, 2017) and Australia. There are numbers of small-scale studies describing bilingual approaches to early childhood education for Indigenous children (Frank & Arim, 2021; Hewitt & Walter, 2014; Malone & Paraide, 2011; Morcom & Roy, 2019), promising pedagogical practices (Ball, 2007; Coates & Leech-Ngo, 2016; Disbray, 2017; Tulloch, 2018), curriculum and program design and development (Ignace, 2016), and policy

issues (Friesen & Krauth, 2012). This work is in its infancy and continues to evolve as both the interest and the urgency become amplified.

Presently, the younger generation of Indigenous peoples in Canada increasingly do not speak their Indigenous language nor do they have full proficiency in the dominant language – increasingly their first and only language. This pattern is echoed in other educational contexts, including Alberta and B.C. placing these students at heightened academic risk, and with it, the struggle to attain a sense of self confidence, agency and identity (Ferguson, 2021; Khawaja, 2021).

The current movement to halt and reverse the relentless shift and loss of Indigenous languages and cultures is relatively recent and driven with a sense of urgency. There has been a distinct reframing of the place and value of Indigenous languages from 'language as a problem' to 'language as a right' to language as a precious resource that calls for a sense of stewardship on the part of the dominant culture, and empowerment and agency realized when language and culture are reclaimed through revitalization efforts. A concerted effort is needed to revitalize languages on the brink of extinction and requires action on a number of fronts including teacher preparation, curriculum and materials design and development, and policy development.

Program design, therefore, must ensure *additive bilingualism* resulting in young learners' growing abilities to communicate, live and work in both their Indigenous language, and the majority language (whether English, Bengali or another language). Indeed, for many young learners whether immigrant, refugee or Indigenous, a third language (English) will be needed as well. This would be the case in the current inquiry and in countries such as Iceland, for example. Relevant research is needed to glean insights into the effects of all of the initiatives noted above.

**1.1 Statement of the Problem**

Bangladesh itself is faced with many challenges including widespread poverty, high illiteracy rates, planning for climate change, and responding to the increasingly pressing needs of Indigenous communities. Government recognition and support for minority language rights have been slow in introducing and implementing effective educational programming (Ahmad, 2021), leading to the marginalization of Indigenous groups and the subsequent inability of these groups to participate in the broader democratic and social institutions.

At least officially, beginning in 2010, the Government of Bangladesh has taken steps to include the languages other than Bengali in the education system. The education policy did not include any clause regarding ethnic minority languages until 2009. Even after addressing this issue, the policies and goals mentioned in the articles are vague and have rarely been implemented. The National Education Policy (Ministry of Education, 2010) states that it is a goal of primary education "to facilitate learning in the mother languages of the indigenous peoples and small ethnic groups" (p. 5). The list of strategies has a sub-section for "children of ethnic groups" (p. 8) which lists 3 points as follows –

- Measures will be taken to ensure the availability of teachers from ethnic groups and to prepare texts in their own languages so that ethnic children can learn their own indigenous languages. In these initiatives, especially in preparing textbooks the inclusion of respective indigenous communities will be ensured.

- Special assistance will be provided to the marginalized indigenous children.

- There are areas where no primary school exists. Primary schools will be set up in these areas inhabited by ethnic people, both in hilly or plain lands. In some areas, there is a thin ethnic population. So the schools may suffer from dearth of

children. So, in order to create opportunities of enrollment of sufficient number of children, residential facilities for teachers and learners have to be created. This also claims necessary attention.

Until the inclusion of these policies, such concerns had only been addressed in a very small scale by some non-government organizations like BRAC (Bangladesh Rural Advancement Committee) (Sagar & Poulson, 2003). In the recent years the Government is allocating more budget into programs dedicated to improvement of education for minority language speaking children. Some steps are also being taken to make changes in the pedagogical practices of the mainstream education system, which is elaborated further in this thesis. Pre-primary or pre-school education is available in most urban and some rural areas, but it is not considered part of the formal education system. Since the time this study was conducted, the Government has also started to provide access to one year of pre-primary education for all 5-year-old children, with plans to extend it to two years (Spier, 2020).

While these steps are focused on the importance of a child's L1 in learning an L2 and overall academic success, the potential of the L1 in the construction of a person's identity remains largely unacknowledged. This potential can be exploited through the implementation of pedagogical practices that reinforces each child's linguistic and cultural identity within the classroom.

The international aide community (UNICEF Bangladesh, 2016a, 2016b) is stepping in to partner with Bangladesh in funding and providing educational opportunities where it is most needed in remote communities, beginning with young learners of pre-school age. The focus of these programs is enhancing early literacy and numeracy skills among first generation learners

within families with a goal of *mainstreaming* these young learners more successfully upon their arrival in the regular, *inclusive* education program (UNICEF, 2016b, p. 41).

I was fortunate to conduct my research in one such setting. Salient features of the program include bilingual instruction (Chakma and Bengali) and a play-based approach that includes games, songs, rhymes, drawing, and storytelling designed to support language and literacy development through a culturally responsive pedagogy. However, once young learners transition from pre-school to the regular mainstream school system, children of all ethnicities, no matter the L1, follow the same curriculum mandated in Bengali. They have to learn two new languages and cannot use their home language once they are at school. Even though a large number of linguistic minority students have teachers who speak their L1, only Bengali and English are encouraged to be spoken in the classroom. Thus, these young learners remain linguistically vulnerable – continually at risk of first language shift and loss and consequently, *subtractive* bilingualism. This point is a crucial one in light of the recent movements toward language revitalization efforts and the desired goal of additive bilingualism for Indigenous peoples from all corners of the globe.

This study has the potential to contribute qualitative insights on implementing early childhood educational programming in the Chakma community that can at minimum, support the transition to mainstream education by age 6 through bilingual instruction and culturally responsive practices. The program has been in place for a few years and is viewed in a very positive light by the community. Former participants of the program have successfully moved into the regular school system, though no systematic study has been conducted to glean insights into the dimensions of the program that can account for students' success, nor to obtain first-hand insights from the community itself that explains their support for the program. Further, as

mentioned, longitudinal data would be needed to determine young learners' success in developing proficiency in Bengali, and over time, English. More importantly and poignantly is the loss of culture and hence, identity – leaving these students forever marginalized and living in a world of 'neither/nor' or 'in-betweenness' (Roessingh & Elgie, 2009).

## 1.2 Purpose of the Study

Motivated by a desire to develop deep understanding of the various dimensions of this pre-school bilingual program for Indigenous minority language speakers, I accepted the opportunity to be embedded in a small, remote community in Rangamati, part of the Chittagong Hill Tracts to observe and document pedagogical practices, children's engagement, and community perspectives of the pre-school bilingual program. My sojourn was of four weeks' duration.

Using the tools of ethnographic documentation and observation offers a pathway to interpretation of a phenomenon in a natural context (Genzuk, 1999; Gray, 2014). I had sufficient time to familiarize myself with the staff and young students, part of the local community and the program, and to establish relationships of trust from the onset. Case study methodology lends itself to this kind of inquiry (Merriam, 1998; Stake, 1978; Yazan, 2015). Journaling and field notes, collecting an array of children's learning artifacts, photographic evidence and interview data with the staff and parents comprise the data. Taken holistically and analyzed in the tradition of qualitative research, a thematic structure emerges that offers explanatory insights into the program. The findings suggest programming recommendations with implications for policy reform that will support children's language, culture and sense of identity from their involvement in bi-lingual pre-school programs.

**1.3 Research Questions**

Four broad research questions guide this inquiry. They may be stated as follows:

1. How does *play based learning* support/encourage/promote cognitive and language development in a bilingual transitional K program?

2. What dimensions of teachers' *instructional repertoire and presence* in the classroom make a difference by supporting, encouraging and engaging young learners in actively making meaning, and developing cognitive skills and understandings through guided play in L1 and L2?

3. How does *culturally responsive pedagogy* create a learning environment that promotes a sense of empowerment, agency, self-esteem that underlies risk taking and discovery?

4. How does the bilingual transitional K program invite involvement and participation of the larger school and Chakma community?

**1.4 Limitations of the Study**

This study focuses on how the cultural identities of community members directly connected to the classroom (namely: teacher, students, and parents) can potentially impact pedagogical practices. While other perspectives – such as that of community leaders, or scholars and academics belonging to the community – would be valuable in this area of research, they were not included. The aim of this paper was to specifically include the voices that are often unheard when it comes to pedagogy or policy making.

In addition, being a Bengali speaker and member of a more privileged linguistic community of the country, I am an outsider to the Chakma people and their experiences within the community, especially regarding issues of language and identity.

Limitations are further elaborated in Chapter 3 Methodology.

## 1.5 Structure of the Thesis

The thesis is organized as follows. *Chapter 2* canvases the relevant research in the domains of play-based learning, language and bilingual development, the language/identity/culture nexus, and culturally responsive pedagogy and practices. A conceptual framework emerges that is presented by way of a visual representation in closing Chapter 2.

*Chapter 3* provides a detailed description of the case and the research methodology. A bounded case study approach is elaborated, including a treatment of the data collection and analysis, following Colaizzi's (1978) seven step framework, as described by Morrow, Rodriguez and King (2015). This framework suits the goals of this research inquiry and provides structured support for the novice researcher.

*Chapter 4* presents the research findings, by way of emergent themes from the data set, taken holistically.

*Chapter 5* presents a discussion of the findings. Corroborative support is provided from across the data as illustrative examples and connections to the conceptual framework. The discussion is organized to address the research questions.

*Chapter 6* summarizes the study, highlighting dimensions/features of the bilingual pre-school programming that account for the findings. Recommendations for program reform are offered, chiefly related to the program structure and goals for preparing young learners for the mainstream inclusive Bangladeshi school system; the need for community involvement and a grass roots approach to these kinds of programs. That is, a 'cookie cutter' program that is implemented from the outside-in or top-down may not be as effective as a program that is

flexible and adaptive to local input and sensitive/responsive to the cultural particularities of the

community served.

## Chapter 2: Literature Review

This chapter provides a review of the literature that underpins the theoretical framework for my inquiry into play-based learning as a context for bilingual transitional K programming for young Indigenous children following culturally responsive pedagogy and practices. This chapter addresses the following topics and is organized as follows:

2.1 Vygotsky, Piaget, Bronfenbrenner: A Brief Overview of Contributions

2.2 Conceptualizing Play: 'Play as the Work of Childhood'

2.3 Language/Bilingual Development

    2.3.1 BICS-CALP

    2.3.2 Program structure, models for bilingual education, and outcomes

2.4 Language, Identity and Culture

2.5 Culturally Responsive Pedagogy and Practices

2.6 The Role of the Teacher

2.7 Theoretical Framework

2.8 Restating the Research Questions

## 2.1 Vygotsky, Piaget, Bronfenbrenner: A Brief Overview of Contributions

Children are nurtured, develop and learn within the context of their social environment, initially their close family. Vygotsky's socio-cultural theory (1967/2016) of childhood development underscores the importance of social contexts, the types and quality of adult-child interactions, and the importance of play in constructing internalized mental representations of the material world. Elkind (1968) summarizes Piaget's stage theory of child development, positing

that children advance in an unending, continually opening and closing series of windows of opportunity that follow a remarkably consistent progression across the human species. The idea of 'readiness' and 'expectancy' are central to Piaget's theory: children are evolutionarily endowed with primitive mental models, for example, similarities: 'like/not like'; size, shape, and structure that affords the abilities to categorize and sort that might have had a survival and protective function in the ancient wiring the human species has inherited. Pre-school youngsters are essentially sensory beings and described as concrete operational: direct tactile experiences and manipulating objects are central in laying down the neurocircuitry to the brain (Wilson, 1999) that supports understanding and meaning making through language, developing a sense of embodied cognition (Reggin & Pexman, 2021). Perhaps the most important task of childhood is to reconstruct the external world into internalized mental models that can ultimately be summoned and shared through language alone (Borghi, Flumini, Cimatti, Marocco, & Scorolli, 2011).

Dewey (1897) highlights the importance of experiential learning and active engagement in discovery and exploration that leads to understanding.

Adult talk and tactile experiences that are pitched at the 'just right' level promote the ongoing development of the child in what Vygotsky described as the Zone of Proximal Development (ZPD). Talk, paired with these tactile experiences supports the beginnings of children's abilities to name, describe, categorize and give meaning to their world – its texture, structure and organization. Enormous amounts of *dialogic* talk, that is talk with some learning intent – initially from parents, is needed for children to acquire the first 1000 words or so of their foundational vocabulary repertoire by age 3 (Hart & Risley, 2003). It is not just the quantity of language input that matters, but the quality of the input and the interactions between adult and

child. Vygotsky identifies the key features of just right 'pitch' – input that is challenging but not overwhelming (ZPD) and scaffolded support for making meaning. This could include embedding definitions, examples, synonyms, antonyms; paraphrasing and recycling/repeating in the service of offering multiple exposures to deepen the chance of comprehension.

Bronfenbrenner and Morris' bioecological systems theory (2007) highlights the complexity of human child development as nature-nurture interact in nested social contexts that enlarge and enrich over time. Thus, for example, the human species is 'wired to acquire' language, but the mechanisms for activating and developing language involve massive amounts of adult-child interaction, reinforcement, practice and encouragement (Hart & Risley, 2003). Advantaged youngsters are recorded to have a vocabulary size of about 1100 words at age 3, double that of others who – often for reasons of poverty, lack of opportunity and exposure, quality instruction, or language minority status – fall behind. By age 5, typically developing children have a lexical repertoire of about 5,000 words or 2500 word-families (run, runs, running constitute one word family) (Murphy, 1957), and learn new words in a remarkably consistent pattern and rate across age and cultures (Biemiller & Slonim, 2001). The longitudinal achievement gap between the 'have' and the 'have nots' accelerates and widens over time. Clearly early intervention and quality, sustained programming are part of the solution to closing this gap.

Teachers' *dialogic* talk in the classroom plays a major role in children's learning and it has gained increasing interest in the research literature (Bromley, 2017; Ferrara, Hirsch-Pasek, Newcombe, Golinkoff, & Lam, 2011). As noted above, dialogic talk is talk that has some pedagogical goal, whether through asking strategic questions, elaborating, embedding information, or paraphrasing information and more. Teacher talk during block play for example,

is found to promote building more complex structures. With students in the beginning stages of acquiring a second language, dialogic talk has a second, critical function in advancing language development (Gibbons, 2003). Following Vygotsky's notion of ZPD and Krashen's (1982) principle of comprehensible input +1, teacher talk acts as a type of scaffold, and must be pitched at the 'just right' level: challenging but not overwhelming. Offering multiple exposures (e.g. recycling), modifying the speed and complexity of oral input on the one hand but strategically embedding new vocabulary are important features of this type of talk. This line of research inquiry is under-developed but clearly has implications for both L1 and L2 learning and closing the vocabulary gap for linguistically vulnerable youngsters.

Works on early childhood development is fairly recent compared to both Eastern and Western philosophies on education, and have mostly emerged from Europe in the latter half of the last millennium. Seminal theories such as those by Vygotsky, Piaget and Bronfenbrenner are widely accepted in the literature on early childhood development and education around the globe. Programs such as the one that is the focus of the current inquiry implement these theories in their design. They are intended to intervene at an early stage and support the mainstreaming and inclusion of these children upon their arrival in the regular school program (UNICEF 2016a, 2016b). This is but one of several programming options available and described later in this chapter.

**2.2 Conceptualizing Play: 'Play as the Work of Childhood'**

Play is often described as the 'work of childhood'. From a child's earliest moments after the discovery of voice and fingers, they begin to actively explore, manipulate, engage and seek interaction in their immediate world – gradually and increasingly to the outdoors and the community of friends, school classmates, teachers and other adults.  Play is a cultural universal.

The International Play Association (2014) advocates for the protection, preservation and promotion of children's right to play. They define play as "any behaviour, activity or process initiated, controlled and structured by children themselves; […] play itself is non-compulsory, driven by intrinsic motivation and undertaken for its own sake, rather than as a means to an end." (IPA, 2016, p. 1)

While this definition is accurate in describing the innate nature of play, it is incomplete and pedagogically passive. It lacks a recognition of the important role of adult initiation and structure of guided play. Play with pedagogical intent or a learning goal is well-established in the scholarly literature on early childhood development as significantly beneficial in all domains of development including language, spatial reasoning, numeracy understandings, social and emotional wellness. And despite there being notable variety in child rearing and home literacy practices around the world, play universally has a part in early childhood learning, regardless of cultural or socioeconomic background. Fine motor and cognitive development in particular are developed through play; for example – learning concepts such as numeracy, sequencing or categorizing using pebbles.

Though the idea of play eludes any single exhaustive definition, there is widespread consensus that children play for the intrinsic rewards of the activity itself. Left to their own choosing, children will spontaneously and repeatedly return to play – it is self-reinforcing. A pile of pebbles, a mud puddle, a dump of fresh fallen snow or simply a wide-open field or hill will invite a child to directly experiment, observe, discover and engage for the simple sensory and sensual pleasures of direct tactile contact with the material and natural world. Chasing, rolling, gripping, climbing, swinging, twirling and running in the wind, splashing, skipping rocks, packing a good snowball for a launch, slipping and sliding on a frozen pond, building and

construction projects – all belong to the world of childhood and children's play. Images of children at play reflect an acute connection to nature and environment, often making use of what the immediate outdoor has to offer to amuse themselves and seek pleasure.

In a social context with adults, play further accrues crucial benefits of language and cognitive development, socialization guidelines and emotional growth, cultural norms, and the encouragement to experiment and take risks. Adult talk during block play ('block talk') mentioned earlier, is found to significantly improve the quality of children's block construction and spatial reasoning (Ferrara, Hirsh-Pasek, Newcombe, Golinkoff, & Lam, 2011). Rough and tumble play in particular is associated with socialization skills (Freeman, 2019). Through play, children learn.  A large body of play research has developed over the last 20 years.

Play theorists catalogue a host of benefits across all domains of early childhood development: social and emotional well-being, cognitive and creative thinking, and fine motor development. Play can be conceptualized along two continua: from open ended/unstructured to more structured, and from child initiated and directed, to adult initiated and directed. *Figure 1* illustrates the matrix of play.
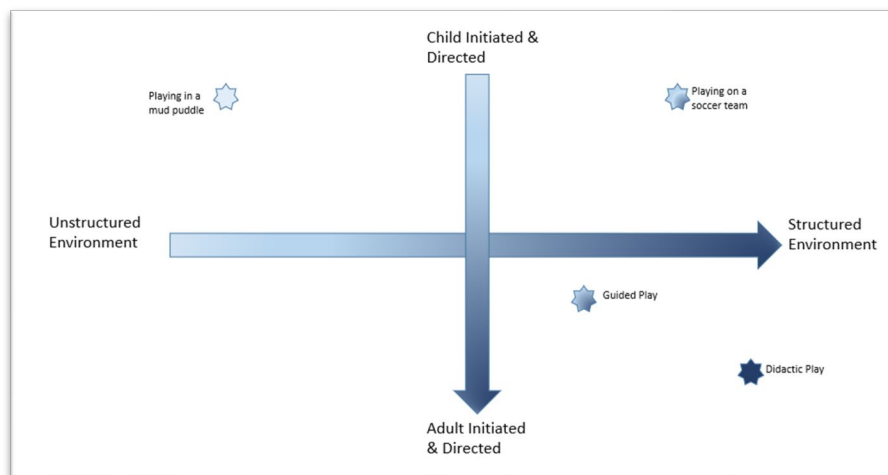


*Figure 1*. Play matrix (Roessingh & Bence, 2018).

The research community generally favors a balanced approach, recognizing that children need both mediated, adult *guided* play that has a learning or pedagogical intent (SE quadrant) (Weisberg, Hirsh-Pasek, & Golinkoff, 2013), but also ample opportunity for open ended play freely chosen to develop imagination, creativity and especially outdoor exploration (NW quadrant) (Department of Education, n.d.). Activities and games drawn from the other quadrants might include a spontaneous game of soccer that youngsters can organize on their own (NE quadrant), giving them important opportunities to 'play by the rules', and settle their differences if required. Open ended, adult initiated play in the classroom might include 'center time' where materials have been strategically set out for youngsters to mold and shape clay or give little fingers a workout with slime. Play based experiences could begin as more guided and purposeful, then allowing for open ended practice and discovery by young learners (Pyle & Danniels, 2017).

Guided play can be defined as 'Purposefully designed activities and tasks that we think will be engaging and fun, are directed to some learning goal, and reflect a sense of pedagogical intent. Children's motivation, curiosity, desire for mastery and their choices for how they interact with the materials are elements of the design. Children are actively involved in advancing embodied cognition and neuro-motor skills relevant and necessary to early language and literacy learning,' (Roessingh & Bence, 2018). Various scholars identify guided, purposeful play as singularly important for school readiness in relation to early language, literacy and numeracy development particularly for youngsters deemed educationally at risk (Gilbert, Harte, & Patrick, 2011; Nicolopoulou, Cortina, Ilgaz, Cates, & de Sa, 2015).

**2.3 Language/Bilingual Development**

Being or becoming bilingual is a complex process that involves many contextual variables related to exposure (at home, at school), age upon learning L2, the status and recognition accorded to minority languages, and even the goals of being bilingual. Bilingualism is increasingly becoming the norm in contemporary life as increased levels of immigration to fulfill the human resource needs of host countries, massive refugee movements, and the arrival of the children of immigrants at school (sometimes termed Gen. 1.5) for example, make their place in the broader demographic landscape and societal structures of countries all across the globe, including Indigenous groups.

Children who learn two languages from the earliest moments of life – perhaps from parents who speak different languages are termed *simultaneous bilinguals*. Those who learn a second language after the onset of the first are recognized as *sequential bilinguals*. Achieving high levels of bilingual proficiency is not always the goal: for many, 'getting around' in two or more languages might suffice for the give and take of bartering in the marketplace; for others, basic communicative proficiency in L1 permits interaction and getting things done in multi-generational households and in the ethnocultural community. Large swaths of the bilingual community 'get by' in running a small business, accessing their shopping needs and engaging with their respective communities, even several generations in. For them, balanced bilingualism sufficient for these purposes can be achieved with limited proficiency on both sides of the bilingual equation, whether learned simultaneously or sequentially.

But increasingly modern urban life in a complex, globally connected knowledge economy requires high levels of academic language and literacy proficiency in the dominant language (the L2), and it is likely learned sometime after the first (sequentially). Developing this

level of L2 proficiency is a gradual, protracted process that requires time and sustained instructional support. Ideally, this results in an *additive* linguistic profile, though often imbalanced. The risk, particularly with Indigenous populations, however, is L1 language loss, resulting in *subtractive* bilingualism. Further, if the L2 is not fully developed, the learner might languish in a type of cognitive/cultural/linguistic/identity limbo that some describe as a place of neither/nor – not 'fitting in' or feeling 'at home' in either language (Roessingh & Elgie, 2009). Many minority language speakers are consequently left living on the margins, never realizing their full potential. This represents an enormous loss of human capital for many countries, including Bangladesh.

Complicating the matter of developing bilingual (or trilingual) proficiency among Indigenous children in many countries such as Canada, Australia and New Zealand, their first language is increasingly being described as Indigenous English (Ball, 2009a), carrying a derogatory connotation that comes with a heavy risk of discrimination. Ball notes that a mere 16% of Canadian Indigenous children under the age of 14 years speak an Indigenous language as either their first or second language. They require bridging support to develop standard English as a second dialect (ESD). Further, the high prevalence of ear infections and the consequences of living in poverty place additional speech, language and identity challenges ahead of these youngsters. These data provide a devastating clear and urgent call for a much more robust research agenda, program development and more for Indigenous youngsters. In the context of the current inquiry, it is important to mention that the Chakma children have their Indigenous language as their first, and it is developed in the early years in the context of their family and community life. Further, Chakma has a literate format, an enormous advantage in realizing the goal of bilingual development. Nevertheless, these youngsters will ultimately need to learn

Bangla as additional language if the goal is to realize educational success and mainstream inclusion in the school system in which they are about to participate. English as a medium of instruction is an option available but not required for success and educational achievement in the Bangla school system.

Developing high levels of cognitive academic language proficiency in both languages affords many opportunities in studies and scholarly pursuits, professional life, international postings, for example, but this tends to be both difficult to achieve and the less prevalent bilingual profile. These ideas are elaborated in the sections that follow.

**2.3.1 BICS-CALP.** Cummins' (1982) posits a framework for the development of language along two continua: from context embedded to context reduced (horizontal axis) and from cognitively undemanding to cognitively demanding tasks (vertical task). The framework is widely recognized in both the scholarly and practitioner communities, offering a pragmatic, intuitive conceptualization of language and cognitive development from Basic Interpersonal Communication Skills (BICS) to Cognitive Academic Language Proficiency (CALP). *Figure 2* illustrates the matrix along the 4 quadrants that emerge from the intersection of the two axes. Against the backdrop of the metaphor of an iceberg with two peaks, *Figure 3* below further provides a visual representation of the closely associated concepts of bilingual development, dual language threshold and common underlying proficiency (CUP), the potential of transfer from L1 to L2, and linguistic vulnerability as a consequence of shallow/under-developed CALP that places these learners at heightened academic risk.
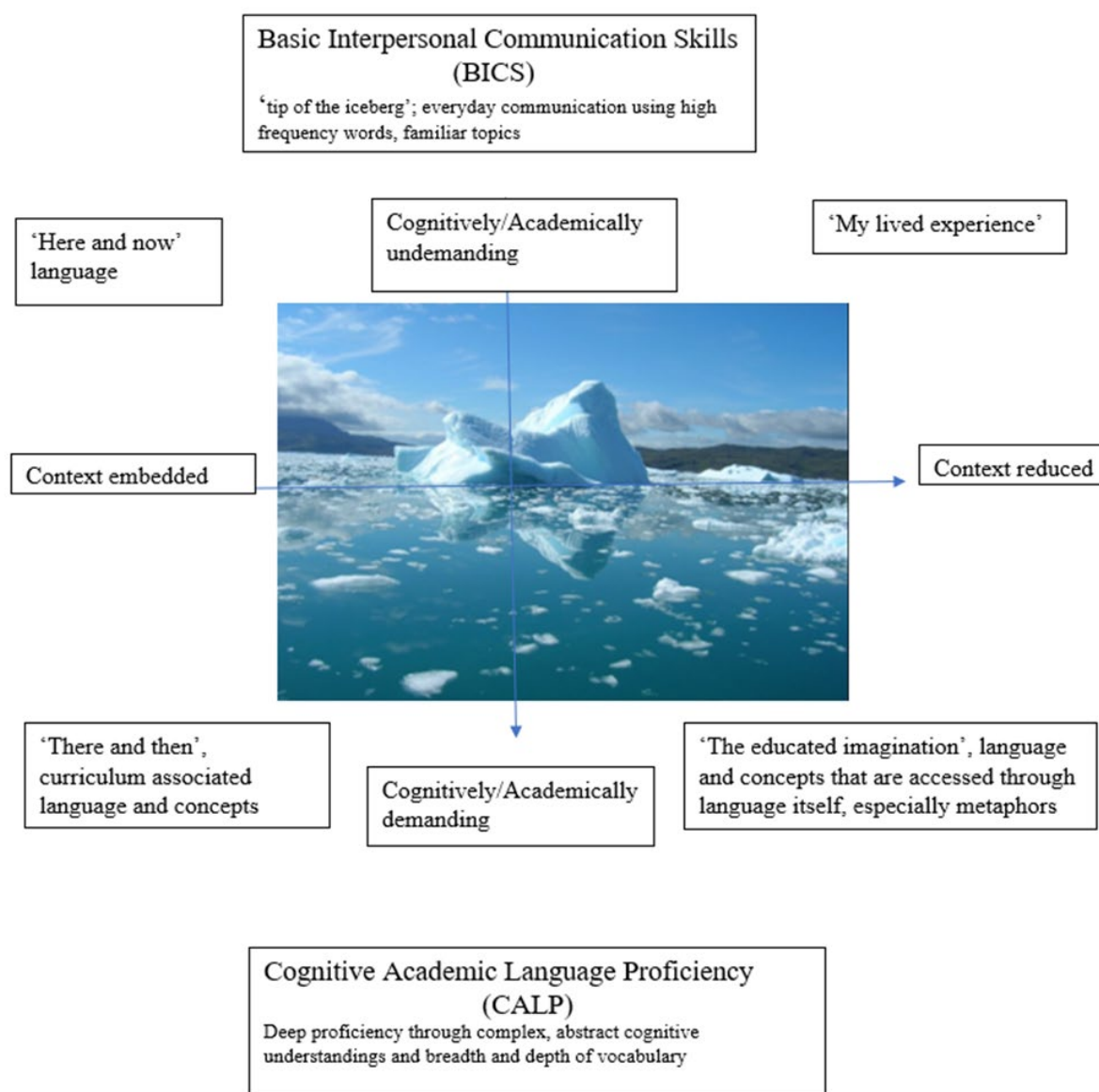
*Figure 2.* BICS-CALP framework, adapted from Cummins, 1982

The NW and NE quadrants of the model represent BICS: the 'tip of the iceberg.' BICS is characterized by 'here and now' language and 'my lived experiences'. The NW quadrant entails daily conversations about routines and procedures, family life and everyday communication using mostly oral, high frequency vocabulary of 2,000-3,000 word-families. The NE quadrant would include basic literacy needs such as making shopping lists, simple notes and messages;

and social interactions in the lived experiences of the interlocutors such as sharing the highlights of a sporting event. This is realized with a vocabulary of perhaps 5,000 word-families.

The SW quadrant can be described as 'there and then' uses of language and literacy: the language of curriculum and the transition from 'learning to read to reading to learn' around Grade 4. This is an important threshold in the language, literacy and cognitive development of young learners. Young English-speaking learners develop more academic vocabulary with Greek and Latin roots; technical, discipline specific, specialized uses and multiple meanings of common vocabulary (e.g. 'work'). Manipulatives, lab work, and visual representations are important scaffolds in this quadrant. Grade 4 represents a literacy threshold where young learners are more able to transfer information from L1 to L2 (Roberts, 1994: Roessingh & Kover, 2003). Chall and Jacobs' seminal study (2003) identifies Grade 4 as the crucial point in young learners' reading development (a vocabulary size of around 9,000 word-families), noting that lack of vocabulary explains the phenomenon of low plateau and simply 'getting stuck': the Grade 4 slump. The revitalization efforts for the Gaelic language in Nova Scotia (Mercer, 2022) and the immersion, transitioning to bilingual, transitioning to dominant language programs for Indigenous children described by Morcom and Roy (2019) are sustained until Grade 4, recognizing this as an important language and literacy threshold. This quadrant continues to Grade 9 (a vocabulary size of around 15,000 word-families), representing another important developmental, cognitive threshold – the increasing move toward abstract thought.

The SE quadrant of the model represents language and thought that can only be accessed through language itself – often metaphorically framed, but also including figurative uses of language, complex analogies, and shorthand abstractions (SHA) that encapsulate bundles of cognitive information the reader must unpack (e.g. flattening the curve, a super spreader

event/gathering, climate change, knowledge economy). This open-ended quadrant involves long

term, life-long literacy growth, though post-secondary academic studies are associated with

heightened levels of vocabulary demand (22,000 word-families), and vast, dense and difficult

learning materials students are expected to access largely independently, on their own.

   *Figure 3* illustrates this idea of deep underlying CALP: there is much, much more 'below

the surface' that is not readily noticed in everyday exchanges associated with BICS. Deep pools

of language and cognitive information on both sides of the bilingual equation unleash the

potential for transfer, cognitive flexibility and other benefits associated with being bilingual.
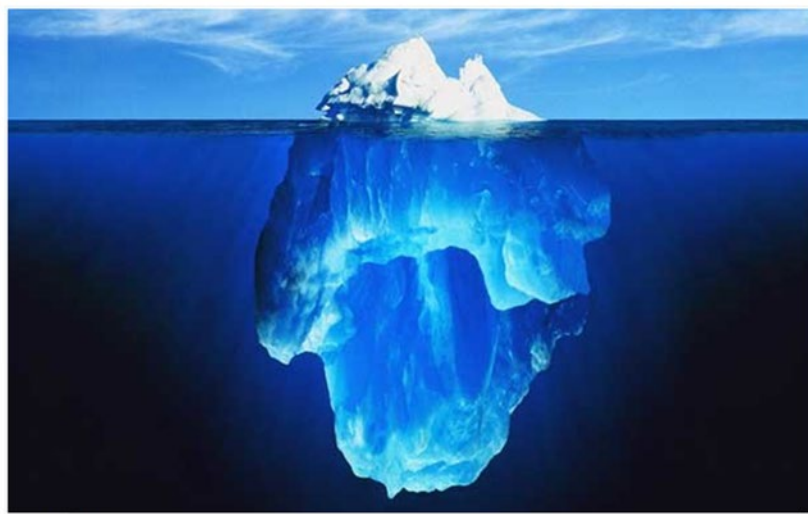


*Figure 3.* Deep underlying language proficiency.

   The double peeked iceberg image chosen for *Figure 2* illustrates the idea of bilingual

development among young learners and the risk associated with shallow CALP – that is, the

under-developed 'below the surface of the iceberg' that is not evident or mobilized in BICS level

communication and early literacy work. What you see is what you get (WYSIWYG). If L1 is not

supported and sustained over time, at least until Grade 4, young learners are at heightened

academic risk by the time they reach the middle school years, as proficiency and progress in L1

affects the same in one's L2 (Ball, 2009b), and for most minority language speakers, academic educational achievement must be realized in L2. A growing body of research findings underscores the difficulty in achieving such outcomes, including Canadian studies tracking educational outcomes of the Canadian born children of immigrants (Government of Ontario, 2013a), immigrant students of all age-on-arrival cohorts (Roessingh & Elgie, 2009; Roessingh & Kover, 2003) as well as the longitudinal outcomes among Indigenous students (Ferguson, 2021; Khawaja, 2021). While it is easy to make the intuitive leap that BICS level fluency will lead eventually to CALP development, this misunderstanding exacts a high cost and long-term disadvantage among many of our youngest learners.

Shifting too early, too forcefully to L2 use in the early years, places young children at enormous risk of language shift and loss, and with it, the loss of their culture and identity – *subtractive bilingualism*. In addition, as noted above this places these young students at heightened academic risk if sustained support for L2 CALP development is not provided. *Additive bilingualism* entails sufficient support for developing both L1 and L2 that requires sustained instructional planning and programming (Morcom & Roy, 2019).

It is important to address here that this model does not take into account languages based in orality, and to recognize the controversy and debate over what has been described as the 'great divide' between orality cultures and literacy cultures. Orality utilizes practical knowledge, direct experiences, natural flow of thought, close contact to the land and kinship ties, and story telling as a way of transmitting cultural values and beliefs and social remembering that have endured for centuries. In contrast, cultures with literacy practices emphasize recordable theories and articulated descriptions associated with a physically documented body of knowledge. Contemporary theorists posit (Dickinson n.d.; Gee, 1990; Ong, 1978) that this conceptual

dichotomy is a false one. The over-emphasis and the consequent sharp dichotomization of orality and literacy may be responsible for trivializing, under-valuing and neglecting the important contribution and traditions of orality as they interact and integrate with literacy in a bidirectional flow. However, silenced practical knowledge is now regaining voice.

**2.3.2 Program structure, models for bilingual education, and outcomes.** Various program configurations have been advanced and implemented for various educational outcomes for young minority language speaking children who must ultimately take their place and follow the mandated school curriculum in the majority language to Grade 12.

Bilingual programs often unfold along a continuum when introduced for young learners in the K year. Many do not take into account extant research on subtractive vs additive bilingualism, but rather, have the more pragmatic goal of preparing young children quickly for the mainstream, inclusive setting in the Grade 1 year by offering *transitional bilingual programming*.

Short and Sutherland (1989) report on a *transitional bilingual kindergarten program* implemented in Calgary, Alberta in response to a sudden, significant influx of young immigrant families of mixed cultural and linguistic background from El Salvador, Nicaragua, Vietnam, China and Poland. The stated goals of the program included improving children's level of speaking and understanding English, the continued use of their L1, enhancement of self confidence and self-esteem, pride in their L1 culture, and overall improvement and understanding of skills related to school expectations.  Key features of the program involved its play-based orientation offering games, songs, story telling, action rhymes, art and drama; field trips to the local library, dentist's office, Safeway, parks and playgrounds in a bilingual context. Center and circle time further allowed for smaller group or whole group activities. Aides were

employed to support the bilingual development through rich use of L1, and parental involvement was encouraged wherever possible as volunteers and aides in the classroom. The authors record strong gains on the targeted outcomes for language growth in both L1 and L2, self confidence and self esteem compared to a cohort of young immigrant children who participated in the regular, *English medium only* kindergarten program. These youngsters did not make the strong gains in either L1 or L2 recorded for those in the transitional bilingual program described above. It would seem that L2 immersion risks the gradual loss of L1 or subtractive bilingualism.

In contrast, Morcom and Roy's recent research (2019) reports on an *Indigenous immersion program* structure followed by *transitional bilingual programming* implemented among the Ojibwe (Anishinaabemowin speaking) of Manitoulin Island along the North shore of Lake Huron, ON. The program is planned for implementation for three years as follows: Jr. K – Grade 1 (100% L1 immersion), Grade 2 (80 – 20% L1 – L2), Grade 3 (two-way bilingual: 50 – 50%). Data are reported in this study of the K – 1 program. On intake, the participants measured only beginner level proficiency in Anishinaabemowin, thus a major goal of this program was for language revitalization, together with enhanced cultural pride and self esteem. A culturally 'rich' learning environment and pedagogical choices included teaching Indigenous ways of knowing and understanding through graphic arts and traditional Indigenous arts and activities and the involvement of elders' visits to the classroom. The general approach is one that is child centered with teachers' role as that of guide and creating opportunities for exploration, discovery and engendering a sense of curiosity, connection and wonder. The authors record strong gains on all targeted program goals including L1 proficiency, self esteem and cultural pride. The goal here is for an *additive* bilingual outcome, though likely an imbalanced bilingualism. This is a good first step in reclaiming and revitalizing Indigenous languages and the concomitant sense of pride,

agency, confidence and self esteem among the youngest learners (Morcom, 2017). These findings echo those found in an earlier study (Usborne, Peck, Smith, & Taylor, 2012) that reports similar outcomes of stronger Indigenous language learning for youngsters who initially participated in a Mi'kmaq immersion program compared to a cohort of children who were enrolled in a Mi'kmaq as a second language program. Longitudinal data revealed both groups scored the same level of English. These findings make a strong case for the work of language revitalization and immersion programming for Indigenous youngsters starting early (Elek, Gubhaju, Lloyd-Johnson, & Eades, 2020; Panda & Mohanty, 2009).

## 2.4 Language, Identity and Culture

Language, identity and culture are inextricably and intimately intertwined. Language is the primary way the human species makes and stores meaning. It is how the core beliefs and values – the 'everyday taken for granted' are conveyed, inculcated, remembered and transmitted intergenerationally. Among Indigenous cultures that rely solely on traditions of orality story telling, songs and music in particular are of central importance in this process. Remove the language and an entire legacy of cultural understandings disappears with it. When language and culture are eradicated as occurred during the residential school experiences of Indigenous children, identity itself is destroyed – language and culture lie at the existential core of what it means to be human and a member of a community (Crossley-Baxter, 2021). Reclaiming and healing begin with revitalizing the Indigenous languages (Rodriguez, 2021).

Hanley (1999) advances a well recognized conceptualization of culture, using the metaphor of an iceberg to describe the 'above the surface' or visible dimensions of culture, to the 'below the surface' taken for granted dimensions of culture. *Figure 4* illustrates the visible and invisible. Note that the above the surface cultural components are associated with folk culture

including festivals, food, fashion, famous people, and flags.
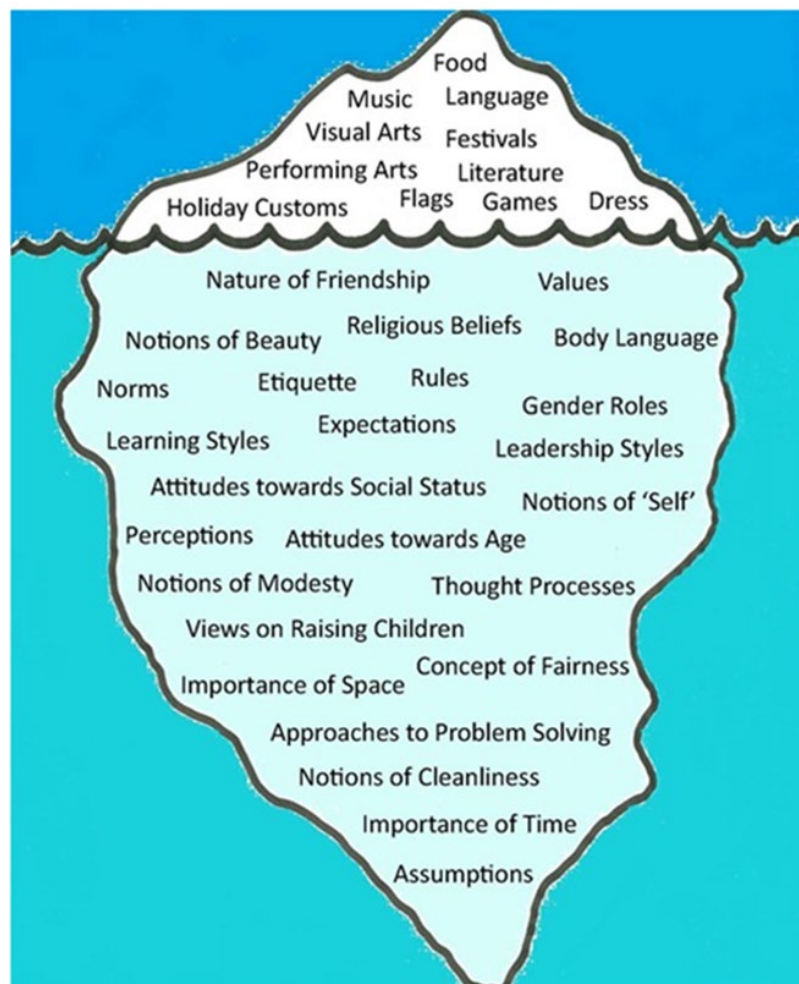


*Figure 4.* Iceberg metaphor for visible and invisible culture, Hanley (1999)

Hanley suggests that first-hand experiences will allow the astute cultural observer or outsides/spectator to access and gain meaning of this surface, visible culture. A deep understanding of culture involves the complexity of family life, child rearing practices, friendships and other relationships for example, and meanings that are metaphorically constructed and culturally constrained may not be so easy for a cultural outsider to access. Direct teaching and mediation through language will be helpful provided by a thoughtful bilingual/bicultural insider. This requires the ability to bring the invisible to the level of critical

awareness, making it visible, and finding ways to make this information knowable. This topic will be addressed in greater detail in the following section on culturally responsive pedagogy (CRP).

Notions of *time,* for example differ from one culture to another. Misjudgements, misunderstandings and miscalculations can be costly and embarrassing. 'Time flies, time is money, on time, behind time, managing time, wasting time, desperate times, family time, take/make time, time out, time up …' When to arrive for a dental appointment? A coffee date? A dinner invitation? A job interview? An air flight?

The forgoing discussion makes clear how tightly anchored we are to our first language and culture as these construct our sense of self – our identity. Various authors explore the question of identity through poetry and stories that reminisce, often poignantly and on a deeply personal level. De Meijer (2020) offers her reflections of language shift and loss in her collection of poems, *alfabet/alphabet – a memoir of a first language*. Having immigrated to Canada from The Netherlands at the age of 12, she returned to her home country for an extended period of time searching for the long lost only to find it was gone. The river moves on and both she and her notion of 'home' were not as she imagined or remembered. Perceived as an outsider due to her accented Dutch, she returned to Canada. She navigates and discloses a complex inner landscape of shifting identity and loyalties. It is not an easy journey for her, nor, she believes, for most who experience leaving home and everything behind, including identity. She dedicates her book to 'each of you who came to English from some beloved elsewhere.' Hers is a story of resolve and overcoming, finding her feet and her voice in her second language. Many immigrants and Indigenous peoples are not so lucky, too often languishing untethered in a neither/nor world described earlier (Roessingh & Elgie, 2009). The role of teachers and schools is crucial in

supporting learners of all ages in navigating this divide and succeeding in finding their rightful place in their bicultural-bilingual world. This is what allows them to thrive academically, socially and emotionally.

## 2.5 Culturally Responsive Pedagogy and Practices

As a consequence of large-scale global immigration and refugee movements over the past 35 years the contemporary inclusive classroom in many Western countries reflects a diverse demographic landscape. Of course, Indigenous students must find their place in this learning context as well. Their needs, as noted numerous times, have long been overlooked. The time for rethinking accepted pedagogical approaches is more pressing than ever.

The broad frame of culturally responsive pedagogy (CRP) has generated considerable research scholarship, especially in the last 15 years, that helps to define and conceptualize CRP and give direction to pedagogical practices that respond to the needs of diverse learners (Villegas & Lucas, 2007; Volante, DeLuca & Klinger, 2019). Perhaps most importantly, CRP sees their linguistic and cultural background – described as *funds of knowledge* – as a rich resource for learning in the classroom (Ball, 2012; Gay, 2013; Ladson-Billings, 2014; Moll, Amanti, Neff, & Gonzalez, 1992). CRP assumes that students will engage and transfer familiar information from L1 to L2 language and culture if the context for learning is personally meaningful, relevant and motivating (Government of Ontario, 2013b). It is in negotiating the 'third space' – the intersection between L1 and L2 – that teachers can exploit cultural universals (Brown, 1991) as beginning points for instruction, understanding, transfer and L2 development for young learners. There is a reciprocal movement back and forth between L1 and L2 language and culture, as young learners 'bring home' new understandings from school that are likely to influence the

home environment. Both sides of the L1-L2 equation thus undergo some transformation. This point will be illustrated among the findings of the current study. *Figure 5* illustrates these ideas.
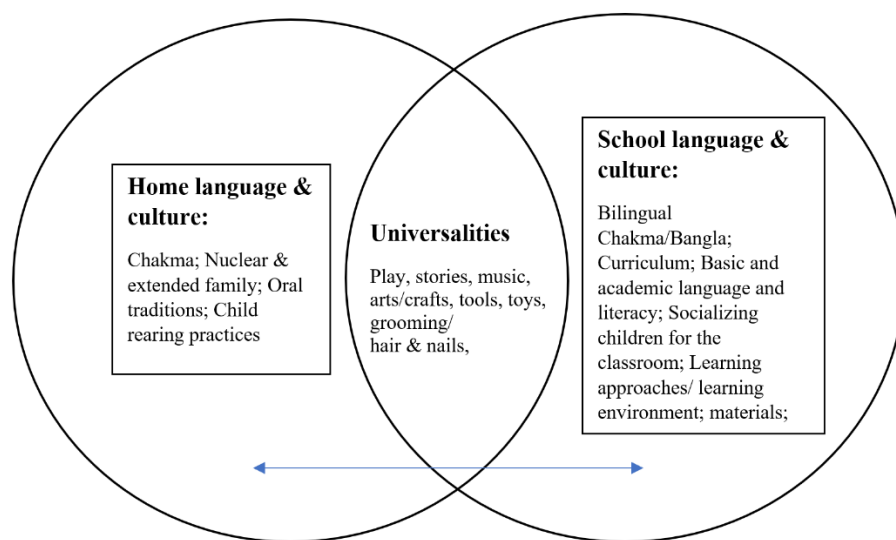


*Figure 5.* The Third Space: negotiating language, culture, identity.

Schultz (2018) describes the importance and the impact of using cultural objects as a point of direct tactile connection with the material world that evokes a sense of resonance, curiosity, awe and wonder – an emotional response if the objects are arresting and captivating. A tapestry or weaving, a toy, a family treasure, cooking utensils, hair grooming tools and adornments (Roessingh, 2011, 2014) all serve to advance this goal. Wilson (1999) emphasizes the centrality of 'hands on' experiences in laying down the neurocircuitry in the hand-brain complex for making meaning in the cognitive networks of the brain. Further, when students are invited to contribute and share their L1 language and culture, teachers demonstrate and affirm the importance of the home-school connection, children's identity, sense of agency, pride and self esteem are enhanced – factors noted for their positive impact on student learning outcomes (Cummins, Bismilla, Chow, Cohen, Giampapa, Leoni, Sandhu, & Sastri, 2005; Morcom, 2017).

CRP practices similarly draw on the same concept of cultural universals, for example story telling (Roessingh, 2018), supported by a language experience approach (LEA) in mapping L1 to L2 literacy. Teachers and learners collaboratively reconstruct and record an event or shared experience, generating familiar, beginner text useful for literacy learning purposes. This process will almost certainly invite children to 'dip into' their L1 repertoire to pluck the exact word for the meaning sought that does not have an equivalent in the L2. *Translanguaging* reveals students' agility or lexical nimbleness that is understood as a strength in *active* bilingualism that should be encouraged in a teachers' instructional repertoire (Cummins, 2017; Wei, 2018). Additional activities including music and movement to a drumbeat, for example, can instill the concept of rhythm and pattern to young learners. All of these can be implemented in the broad frame of play-based learning that provides the overall context for the program under study within the Chakma community.

## 2.6 The Role of the Teacher

The teacher's role is central and crucial. There is a well-developed line of research scholarship that underscores well prepared teachers make a significant impact of the learning outcomes of their students (Darling-Hammond & Youngs, 2002; Hattie, 2012). Content knowledge associated with the mandated curriculum (i.e. the 'what?' of teaching); pedagogical knowledge (i.e. the theoretical underpinnings, the 'why') and practical knowledge (i.e. the 'how?') tends to be the focus of what is involved in being well prepared for the classroom. A gap in this research relates to working with language minority students and their need to learn a second language while immersed in a content driven curriculum. This dual learning need (language *and* content) is too often assumed to occur through simple exposure and immersion in this second language context, receiving scant attention in initial teacher preparation (ITP)

programs. This was the case as well in the approach taken in the current study. As we shall see in the findings section, the strength of the teacher was central and crucial in adapting, modifying and implementing an array of strategies suited to the needs of the children in the program. Differentiating instruction (Tomlinson, Brighton, Hertberg, Callahan, Moon, Brimijoin, Conover, & Reynolds, 2003), for example, is but one of dozens of demands and hundreds of in-the-moment decisions the classroom practitioner must make to respond to the diverse learning needs of mixed age, abilities, language background and more. It would seem that an instinct of *savoir faire* and a certain intuitive sense of *je ne sais quoi* help explain the complexity of the action in the classroom orchestrated by the teacher.

Recent research has further shifted the attention to the importance of the *relational*, that is, teachers' ability to instill a sense of trust, and perhaps above all create a welcoming, warm class setting that promotes risk taking, discovery, experimentation and growth in confidence. Honesty, authenticity and a sincere interest in the well being and learning of students are all part of creating such an environment (Henik, 2018). Henik further underscores the importance of the *relational* that depends in large measure on developing this sense of trust and trustworthiness that invites young learners and their families into the classroom community. Among immigrant and Indigenous families especially, trust in their child's teachers must be nurtured and won – promises and commitments must be kept, honesty and reliability implicit (Roessingh, 2006). The teacher is the central player in the ecology of the classroom and the connection to the community who must bridge and strengthen the ties between them.

## 2.7 Theoretical Framework

The theoretical framework that evolves from this literature review provides a structure for synthesizing and summarizing the key concepts and theories that underpin this inquiry. It further

serves as a lens through which to focus on the data, direct my thinking throughout the analysis phase described in Chapter 3, and arrive at the meaning embedded within. Given the multiple sources and complexity of the data the development of this structure is a key step in guiding the work elaborated in the chapter that follows next (Kivunja, 2018).

The framework takes its inspiration from Chakma textile art, especially waist loomed tapestries (see *Figure 6*) that have played a central role in signifying culture, traditions, religion, and the particularity of tribal identity for over 500 years (Arpan, Ding, Jiang, Halim, & Muzammel 2020; Mahbub, Minhus & Hui, 2021). The tapestries produced on the waist looms (see *Figure 7*) derive their color from organic dyes: indigo, turmeric and mango for example. Hundreds of patterns are memorized over many years of young girls' apprenticeship in producing the tapestries that, like the Chakma language, is rapidly becoming part of the lost. Ironically, revitalization of the Chakma textile arts is coming from the luxury textile industry that is discovering a market for the exquisite craftsmanship and simple elegance of the clothing pieces worn by these Indigenous peoples (Williamson, 2015).



*Figure 6.* Chakma traditional waist loomed textiles (Williamson, 2015); *Figure 7.* Chakma woman at waist loom.

The theoretical framework for this inquiry is illustrated below in *Figure 8*.
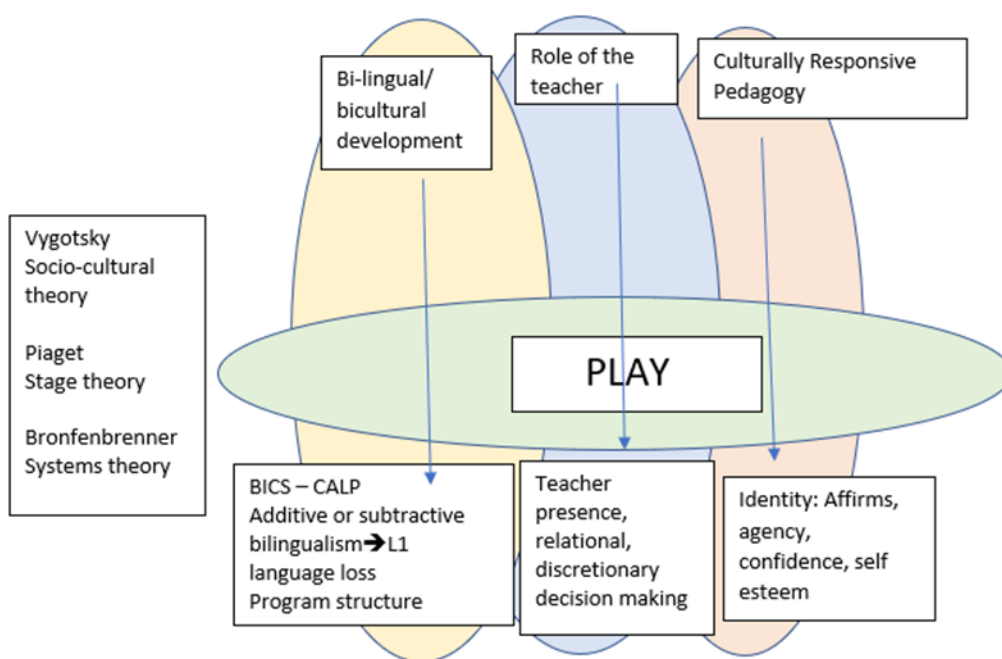
*Figure 8.* Theoretical framework evolving from the literature review.

In sum, three broad theories of childhood development advanced by Vygotsky, Piaget and Bronfenbrenner underlie bilingual/bicultural development; the role of the teacher and the choices and decisions she makes for the welfare and learning for individual youngsters, the group and the larger Chakma community; and finally, culturally responsive pedagogy that is so closely intertwined with identity. Play is the central mediating space/context through which these intersecting components may be realized.

**2.8 Restating the Research Questions**

Four broad research questions guide this inquiry.

1.      How does *play based learning* support/encourage/promote cognitive and language development in a bilingual transitional K program?

2.      What dimensions of teachers' *instructional repertoire and presence* in the classroom make a difference by supporting, encouraging and engaging young learners in actively making meaning, and developing cognitive skills and understandings through guided play in L1 and L2?

3.      How does *culturally responsive pedagogy* create a learning environment that promotes a sense of empowerment, agency, self-esteem that underlies risk taking and discovery?

4.      How does the bilingual transitional K program invite involvement and participation of the larger school and Chakma community?

These four questions frame the discussion in *Chapter 4*, closing the loop between the preceding *Findings* chapter, and the data analysis and thematic clustering from *Chapter 3: Methodology*.

**Chapter 3: Methodology**

In this paper, I am studying the pre-primary bilingual program of ICDP by conducting a case study of a single classroom within this program. The study is bounded by various parameters, making this a bounded case study. The purpose of this study is to observe how play-based learning can create a context for a culturally responsive language learning pedagogy that reinforces a child's linguistic and community identity. This observation is comprised of the learning experiences of the students, as recorded by the researcher, and the teaching and learning experiences of adult community members, i.e. the teacher and parents of the students, as reported by them. The collected data is expected to shed light on effective early learning practices that are based in universal principles but shaped by community-specific experiences of the speakers of the students' L1.

In this chapter, I discuss the research methodology followed in the study, as well as the rationale behind the methodology. It is followed by a detailed description of the research design, and its limitations.

**3.1 Bounded Case Study**

This research inquiry adopts a qualitative case study approach advocated and described in seminal and widely cited work by Merriam (1988, 1998, 2009), and Stake (1978, 1995). In broad strokes, case study is a useful approach in educational settings when the goal is to glean deep descriptive insights into a phenomenon of research interest in a real-life naturalistic context, in this case a play-based bilingual transitional program for young Chakma children.

As the study attempts to answer its central research questions through the lived reality of the children and other community members, which are observable rather than measurable, it is

most appropriate to approach this study with qualitative methods that interpret individuals'

experiences. According to Denzin and Lincoln, interpretations of phenomena in qualitative

research is done "in terms of the meanings people bring to them" (2013, p. 7). Thus, a qualitative

approach can do justice to one of the most focal elements of this study, that is to represent the

mostly unheard voices in relation to early language learning practices for minority language

speakers of Bangladesh, as it opens up a space for them to take an active part in the research by

bringing in perspectives outside of any pre-set criteria set by the researcher's limited knowledge

of the participants' personal experiences (Kingsley, Phillips, Townsend, & Henderson-Wilson,

2010).

This study is conducted with the belief that in order to benefit the members of a minority

language community, pedagogy should be informed by the experiences of the community, rather

than the other way around. This is supported by the constructionist view of qualitative research.

To best understand these experiences, it is important to involve a naturalistic approach to the

observations, which is also part of qualitative research (Bryman, Teevan, & Bell, 2009). Only by

observing the teaching and learning experiences in its own natural context would it be possible to

understand how the program has adapted elements from the students' cultural reality into the

universal pedagogy.

Case study was chosen as the methodology for this qualitative research for a number of

reasons. First, it is a very contextual study. One of the major reasons to conduct this study was

that despite there being a significantly large body of knowledge on early childhood learning and

bilingual education, there is a lack of community specific research, especially in a largely

homogenous country like Bangladesh.

As this is a master's research, it limits the scope of research within a specified length of time. In this limited time, a more efficient way to gather knowledge in an area of research is to take an in-depth look at one unit of study from multiple perspectives, rather than looking from one perspective through a number of instances. Merriam (as cited in Merriam, 1998) defines case study as "an intensive, holistic description and analysis of a single instance, phenomenon, or social unit" (1988, p. 21). This methodology made it possible to glean substantial insights into the pedagogical practices of the pre-primary program by enabling me to fully immerse myself into the experience of a single classroom.

One of the most important reasons to choose the case study methodology, however, was that the researcher had a unique opportunity to closely spend time with the participants and build rapport on a personal level by being given access to the site. A case study, being an interpretive approach where research is seen "as a researcher-subject interaction" (Stake, 1995), allowed me to utilize this opportunity in the role of the researcher, who participates on a more personal level than in other qualitative methodologies.

Case study, in its emphatic characteristic, also recognizes the experiences of the subjects as contributors to knowledge, which is central to this research (Stake, 1995).

Both Merriam's and Stake's definitions of qualitative case study research has informed the decision to use this methodology for this research. Their views resonated with my constructivist epistemological position and suited the specifics of my research.

Based on the nature of the research questions, and their relation to the theoretical framework, I conducted an interpretive case study. This paper provides a rich description of the

case, which is used "to illustrate, support, or challenge theoretical assumptions held prior to the data gathering" (Merriam, 1998, p. 38).

**3.1.1 Bounding parameters.** The unit of analysis here is bounded by various parameters that characterize it as a case and determines the research to be a case study (Merriam, 2009).

First, it is bounded by the particular language learning pedagogy, which in this case is a bilingual classroom practice, that uses the students' L1 to deliver lessons.

The study takes into concern specifically the locality of Bangladesh where the bilingual education program is being conducted, in order to learn more about the culture-specific pedagogical practices. Thus, it becomes bounded by area. A single classroom was chosen from this program, which falls in the district of Rangamati. As the program is run only at the pre-primary education level, the study is also bounded by the age group of the students, i.e. 3-6 years.

Although the students of the bilingual pre-primary program come from many different language communities and often attend multilingual classrooms, the particular classroom chosen for this research is situated in a monolingual village, and so is comprised of only Chakma speaking students and teacher, making the case bounded by participants' L1.

Each classroom in this program is run by only one teacher. In this instance, the teacher is female, aged 26 years, an SSC (public examination after Grade 10) graduate, and has been working in this program for 5 years. Thus, the case is bounded by the gender, age, educational background, and experience of the teacher.

The case is also bounded by time. The researcher was involved with the participants in terms of rapport building and data collection for a total of 4 weeks during September-October of 2016.

## 3.2 Data Collection

Despite having differing views on the nature of case study research, methodologists Yin, Merriam, and Stake agree on the point that only by gathering data from multiple sources can the researcher "capture the case under study in its complexity and entirety" (Yazan, 2015). In a broader sense, qualitative researchers have been called bricoleurs because of how they bring together different types of data to get to the answers to their questions (Denzin & Lincoln, 2013). In this study, data was collected using a number of qualitative research instruments, namely – naturalistic observation, semi-structured interviews, photographs, documents, and artifacts of children's learning. These methods were able to draw an array of data, which was then coded, examined, analyzed, and finally triangulated to form a holistic picture of the case.

The first step of the data collection process was a rapport building period where the researcher spent time in the classroom to become a familiar part of the environment, so as not to interrupt the regular practices of the participants during the naturalistic research. During this period the researcher also familiarized herself with the participants and their activities in the classroom. The observations began after that.

The interviews were held according to time volunteered by the participants. Photographs, artifacts and documents were collected towards the end of the observation period, when the participants had become completely accustomed with the presence of the researcher in the

classroom. Field notes and diagrams were made during observation to aid the data analysis process afterwards.

**3.2.1 Research instruments.** This section addresses the research instruments used in conducting this inquiry, and provides brief descriptions as well as rationale for choosing each of these instruments.

*3.2.1.1 Naturalistic observation.* Since its earliest days, observation has been considered as one of the essential elements of ethnographic research. As Adler and Adler (1994) put it, it is "the fundamental base of all research methods." Since the intent of my study was to understand and describe the teaching and learning practices within the space of the classroom, it was important to conduct an observation of the members. As is the characteristic of naturalistic observation, I tried to remain as unobtrusive as possible in the functions of the classroom, adapting a fly-on-the-wall technique.

During the initial rapport-building period I did what is called "descriptive observation," without putting much focus on specifics. After I learned that the class followed a slightly varied lesson plan different days of the week that was repeated weekly, I conducted "focused observation" on different aspects of the classroom practices each day (Angrosino and Rosenberg, 2013). At that time, I started making field notes in the form of writing and drawing. The categories I followed were – classroom design, sitting/standing formations, age groups, movements, curriculum, activities, and L1/L2 use. The observations revealed many universal principles of early childhood education in use by the participants, and also in the classroom environment. There were also elements of cultural specificity in terms of materials and activities.

Towards the end of the observation period, after the students had become comfortable with me as a part of the classroom, I became slightly more involved with them in an observer-as-participant role, and watched some activities while taking part in them (Bryman et al, 2009, p. 149).

*3.2.1.2 Semi-structured interviews.* One of the key motivations behind this study was to include voices from the minority community that are often unheard in research or policy making. A semi-structured qualitative interview is a very useful instrument in such circumstances, as it "tends to be flexible, responding to the direction in which interviewees take the interview and perhaps adjusting the emphases in the research as a result of the issues that emerge during the interview" (Bryman et al, 2009, p. 159). In comparison to structured interviews, it is less influenced by the researcher's agenda. Semi-structured interviews were particularly useful in this study because the cultural unfamiliarity meant that the researcher could not predict the interviewees' inclination or level of reflections on pedagogical matters before meeting them. Therefore, the questions had to be flexible and more conversational in nature in order to engage the participants and include aspects of the study where they would have more inputs.

I conducted the interviews towards the end of the research period, when most of the observations were complete. This was done partly due to the parents' work schedule, and partly in order to take the time to get acquainted with all the participants.

For the interview with the teacher, 10 initial questions were set. For the parents the number of initial questions was 7. (For full lists of interview questions used, please see Appendices A and B.) The interviews were allowed to run according to the participants' interest and inputs. The participants were at liberty to change the course of the conversation as long as they remained within the topic of L1/L2 learning, and their children's and their own education.

The runtime of each interview was expected to be around 20 minutes. Due to the teacher's enthusiasm in the discussion, the interview with her came to be about 40 minutes in length. The interviews with the parents were about 9 minutes on average.

The interviews were audio recorded for later transcription and coding. It was not possible to transcribe the parents' words as they spoke in Chakma, so only the interpreter's translations were transcribed verbatim. Afterwards they were studied in order to elicit themes pertinent to the research questions.

*3.2.1.3 Photographic evidence.* The use of photographs for research purposes, or "visual ethnography," has become more common over time. They can be used in a number of ways. In this study they are mainly used within a realist framework (Pink, 2001). The photographs are viewed and interpreted as part of the collected data.

Issues of ethics were resolved with consent from the participants and/or their guardians, and approval from the board. The faces of people in the photographs were obscured for privacy reasons.

*3.2.1.4 Learning artifacts.* The participating students' learning artifacts, such as – writing samples, drawing samples, photographs of teaching/learning materials, toys, posters, charts etc. were collected as data, and later analyzed for themes to be connected to theory. Studying of artifacts as research instrument helps build part of the case study and adds to the "rich, thick description" (Merriam, 1988) of the case.

In order to avoid taking actual materials or pieces of classwork, these artifacts were also collected as visual samples in the form of photographs, with permission from the participants.

**3.3 Selection of Site and Participants**

In order to learn the impact of the language learning and literacy experiences of community members, I studied the Child Development and Pre-Primary Education Program run by the Integrated Community Development Project (ICDP), a division of the Chittagong Hill Tracts Development Board (CHTDB). This program was chosen because of its success in bilingual education for children from linguistic minorities and its steady growth over the past two decades. Aside from functioning in the area of Bangladesh with the largest and most versatile Indigenous population, it follows a curriculum designed from universally accepted principles of early childhood education, and incorporates the use of the children's mother tongue along with their second language.

To provide ecological validity, the research had to be conducted within the room where class is regularly held, as it is required in understanding the learning process of the students. The interviews were also taken in the same place in order to maintain the comfort level of participants. The bilingual early education program studied for this research has around 4000 schools divided between the three districts of the Chittagong Hill Tracts. As they are all conducted in the same manner following a single teaching manual from the Child Development and Pre-Primary Education Program, the particular school to be observed was selected largely because of convenience. The village where the school is situated is a 30 minutes' drive from the town of Rangamati, where the nearest public services such as hospitals would be available. (Please see Appendix C indicating the site's location in relation to the nearest town.) Being close to the town and the ICDP offices made it possible to make daily visits to the school for several weeks for rapport-building and consistent observation (Denzin & Lincoln, 2011).

As research for a master's thesis runs for a short length of time, an exclusively Chakma speaking area was selected so that the use of languages in the classroom is limited to one mother tongue and the second language. Chakma being the first language offered a specific advantage to this researcher as it bears some similarities to her own mother tongue, Bengali.

Access to the site was subject to permission from the teacher. As permission was given by the teacher who was contacted first, no other school or teacher was approached.

The teacher was approached through local ICDP officials, and afterwards the teacher introduced the researcher to the students and helped contact the parents. The students were selected based on their parents' consent and the students' assent. The parents were selected for the interviews based on their consent and availability. 7 of the parents consented to participating in an interview, but ultimately 4 of them were able to make time from their work.

The interview with the teacher was conducted in private after school hours. The interviews with the parents were conducted in the presence of an ICDP official who acted as an interpreter between the Chakma speaking participants and the Bengali speaking researcher.

## 3.4 Description of the Program

ICDP provides its services through units called Para Centres (Neighborhood Centres) that function in villages and neighbourhoods. They only work in rural areas, while in the towns these services are provided by the Government. These centres are managed by para workers, who handle affairs of their respective Para Centres. Each Para Centre covers 30-60 households within a 1-1.5km radius, and has 1 para worker in charge of it. 70% of the areas covered by the services of Para Centres are populated by Indigenous communities. For the early childhood development

program, teacher training as well as teaching and learning equipment are funded by UNICEF (UNICEF Bangladesh, 2019).

**3.4.1 Para Centre.** Para Centres provide a number of services to villagers. Among them are – pre-primary education, health and hygiene, immunization, maternity care, birth registry, and safe drinking water. Classes for the pre-primary program are held within the Para Centre. The Para Centre where I conducted my study can be seen in *Figure 9.*



*Figure 9.* The Para Centre observed in the current inquiry.

Every Para Centre has a physical location, usually a one room house of 25ft x 18ft, which is located within the neighbourhood or village, and built through a collaboration between the Project and the residents of the area (Integrated Community Development Project, 2015, p. 12). Many of the activities of the Para Centre, including the pre-school program, are held in this space. Other activities, such as – neighbourhood meetings, are held in different community members' houses. *Table 1* shows a timetable displayed in the classroom of how the Para Centre is shared within the community.

**Table 1**

Para Centre timetable.

|  | Time | Activities |
|---|---|---|
| Lesson preparation | 8am – 9am | Clean up of para centre; preparing lessons |
| Lessons | 9 am – 11:30am | Child development and pre-primary related lessons |
| Updating information | 11:30am – 12pm | Updating para centre information; preparing reports; keeping inventory |
| Social activities | 12pm – 1pm | Organizing yard meetings; organizing PCMC meetings; helping other organizations provide services (vaccination, distributing iron tablets and vitamin-a capsules, discussions with pregnant women and teenage girls); help during inspections by officers, etc. |

**3.4.2 Para worker.** A para worker is the person in charge of the Para Centre in their own neighbourhood or village. They must be a permanent resident of that area, and must have an education background of Grade 8 graduate or higher. They are employed for an indefinite period. One para worker manages all of the activities of the Centre. Besides taking care of the services to be provided to villagers, the para worker acts as the teacher of the pre-primary classroom.

**3.4.3 Pre-primary program.** The pre-primary program registers children at the age of 3, and provides early childhood education up to age 6, when they graduate from this program and can begin formal schooling at a primary school. Children younger than 3 years old are also welcomed in the classroom if they want to attend, but they are not registered until they turn 3.

As teacher of the program, the para worker's duties include – preparing daily and weekly lesson plans, teaching subjects (Bengali; math; arts & crafts; science & technology; environment, health & safety), managing the classroom and the students, and clean-up at the end of the day. *Table 2* shows a table of the day-by-day weekly schedule for the program.

**Table 2**

Weekly schedule of pre-primary class (ICDP, 2015, p. 29).

| | General Topics (for all) | | | Age Specific | | General Topics (for all) | | | |
| | | | | 3-5 years | 5-6 years | | | | |
| | 5 min | 15 min | 20 min | 40 min | | 30 min | 20 min | 15 min | 5 min |
|---|---|---|---|---|---|---|---|---|---|
| Day 1 | Greetings | Exercise & national anthem | Rhymes & acting | Pre-reading | Bengali reading & writing | Play as you like | Story time | Guided playtime | Finishing tasks |
| Day 2 | Greetings | Exercise & national anthem | Rhymes & acting | Pre-writing | Bengali reading & writing | Project work/Science & technology | Story time | Guided playtime | Finishing tasks |
| Day 3 | Greetings | Exercise & national anthem | Rhymes & acting | Pre-reading | Bengali reading & writing | Play as you like | Story time | Guided playtime | Finishing tasks |
| Day 4 | Greetings | Exercise & national anthem | Singing & dancing | Pre-math | Math | Fun games with pattern blocks | Environment, health & safety | Guided playtime | Finishing tasks |
| Day 5 | Greetings | Exercise & national anthem | Singing & dancing | Pre-math | Math | Play as you like | Environment, health & safety | Guided playtime | Finishing tasks |
| Day 6 | Greetings | Exercise & national anthem | Assessment & feedback | Assessment & feedback | Assessment & feedback | Arts & Crafts | Assessment & feedback | Assessment & feedback | Finishing tasks |

## 3.5 Participants

The case study involved a total of 16 participants and an interpreter helping with the interviews. Their experiences were captured by the use of naturalistic observation and semi-structured interviews.

Among the participants were 10 registered students, 1 unregistered student, 1 teacher, and 4 parents. The students participated in the research by attending the lessons within the classroom. The teacher and the parents did interviews with the researcher.

All of the research participants are from the same village and live within a kilometer of the school.

Short descriptions of the participants and the translator are presented here. The students are described in groups rather than identified as individuals.

**3.5.1 Students.** The students are divided into two age groups within the program. Among the participating students, 4 were in the age group of 3-5 years of age, and 6 were in the group of 5-6 years. One other student who was 2 and a half years old at the time, also attended the lessons with the rest of the children. She had not been formally registered in the program yet but took part in the research as a regular participant in the classroom.

All 11 of the children speak Chakma as their first language. Many of them understand a fair amount of Bengali as well. A few of them can also speak Bengali. As part of the program, they are all learning to read and write Bengali.

Most of the students started attending this program at the age of 3. Some of them started coming to the class earlier, when they were too young to register, like the youngest of them was doing during the data collection period.

For all the students, this is the first schooling experience. After graduating from this program, they are expected to start formal schooling in Grade 1, most likely at the nearest Government school.

**3.5.2 Teacher.** The teacher is a native Chakma speaker like the students. She was born and raised in the local community and is a resident of the neighbourhood where the school is located. As para worker she has a number of responsibilities for her community, including

teaching the pre-primary program. According to her, this part of her job was one of the main motivations for her to apply for the position.

After completing high school and passing the public examination she applied to be a para worker. In order to get the job, she had to beat out two other applicants in an examination and participate in a 14-day training program based on the Para Worker's Guidebook (ICDP, 2015). She later received a 7-day training based on the modifications made in the guidelines, shortly prior to this study was done.

Being from the same village she knows the students' families well. As para worker, she has been involved in the children's lives since birth through responsibilities such as birth registration and vaccination. As a result, she has developed a bond with the children which, in addition to motivating her as their teacher, helps the children cope with the first schooling experience of their lives.

**3.5.3 Parents.** The students come from families with varied levels of educational background. Among the interview participants, 2 had formal schooling experience and 2 did not. Some of the other parents opted not to take part in interviews because they felt uncomfortable due to knowing only Chakma and/or not having literacy.

Most, if not all of the parents in this program work in agriculture. Their place of work is close to the neighbourhood, and thus the school. At least some of them come to the school from time to time, either to travel with their child to and from school, or to sit at the back and watch the proceedings of the class. Sometimes family members do some personal chores sitting at the back or just outside the door, in order to stay close to their child.

Living and working so close to the school enables them to visit or sit in class if their child needs them. It also helps them remain involved in the children's education. As the teacher is also from the same village, the parents are well acquainted with her and often have discussions with her outside of school hours.

None of these parents have had schooling in their mother tongue. They only received education in primary schools where general government curriculum is followed and were taught in Bengali. Prior to formal schooling they had almost no knowledge of Bengali. They mostly learned the second language from informal situations such as playground conversations or trips to the marketplace with their parents.

**3.5.4 Interpreter.** As all of the parents speak Chakma as their first language, and most of them struggle with conversing in Bengali outside of everyday topics, an interpreter was required during the interviews. And officer from ICDP helped in this regard. As the interviews were semi-structured and were conducted in an informal setting, the officer also gave her own inputs on the topics while translating the parents' responses. She mainly provided information regarding language learning opportunities at the time of her own primary education, as the parents experienced similar situations growing up.

## 3.6 Methodological Assumptions

As this is a qualitative study that relies heavily on the perceptions and recollected experiences of several of the participants, as well as behaviours and actions of others in the research context, certain methodological assumptions had to be made during the study.

For the participants there were several assumptions, such as – the interview participants were honest in their consent and responses; they were able to recollect their past experiences

accurately; the students' behaviour did not change because of the presence of a stranger (the researcher), and on occasions, a camera; the teacher did not change the curriculum or teaching practices because of the presence of the researcher.

Since some major parts of the data collection required the researcher to rely on an interpreter, it also had to be assumed that the researcher's queries, and the contributions of the participants were translated and relayed accurately.

## 3.7 Limitations and Delimitations

Qualitative studies are characterized by certain methodological limitations, as well as limitations of the researcher (Merriam, 1998). Being a case study, this research is done on a single unit of one particular program. The sample sizes are small in both observation and interviews. By nature, the case study has limited generalizability.

Focusing on one single bounded case led to the inevitable exclusion of certain populations. The schools within the ICDP pre-primary program consist of students from many minority language communities, sometimes a combination of two or more, such as – Marma, Tanchangya, Tipura, Rakhaine etc. The program does not exclude Bengali speaking students, who are native speakers of the L2 in terms of the minority communities as well as this study. In many cases the teacher has a different L1 than some or all of the students. Some of these teachers are also Bengali. As the particular classroom being studied is located in a Chakma speaking village, it consisted of only Chakma students, and a Chakma teacher. This meant the study excluded speakers of other minority languages, multilingual classrooms, and presence of L2 speaking students and teachers. The study was also limited by the teacher's age, gender, educational background, and experience in the program, as it excluded male teachers, older

teachers etc. These exclusions, while being a limitation in this study, create opportunities for further research, as the study of these populations can reveal other unique perspectives in future (Merriam, 1998).

As this study was done for a master's thesis, it was limited by time. The time period spent in contact with the case was shorter than is usually expected of a case study. Not every element in the curriculum was covered during the research period. To overcome this limitation, data was collected through several different sources and triangulated to bring up rich themes and create depth of understanding.

A drawback of naturalistic observation is "its potential for generating reactivity or observer effect" and observer bias (McKechnie, 2012, p. 551). Triangulation of data was useful to ensure validity in this regard as well. In order to minimize observer effect, I took some time with the participants as a rapport-building period. Before I began observations for my research, I spent the duration of one week in the classroom with the participants as they conducted and attended lessons as usual. During this time, I only remained there as a guest and became acquainted with the teacher and the students. As the novelty of my presence wore off, and the children warmed up to me, they stopped taking particular notice of me during class hours, making observer effect minimal to none.

The interviews with the parents were limited by a lack of response to questions regarding pedagogical and ideological implications of language learning. Despite having simplified open ended questions, the responses were short and consisted mainly of the nature of their children's learning, as opposed to thoughts or concerns about it. This lack of input in certain parts of the interview could have been due to the parents' socioeconomic and educational backgrounds where they had little or no opportunity for schooling in their childhood, and in later life, for

reflecting on these issues. This limitation concerning the interviews were dealt with by moving towards a more conversational approach and introducing a number of new questions that helped the interviewees contribute more. Although this made the interviews more structured in some ways, there was enough response regarding their personal experiences and observations of their children's learning for relevant themes to emerge from analysis.

One important limitation was the fact that the researcher is a native speaker of the participants' L2, an outsider to the community, and does not speak their L1, in which most of the in-class communications happened. As a result, there was very limited data on the vocabulary development of the children, especially in their L1, as well as observations regarding some of the culturally responsive practices.

Researcher bias can affect the results of the study, particularly if the researcher does not share the "situation", e.g., age, gender, ethnicity, language, sexuality etc. (Denzin & Lincoln, 2013) of the participants. In this study, my outsider position to the participants' community created some limitations. Thus, it became necessary to recognize my positionality as the researcher.

**3.7.1 Positionality and reflexivity.** The issue of positionality was addressed through reflexivity, "a self-conscious awareness of the relationship" between the person conducting the research, and the people participating in it (Bourke, 2014, p. 2). I was a member of the dominant linguistic group of the country, conducting research relating to one of the minority linguistic communities. The L2 being considered in this research, Bengali, is my L1. My background experience does not coincide with those of the participants'. I enjoy a privileged socioeconomic position compared to their community that shields me from the struggles faced by them. As a result, my interpretation of their experiences may have been informed by my background.

Acknowledging this was important in keeping any possible cultural bias in check while conducting the research.

As Bourke (2014) finds in his research, it is not only the outcome of a research but also participation in it that is influenced by the researcher's positionality. I approached the site and the participants as a Bengali researcher coming from a foreign university. My communication with the Chakma participants and in turn, their response happened in relation to this fact, and may have been affected by it.

The application of reflexivity, i.e., a continued mindfulness of the researcher's positionality throughout the research, made it possible for me to remain respectful of the participants' voices and help their inputs to be represented in the results of my study.

As part of this process, I used field notes to record my observations, where descriptive documentations of events and environment were compiled independent of my thoughts on them. In addition, I also kept a reflective journal to take note of my reflections and comments on these observations. This way I was able to not only take a retrospective look at the data and revisit my observations, I was also able to take a step back and look at my thoughts at that time from a different perspective, and where necessary, revise the interpretations based on experience and maturity. This way the journal could be used as an audit trail and an estrangement device of sorts.

Reflexivity can also help the researcher find common ground with the participants despite the difference in situations. I was able to recognize during the research that while I was an outsider to the community in terms of cultural and economic background, I was an insider as a student receiving education in her L2, living in a multilingual community where most of the

communication is held in the L2. Among other commonalities between us were our citizenship and some sociocultural elements, being from the same country. Recognizing this insider-outsider relationship with the participating community enabled me to take both an *emic* and an *etic* approach by acknowledging the participants' cultural perspectives and my own in the research.

As I present the results, the awareness and disclosure of my positionality aids the reader as a relevant factor to be considered.

**3.8 Credibility**

In this paper, I attempt to put together a real-life representation of the case studied. Authenticity was given utmost importance.

First, in order to be able to get a candid, authentic view of the case, some time was dedicated just to be present in the same room with the participants and build a sense of comfort and trust. Compared to the day of first contact, researcher-participant interactions were significantly different with an increased comfort level by the time the data collection process began. This ensured that the participants would not be self-conscious with their actions and carry on with their regular classroom activities, which are the subject of this study.

To ensure validity of the data, it was collected through multiple methods and triangulated, drawing on the different sources to reach the same information through corroboration. The interviews were taken towards the end of the observation period, and answers to questions regarding the classroom activities supported the data found through observation and photographic evidence. Likewise, information gained from parent interviews regarding home and community practices were corroborated by the teacher interview and vice versa.

The rich use of photographic evidence heightens the sense of honesty in rendering a narrative that captures the essence of the case, and in turn, the credibility of the insights offered in this inquiry.

Finally, the field notes, and the reflective journal used throughout the data collection process were revisited from time to time to aid the researcher's memory and support the findings from the data sets.

The multiple perspectives on the same data gained through multiple sources, in addition to a researcher-participant dynamic based in trust helped render an authentic and honest interpretation of the case, and provide credibility to the study.

**3.9 Generalizability**

Generalizability is not one of the goals of case study research. But as Flyvbjerg (2006) puts it, ""the force of example" is underestimated" (p. 228). This case was chosen and is valuable due to its uniqueness of accessibility and features. In Stake's (1995) words, "We are interested in it, not because by studying it we learn about other cases or about some general problem, but because we need to learn about that particular case." (p. 3) Insights gleaned from this particular case can potentially be transferred to other cases.

The research was conducted with the aim of gaining deeper understanding of this particular case, which has implications in the broader contexts of community and language revival. There will be lessons to learn from this study, including important insights similar and/or comparable to those found in Canadian and international studies (Morcom & Roy 2019; Usborne et al 2012; Short & Sutherland 1989; Malone & Paraide 2011) that show promise in beginnings with L1 immersion in the long run.

**3.10 Ethical Considerations**

Major parts of this study required human involvement, and ethics approval was necessary. My conduct throughout the research process was compliant with the ethics protocol of the Tri-Council Policy Statement 2 (2014). Before beginning the study, permission was acquired from CHTDB and ICDP. Ethics approval was given by University of Calgary Conjoint Faculty Research Ethics Board (REB 16-1162). It was also important to receive informed consent from the participants.

 **3.10.1 Informed consent.** Consent letters for the teacher and the parents were translated into Bengali and participants were given hard copies. The letters mentioned the research process, the purpose of the research, the kind of information that will be collected and the measures to protect them, and the voluntary nature of the research. These details were discussed with the participants before signing. Those who cannot read and/or understand Bengali were told and explained the contents of the letter by the interpreter. The participants were given a copy of the consent letter to keep. They were informed that the researcher would be keeping a copy of the signed form as well.

 For the students who are minors and under the age of understanding the concept of formal consent, a script was prepared to get verbal assent from them allowing the researcher to spend time with them and keep some of their classwork. In addition to their assent, permission from their parents were asked for in the consent letter.

 **3.10.2 Participant withdrawal.** Participants were given the opportunity to withdraw from the study at any time. This was explicitly mentioned in the consent letters given to them.

The students were told orally that they would not have to talk to the researcher or show her any of their work if and when they do not want to.

The consent letters explained that if they chose to withdraw from the study, any data collected on them until that point will be destroyed. No participants chose to withdraw from the study.

**3.10.3 Confidentiality.** Confidentiality was ensured by keeping all data protected by password. The field journals were treated similarly and no one other than the researcher and her supervisor were given access to it. Data analysis was done entirely by hand using analog tools and kept in one of the field journals.

In the description of the participants and the program, neither the people nor the Para Centre was mentioned by name. The children were mostly mentioned by age groups. Even when individual children were mentioned as part of anecdotal evidence, any identifying characteristics were avoided. In the photographic evidence, images of their faces were blurred with technology.

As there was only one teacher participating in the study, it was not possible to keep her unidentified. For this reason, the interview data was handled with sensitivity.

## 3.11 Data Analysis

Analyzing the rich set of data was a dynamic and iterative process. Colaizzi's descriptive phenomenological method (as cited in Morrow et al, 2015) provided a pragmatic framework for a novice researcher such as myself. Among phenomenological researchers this framework is widely recognized (Gumarang, Mallannao, & Gumarang, 2021; Morrow et al, 2015; Shosha, 2012) as a robust and rigorous approach to the treatment of qualitative data in revealing

emergent themes and their interconnected relationships. *Table 3* shows a brief description of my data analysis process based on Colaizzi's steps.

**Table 3**

Steps in Collaizzi's descriptive phenomenological method (Morrow et al, 2015).

| Step | Description |
|---|---|
| 1. Familiarization | I familiarized myself with the data by listening to, transcribing, and reading through the transcripts of the interviews, reading my own field notes, as well as looking at the visual data both individually and holistically. |
| 2. Identifying significant statements | I identified statements and illustrations relevant to my research questions from all bodies of data. |
| 3. Formulating meanings | I identified and extracted meanings from the significant statements by considering them holistically and looking for emergent themes. |
| 4. Clustering themes | I clustered the meanings into emerging themes by color-coding the identified meanings using sticky notes and markers, and identified the overarching major themes. |
| 5. Developing an exhaustive description | I developed a description of the program centered around the major themes that emerged from the exploration of the dataset. |
| 6. Producing the fundamental structure | Out of this description I extracted the essential elements and their interrelations, and mapped them out in a condensed visual structure representing the case. |
| 7. Seeking verification of the fundamental structure | Verification of the fundamental structure was sought through triangulation of data. |

*Figure 10.* Clustering meanings extracted from the data during analysis. *Figure 11.* Field notes taken during data collection process.

After thoroughly familiarizing myself with the data, I went through steps 2, 3, and 4 a few times as the major themes started to emerge, and even revisited these steps while writing the exhaustive description as mentioned in step 5.

No technology was used except to store and access data. The use of legacy tools (notebook, pen, pencil, markers, sticky notes) throughout the analysis process allowed for deep engagement with the data sets through embodied cognition (see *Figure 10*). The 'active involvement in making sense and meaning' through taking field notes (see *Figure 11*) during the data collection process also helped in the retrospective reflection on the case while analyzing the data sets (Roessingh, 2020). While technological tools offer certain advantages such as speed, analog processing using legacy tools allows for the researcher to closely work with the data and garner further qualitative insights by engaging with meanings. Meaning making was an essential dimension of this inquiry, especially during the implementation of Colaizzi's framework, as its

central aim was to gain in-depth understanding of the case through multiple and complex data

sources.

**Chapter 4: Findings**

The current chapter presents the findings of the study through an exhaustive description of the findings in the form of emergent themes. This description was developed through a holistic in-depth analysis of the data. This chapter is followed by a discussion chapter comprised of a visual representation of the findings as well as discussion of the key findings with relation to the research questions that guided this inquiry, connecting them to the relevant literature that provided the theoretical framework.

**4.1 Primary Findings**

In this section, the key findings of the research are presented through themes that emerged from a careful and holistic analysis of the data sets. This section focuses on the three major themes that were visible in the various sets of data. Among these are (1) the central position and significant role of the teacher in this pre-primary program, (2) the use of the child's L1 as a sort of bridge to their L2 and L2 culture, and (3) play as a host to the "third space" as it creates a context for the child's home culture to coexist with the school culture, by drawing on their universalities. Permeated throughout all three themes are elements of early childhood development, bilingual education, and culturally responsive teaching.

**4.1.1 Theme 1: The centrality of the teacher in the program.** In my observations, I found the teacher to be the lifeblood of the program, not only in terms of engaging her students in making meaning but also in effective implementation of the program design, including use of language and materials, and in the linguistic and identity development of the children.

***4.1.1.1 Value of trust.*** Trust was found to be crucial, both in the student-teacher and parent-teacher relationships, where the teacher is the common element.

A general atmosphere of trust was observed within the classroom. The children relied on the teacher with problems and questions, and they did not hesitate to approach her with them.

The parents expressed trust in the program when it came to their child's L2 learning and the preparedness for starting elementary school in L2 medium. This source of trust is their long-term relationship with the teacher, as she is their main connection to the program itself. In the classroom observations the visiting parents or guardians seemed very comfortable sitting in the classroom, and the teacher was comfortable with their presence. This gives the families of the students a very candid look into the education of their children and in the interviews with the parents, they expressed contentment with this arrangement. This trust and mutual comfort are likely the result of years of familiarity with the teacher through her involvement in various community activities as part of her job as para worker.

According to the teacher, building trust was an integral part of adjusting in her new job when she first started at the program, and she referred to it as the biggest aspect that sets her early days in the program apart from the current dynamics in the classroom. A major issue she faced as a beginner was that the students had grown to trust and respect her predecessor so much so that it was initially hard for them to accept her authority and guidance. She had to invest time in gradually building a relationship with the children. At present she feels that she is the person they trust and respect the most. This was also somewhat reflected in the interviews with the parents. Two of them mentioned that their child often imitates the role of the teacher at home and tries to re-enact classroom activities with family members and teach them the lessons they learned in school that day. It shows that not only does the teacher have the trust of her students in her knowledge of the world, she also acts as a role model they look up to.

***4.1.1.2 Teacher agency and discretion in pedagogical practices.*** The program, though designed with a certain structure and guidelines, allows the teacher a fair amount of agency in the classroom that enables her to make decisions about pedagogical practices based on her own instincts and discretion.

*Language use.* The program recommends using L1 for the first 6 months of a child's time in the program and start to use L2 in addition after 6 months. (ICDP, 2015, p. 47) However, the teacher needs to be able to assess their level of understanding, progress and cognitive development, and decide how much L2 to use in various areas of communication such as conversation, instructions and teaching. She also needs to consider the fact that there is great diversity in the classroom in terms of age, readiness, personality, time spent in the program etc. Based on these she needs to balance out her use of L1 and L2 while being mindful of each child's needs at their respective stage of learning. She does this by using Chakma in general conversation and incorporating Bengali words and phrases by way of translating and translanguaging.

*Dialogic Talk.* The Guidebook (ICDP, 2015) does not put any emphasis on dialogic talk in either L1 or L2. It does recommend asking questions that encourage talk and thinking from children, and discusses different types of questions (p. 47-48). Beyond that talk is not suggested to be used for vocabulary development. However, the teacher was observed in using some features of dialogic talk during her instructions and explanations in both languages. For example, when asking questions during a storytelling activity, she provided the children with options by embedding the opposite word of the answer in her question as well.

T: *Where is [x]?*

Ss: *Above [y].*

T: *Above or below?*

Ss: *Above.*

She also brought focus on certain keywords that the children started to use by repeating those words in her own response. For example, during a pre-reading activity of talking about personal experiences, the teacher and students aged 3-5 were sharing stories about the clothes they were wearing. A child mentioned getting his clothes as a gift during the Bizhu Festival of the Chakma people. The teacher picked up on his use of the word 'Bizhu' and used it in her own sentence to elaborate on it, based on her own personal experience with the cultural celebration.

During an 'Environment, health & safety' activity, the teacher made use of an anecdote that the students were all familiar with. They were talking about the importance of brushing your teeth regularly, and she mentioned a time when one of the students got sick with a gum infection. This made the students more engaged and participate actively in the conversation with their own inputs on the matter, recycling the words that the teacher was using as part of the lesson.

In addition to these, the teacher often elaborates on topics and brings in related vocabulary. For example, Within the same pre-reading activity mentioned earlier, she also introduced the category of color by talking about the colour of her dress and encouraged the children to name the colors of their own clothing items.

*Teachable moments.* There was a special occurrence during one of the regular activities. The teacher was conversing with the students before lining them up for exercise and national anthem, when some kids heard some talk from outside about slugs appearing due to the previous night's rain. The teacher took this as an opportunity and took the class out to see the slugs and

talk about them. It is notable that such actions are not usually encouraged in the context of Bangladesh and is considered disruptive. But in this case the teacher made use of it as a teachable moment.

*Home literacy.* The teacher also takes initiative as para worker and member of the community to approach parents regarding their home literacy practices. Often the parents of these children are themselves not literate and/or have little knowledge of how to help their children with language development and learning, despite having the willingness to do so. The teacher takes the time to talk to them about early learning and discuss their involvement. In the interview she mentioned that she usually suggests providing their children with writing/pre-writing supplies, especially chalk and chalkboard, and encouraging them to scribble or draw. She also asks them to motivate them with positive reinforcement. She starts these discussions with parents even before the child reaches pre-school age so that by the time they start in the program, they are familiar with those objects and are already motivated to start taking part in the designed activities.

The parents also mentioned being in regular communication with the teacher and doing these things at home with their children.

This was reflected in the observation of the youngest child in the classroom who, at the age of 2 and a half years, was already showing involvement in pre-writing activities among others and demonstrated advanced grasp on a piece of chalk, as seen in *Figure 12*.

*Figure 12.* Child demonstrating pincer grasp.

**4.1.1.3 Child's agency in classroom.** One of the things that depends almost entirely on the discretion of the teacher is how much agency the children get to exercise in the classroom. The Para Worker's Guidebook (ICDP, 2015) mentions allowing them some autonomy and utilizing their imagination during creative tasks, but does not go into details. The teacher uses her knowledge about the students and contextual information such as the task at hand or the mood of the class to make decisions as to the extent of freedom children are to have in directing their own learning, and when to allow or encourage it, while maintaining a balance between promoting a child's sense of self and ensuring discipline in the classroom.

The teacher mentioned in the interview that in her own observation, the students prefer 'do-as-you-like' activities compared to ones with a specific set of instructions, and she generally tries not to force them.

I observed an example of this during a songs and rhymes (assessment) activity. The teacher was going around the circle of students asking them one by one to sing or recite one song or rhyme from what they have learned so far. They were free to choose any from either language. One child, when asked to recite or sing, expressed unwillingness. The teacher confirmed with her

that she indeed did not want to participate at the moment, then moved on to the next student. It is relevant to note that this child usually participates in all activities and this was not a regular issue with her.

The teacher also talked about children using agency in classroom while talking about engaging activities in her interview. During the wordless picture book reading activity – one of the activities most effective to hold their attention, according to the teacher – the children not only take part in creating the story, as intended by curriculum design, but also bring up personal experiences related to the topic, and even ask the teacher to share similar experiences from her own life, thus directing the course of the lesson and teacher participation. This was corroborated by the researcher's observation of the Picture Reading activity.

This kind of spontaneous participation from the students was found to be encouraged by the teacher with verbal affirmations, informed by both the teacher interview and field observation.

*4.1.1.4 Teacher-student relational.* In addition to trust, other valuable aspects of teacher-student relational were found to include affirmation, empowerment, instilling confidence, promoting healthy relationships, problem solving and disciplining among other things.

The teacher provided words of affirmation and positive reinforcement by way of promoting confidence when students made use of their cultural and linguistic repertoire in class. She allowed them to exercise a certain level of agency both during and between lessons. She encouraged the raising of hands to take turns and to volunteer for certain roles. It worked as an exercise in individuality while establishing discipline in the classroom.

In order to promote healthy relationships between students the teacher modeled strategies of pro-social behavior, e.g. exercising fairness and empathy, and working in teams.

One of the guided play activities involved two students making a tower by joining their hands and feet, and the other students jumping over it one by one (see *Figure 13*). It was an accepted rule that those who fail to jump over with get to keep trying until they succeed, lowering the hurdle with each try if necessary (see *Figure 14*). This way the activity established an environment of fairness and empathy in the classroom.



*Figure 13.* Child jumping over high hurdle. *Figure 14.* Child jumping over low hurdle.

The students also have the responsibility of cleaning up after certain activities, and the task is often completed as a team (see *Figure 15*). Sometimes they will take turns in special roles, for example – one student holding a bag open while the others collect the puzzle pieces to put in the bag (see *Figure 16*).

*Figure 15*. Teamwork during cleanup. *Figure 16*. Student taking turn in special role.

The teacher usually took on the role of problem solver and disciplinarian during conflicts and disruptions. As strategies she mostly used certain tones of voices and warning looks. Occasionally she would discourage disruptive behaviour by negative reinforcement such as withdrawing attention until the child(ren) settled down.

However, she also cultivated independence in students by leaving them in charge of themselves during some routine activities. This was observed especially during age-specific activities where students sat in two separate circles based on their age group and the teacher could only attend to one group at a time. During these times the unsupervised circle quietly worked on their own tasks and showed the work to one another. (see *Figures 17* and *18*)

*Figure 17.* Unsupervised class activity (age group 3-5 years). *Figure 18.* Unsupervised class activity (age group 5-6 years).

### 4.1.1.5 Teacher's value as L1 speaker.

*L1 role model.* As mentioned in an earlier section, the students see the teacher as a role model. In contrast to the broader society where Indigenous people lack representation in media and leadership roles due to a dominant and privileged culture based in their L2, these Indigenous children have the opportunity to have an L1 speaker and a member of their own community as a role model from an early age.

*Knowledge of invisible culture.* Being biculturally competent, the teacher's knowledge of the invisible aspects of the child's culture works as an asset in this program. Although it was difficult for the researchers to make detailed observations on this topic due to the cultural and linguistic differences, certain things were visible even to a casual observer. For example, she uses some tones while speaking with the children (especially while placating or comforting) which I am unfamiliar with as a Bengali speaker but have heard other Chakma speakers use with children.

The students were also observed addressing the teacher with the familiar degree of pronoun, as opposed to the more formal pronoun which would be more commonly used with a teacher in Bengali culture.

*Culturally relevant content.* The program also relies on the teachers to choose a large variety of learning materials and conversation topics to bring into the classroom. As a member of the L1 community and resident of the same village, the teacher is able to incorporate more aspects of their culture into the curriculum to create a culturally responsive environment for the children. These include physical materials as well as examples and anecdotes used by the teacher during lessons.

*Family involvement.* One of the most important aspects of this program is the involvement of family and community members in the early development of children. As part of it, it was observed in this study, especially from the teacher and parent interviews, that there is regular communication between the teacher and the families of the students. As many of the students' parents are not fluent in languages other than Chakma, a shared L1 with the teacher can be crucial in establishing strong relationships and effective communication with them.

**4.1.2 Theme 2: L1 as a bridge.** This pre-primary program is a mother tongue based bilingual program that acknowledges the important role a child's L1 plays in the learning of their L2, and encourages the use of L1 in familiarization, instruction and explanation among other things. The L1 works as a bridge to reach the L2, which the children have little to no relationship with prior to starting in this program.

***4.1.2.1 L1 is means, L2 is destination.*** Based on its curriculum milestones and overall language use, the program appeared to be intended as a transitional program. Although there is

extensive use of L1 throughout the designing which is further added to by the discretion of the teacher, it is only meant to aid in the learning of the children's L2 in preparation for their eventual schooling in Bengali medium.

The only Chakma contents in the curriculum are some songs and rhymes which are part of the early childhood development part of the program. They were included so that the children do not face language problems with the unfamiliar L2 at the beginning of the program (ICDP, 2015, p. 82).

Although the L1 is used as a mode of instruction and in explaining lesson contents, the key words are taught in the L2. For example – during a lesson about pre-math concepts such as 'tall/short', 'high/low', 'big/small' etc. the teacher explained the ideas and asked questions in Chakma, but the words for 'tall', 'short', 'high', 'low' etc. were said in Bengali.

Despite the Chakma language having a written form, it is not included in the program design, possibly owing to the fact that only a small number of people in the Chakma community have literacy in that language.

In terms of vocabulary development, only L2 is emphasized in goals and lesson contents. This can be observed from the word charts, story books, alphabet and word exercises done by the children, self introduction practice etc., as well as the target word lists provided by the program. Upon completion of the program the children are expected to be literate in Bengali with a small vocabulary and communicate certain concepts and personal information in Bengali, with no expectation regarding the development of Chakma.

This is reflected in the language usage in the age-specific activities for the 5-6 years old children where L1 is not used unless necessary.

***4.1.2.2 Valuing first language and culture.*** Although the program does not consider L1 development as a target, and also misses out on some major opportunities by not utilizing the L1 culture as capital more actively, the students' home language and culture are not unwelcome here. Some important features of this program to consider are –

- The use of L1 is not forbidden or frowned upon. If a child needs explanation for something or wants to communicate in L1, it is allowed beyond the recommended period of L1 use without them being reprimanded or punished for it.

- At least initially L2 is not given higher value over L1. For example – the children can choose to perform songs and rhymes from either language and are given positive reinforcement for both.

- Students are encouraged to share their personal experiences from home life and culture. It was observed during several activities and also mentioned by the teacher in her interview.

- The teacher shares her own cultural experiences that are often relatable to students. This was also similarly observed in multiple sets of data.

- At least some of the teaching materials and lesson contents come with images of Chakma people and reflect their culture, although it has significantly reduced in the recent years, as reported by the teacher and found in the analysis of program materials.

As a result of such classroom environment and practices, some important developments in L1 occur despite not being part of the program planning.

*L1 in a broader context.* The classroom practices of this pre-school program provide a space for the use of the children's L1 to happen in a broader context as opposed to only in everyday situations. This creates opportunities for use of an extended vocabulary, including some academic words that are usually absent from language practices at home or even places of socialization, like the playground or market.

For example – a lesson in a subject like Environment, Health & Safety introduces words such as 'health', 'nutrition', 'germs', 'cleanliness', 'daily', 'safe', 'careful', 'environment' etc. Although the target words for these topics are in Bengali and are often directly taught with accompanied explanation in Chakma, occasionally the teacher chooses to use Chakma terms depending on factors like difficulty level or familiarity of sounds.

Besides subject-based lessons, a teacher has a generally formal way of speaking in a classroom including the use of certain jargon. When the teacher is an L1 speaker, like within the subject of this study, and uses the language as a mode of instruction, the children can pick up the vocabulary due to her habitual repetitions. This also adds to their L1 vocabulary.

*Affirmation of identity.* Seeing their own L1 being used in a formal environment such as the classroom has an affirming effect on the children's sense of identity and cultural pride. It also creates opportunities for the students to occasionally take charge and utilize their existing funds of knowledge to initiate conversations (Moll et al, 1992).

For example – a poster on the topic of Environment, Health & Safety includes the picture of a woman in traditional Chakma attire (see *Figure 19*), and the teacher mentioned in the interview that occasionally a child would point it out and exclaim that their mother also wears

similar clothes. The teacher makes a point to affirm these connections made by students, and sometimes adds to it with stories or comments about her own personal connection.



*Figure 19.* Traditional Chakma attire in lesson content.

**4.1.2.3 Making meaning through L1.** The program provides the children a safe space for risk taking in order to make meaning through their L1 knowledge.

Translating and code switching are accepted methods for teaching L2 in this classroom, and the teacher makes extensive use of this in introducing new L2 vocabulary. When a child already knows a word in L1 and recognizes the association with the object in question, the teacher affirms that knowledge and teaches the L2 counterpart. She also takes advantage of the similarities between some Chakma and Bengali words. In her interview she shared an instance of this, when they talked about the word 'rat', which is 'undur' in Chakma and 'indur' in Bengali:

> For example, rats. When they see a rat… 'Didimoni it's Undur!' I said, 'Yes, we call it undur in Chakma. And it's called indur in Bengali.'

The teacher also uses code switching as a strategy in early stages of learning when the children are not ready for full sentences in Bengali, or when she's explaining concepts in Chakma while teaching the terms in Bengali. Often, she gives the children the choice to answer in Chakma even when she is asking questions in Bengali. This was observed in one of the daily greeting sessions:

T: (in Bengali) How are you all?

Ss: (in mix of Bengali and Chakma) Good.

T: (in Bengali) Were there any problems coming to school?

Ss: (in Bengali) No.

T: (in Bengali) What did you eat for breakfast?

Ss: (answer in Chakma)

She incorporates this strategy in her questioning techniques as well.

T: (in Bengali) What day is it?

Ss: (in Bengali) Saturday.

T: (in Chakma) Yesterday was Tuesday, so what day is it today?

Ss: (in Bengali) Wednesday.

T: (in Bengali) How many days make a week?

Ss: (in Bengali) Seven.

**4.1.3 Theme 3: Play as a host to the "third space".** In the bilingual environment of the classroom, the children navigate the intersecting space between the students' home culture based

in their L1 and the school culture practiced within the classroom centered around the L2. The play-based programming acts as a host to this "third space" as it opens up opportunities for the children to move across linguistic and cultural boundaries through the creative freedom it allows.

*4.1.3.1 Doorway into L2 culture.* In this classroom children are being introduced to the L2 language and culture within the universality of play. They are often invited to engage in activities such as singing, rhyming, or playing physical games that involve familiar and even instinctive movements. Even if these activities include words from the L2 or games from the L2 culture that they have not had experience with thus far, the children are still within the comfort zone of the familiar.

For instance – the very first activity involving the L2 a student comes across in this program, is the singing of the national anthem every morning. Despite being new to the language, the child is able to engage and even enjoy participating thanks to the playful elements of music and rhyme.

Play also makes use of other cultural universals such as stories, music, arts, grooming etc. and incorporates them within the classroom culture. This programs especially incorporates songs into many of its activities including learning vocabulary, subject-based lessons, cleaning up together etc. Even though these songs are mostly in Bengali, the children are able to engage quickly because of the rhymes, repetitions and catchy tunes. An example of this was observed during a health lesson when some younger students, although unable to answer questions on the topic by themselves, could sing the related song in full, thus receiving positive feedback for participation, while taking the first steps into learning the concepts and the words associated with them.

***4.1.3.2 Two cultures sharing an intersecting space.*** Within play, and by extension, in the classroom, the L1 and L2 cultures share a space, without any obviously visible hierarchy, as opposed to the picture seen in the Bangladeshi society.

The program offers songs and rhymes in both languages. For individual participation they are given the freedom to choose items from either language. Often during group activities as well, the teacher asks the class if they want to sing or recite a particular song or rhyme, and they choose either from the Chakma songs or the Bengali ones.

They are also playful activities that does not have any language restriction, such as the 'Picture Reading' activity (see *Figure 20*). It consists of wordless picture stories that the students and teachers 'read' together. Besides exercising creativity, it allows children to spontaneously utilize their linguistic repertoires, especially in L1 and occasionally use translanguaging as a communication strategy.



*Figure 20.* Picture cards used in creative storytelling activity.

One exception to this would be the written materials available in the classroom, as the program does not include the Chakma writing system, or Chakma written in Bengali script,

which is often used in the practice of Chakma literature. Because of this the children do not see their L1 being represented in the storybooks or lesson posters.

However, despite the absence of the Chakma language, some of these materials do include culturally relevant images which motivate children to initiate conversations and use culturally relevant vocabulary. For example, the images of traditionally clothed people mentioned in an earlier section.

*4.1.3.3 Bringing home into school.* During play-based activities, especially through the materials used in them, the students' home culture is brought into the classroom and incorporated with their learning process.



*Figure 21.* Braided 'tails' made of traditionally spun fibre. *Figure 22.* Practicing oral hygiene through play acting. Child second from left pretending to be water pump.

This pre-primary program encourages teachers to make use of local and improvised materials in class activities. For example – a game involving students chasing each other and pulling their 'tails' off uses a braided tails tied around the students' waists (see *Figure 21*). The

braid is made of fibre that is spun by members of the Chakma community and is the material used to weave their traditional clothing. Another activity has one student pretend to be a water pump similar to those used locally (see *Figure 22*), while the others pretend to pump water using their arm, in practicing oral hygiene through play acting.

Play based activities can also bring home life into the classroom through the students themselves. The Picture Reading activity, among others, enable children to share their own experiences involving close and extended family members and the cultural aspects embedded in them. They can also make use of examples from life in play acting by themselves, both with and without the program or teacher provided materials, during unguided play (see *Figure 23*), often by imitating adults in their lives including family members.



*Figure 23.* Children engaging in unguided play outside the classroom.

One important way the program connects home life to school is by being open to the presence of family and community members within the classroom, as seen in *Figure 24*. Play makes it easier for them to get involved in the activities their children are participating in. It is

especially useful for the family members who are not literate and thus cannot help the children much with schoolwork when they are at home.



*Figure 24.* Presence of family members in classroom during pre-writing activity.

*4.1.3.4 Bringing school into home.* Just as bringing home life into the classroom, the program also helps the children bring their school life back to their homes. While children from any schooling program often tend to do that by talking to their family members about school and imitating their teachers, the play-based nature of this pre-school program especially enables them to convey most of their learnings to their families.

It was consistent in all of the parent interviews that the children often talk about school at home and also teach the days' lessons to their parents. Some children even try to recreate classroom activities at home by pretending to be the teacher and having family members play-act as students. One mother emphasised that her son includes "even his father" in these activities, possibly indicating that the father has less involvement otherwise. The mother of the youngest (unregistered) child mentioned that her daughter tends to talk more at home than at school, and

she very clearly describes her school activities, and although she is not yet in the habit of studying at home, she often practices school activities during her playtimes.

The activities the children are most often seen to re-enact at home are the play-based activities, such as – songs, rhymes, physical exercises, storytelling etc. This shows deep engagement and enjoyment that helps them learn the lesson contents by heart and find joy in sharing with loved ones. This is confirmed by what the teacher shared in her interview regarding most engaging activities in the classroom.

The parents and teacher also note that the children's talk at home is very school centered, making them initiate conversations at home that would otherwise not happen. It leads to more extensive use of L1 with family, including the use of more advanced vocabulary, and increased parent involvement in the lives and learning of their children.

## 4.2 Secondary Findings

In addition to these major themes there were also some secondary findings that emerged from this study. They did not strictly fit into the 3 themes but were worth being noted due their potential to impact the language and early childhood development of the children.

**4.2.1 Para Centre as community space.** The Para Centre, where the classes for the pre-primary program are held, functions as a space for most of the ICDP activities in the village, namely – meetings, vaccinations, registrations, adolescent girls' club etc. Through these activities the Centre becomes a communal space that brings them together through a shared sense of ownership as well as responsibility.

Sometimes during school hours, the students' mothers, grandmothers, or aunts sit at the back and work on their own tasks while being near the children. At other times older children

visit the class if they leave school early, or if they have their own club activities after pre-school classes are over, and help the students in class activities. On one occasion, a father was seen visiting during class hours, though most often the male community members are busy working in the field during the day. There was also a carrom board seen at the back of the room which indicates that it might also be used as a space for leisurely activities after the working hours, presumably by male members of the community as carrom is commonly played by men in Bangladeshi villages.

Although the ICDP takes the initiative to build the Para Centres, the local community contributes in its construction and maintenance. The interior of the room reflects its connection to all the members of the community in the display of statistical charts and village maps.

With the Para Centre as a common space used by all members of the community, it creates a vested interest among them in the space, and in turn, one another's lives.

**4.2.2 Welcoming diverse learners.** An important feature that was noted about this program was that it is open to accepting diverse learners of different ages and abilities. In particular, welcoming developmentally delayed children or children with other disabilities is not very common in Bangladeshi schools, especially in rural areas.

The pre-school class showed flexibility in welcoming children who are too young to be registered in the program. As mentioned earlier, one of the participants of this research was only 2 and a half years old at the time of data collection, and was not registered as a student yet. However, she was allowed to take part in regular class activities with the other students. Even within the 4-week period of the study, she showed development in terms of socialization and participation. Another unregistered child, younger than the girl, was occasionally seen visiting

the classroom. He did not attend all lessons but took part in some play-based activities and was starting to become familiar with the classroom and the people.

Another student, though in the age group of 5-6 years, was allowed to take part in age specific activities with the 3-5 years old group, due to delays in his cognitive development. Rather than push him to graduate the program with other students of his age, the teacher let him take it in his own pace. Despite being behind, he had made significant progress in socialization and was able to learn some reading and writing.

**4.2.3 Emphasis on literacy tools.** This program, especially through initiatives taken by the teacher, greatly emphasises the use of fine motor manipulatives and fine motor literacy play, starting at a very early age. Even before the children reach the age of pre-primary schooling, the teacher encourages the parents to provide them with early literacy tools such as chalk and chalkboard as play materials. Consequently, by the time they enter the classroom, they are already comfortable with and even drawn towards these tools and eager to play with them. Early habits in manipulating these tools, in addition to guided and unguided play with materials provided by the program (blocks or puzzle pieces) in the classroom result in the development of good pincer grip, sometimes ahead of expected developmental milestones, as well as numeracy understanding and spatial awareness, which is reflected in their pre-writing (see *Figure 25*) and writing samples (see *Figure 26*) throughout their time in the pre-primary program.
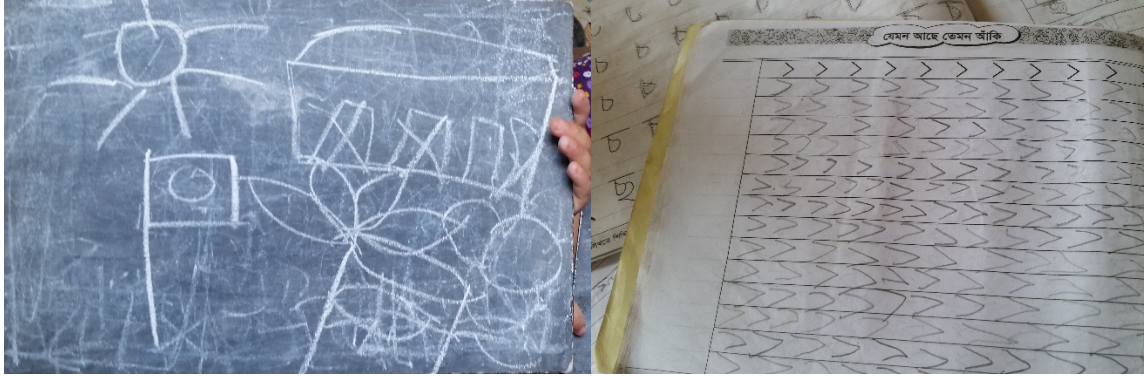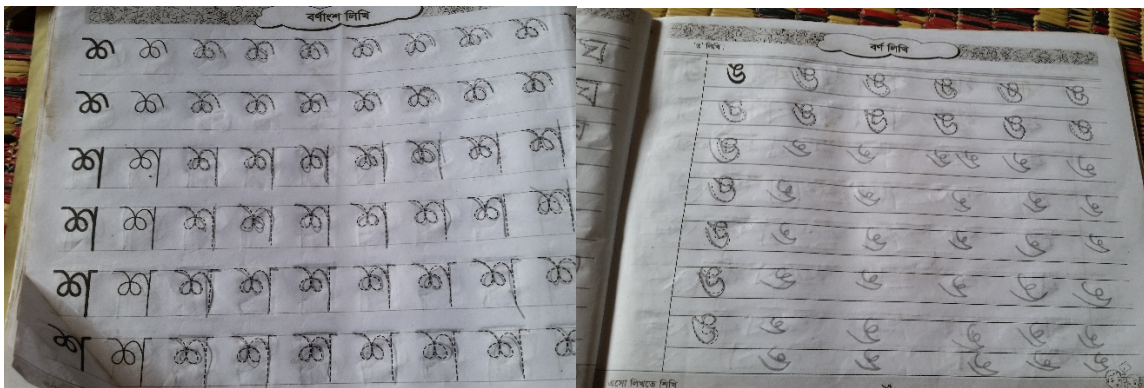
*Figure 25.* Pre-writing samples of children.



*Figure 26.* Writing samples of children.

**Chapter 5: Discussion**

This chapter connects the major research findings to the four guiding questions and the underlying theoretical information reviewed in Ch. 2 to bring a sense of completion and cohesion to this inquiry. It is organized around these questions, revisiting the initial motivation to engage in this research. The discussion often overlaps across the four questions since they are closely intertwined and together form an integrated explanation for the case under study. Importantly, the discussion also points to areas of strengths, missed opportunities, the larger idea of loss. These points are addressed after the discussion linked to the research questions. Finally, the discussion identifies important programming and policy implications that are addressed in Chapter 6.

**5.1 Connecting Findings to Theory**

The theoretical framework presented in Chapter 2 illustrates the theoretical underpinning for bilingual/bicultural development, the role of the teacher, and culturally responsive pedagogy in early childhood learning. All three elements are supported by play which provides a context for them to be put into practice. The findings of this inquiry confirm the implications of this framework in that a culturally responsive approach and bilingual practices in the classroom provide a structure for the pre-primary program, supported by a play-based programming. However, the role of the teacher proved to be much more central and far-reaching in terms of impact on the children's learning. This new insight would be better represented through a new visual that puts the teacher in a central position and shows the influence of her instructional repertoire on the programming itself. To that end, the essential elements of the exhaustive description of the findings were condensed to form the following visual structure (illustrated in *Figure 28*) that embodies the findings of the study.

In forming this visual representation (*Figure 28*) I took inspiration from the Ojibwe

legend of the Spider Woman, or *Asibikaashi* (Densmore, 1979; Ojibwe dream catcher history,

n.d.), as well as the construction process of spiderwebs.
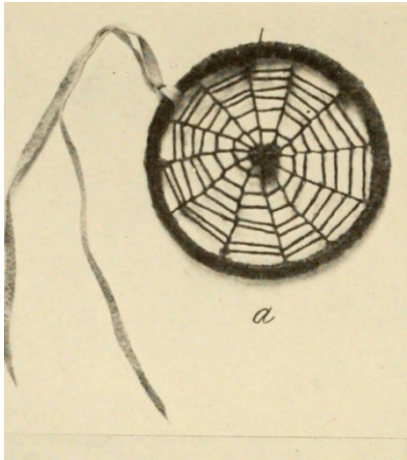


*Figure 27.* Ojibwe spiderweb charm (Smithsonian Institution, *Bureau of American Ethnology,*
1929, plate 24).

*Asibikaashi* is protector of children. With the spread of Ojibwe Nation, she "had a

difficult time making her journey to all those cradle boards" (Ojibwe dream catcher history, n.d.)

and so mothers, grandmothers and sisters started making spiderweb charms (see *Figure 27*) to

hang over infants' cradles. In *Figure 28* the spider represents the teacher, and the web her central

role in the pre-primary program.
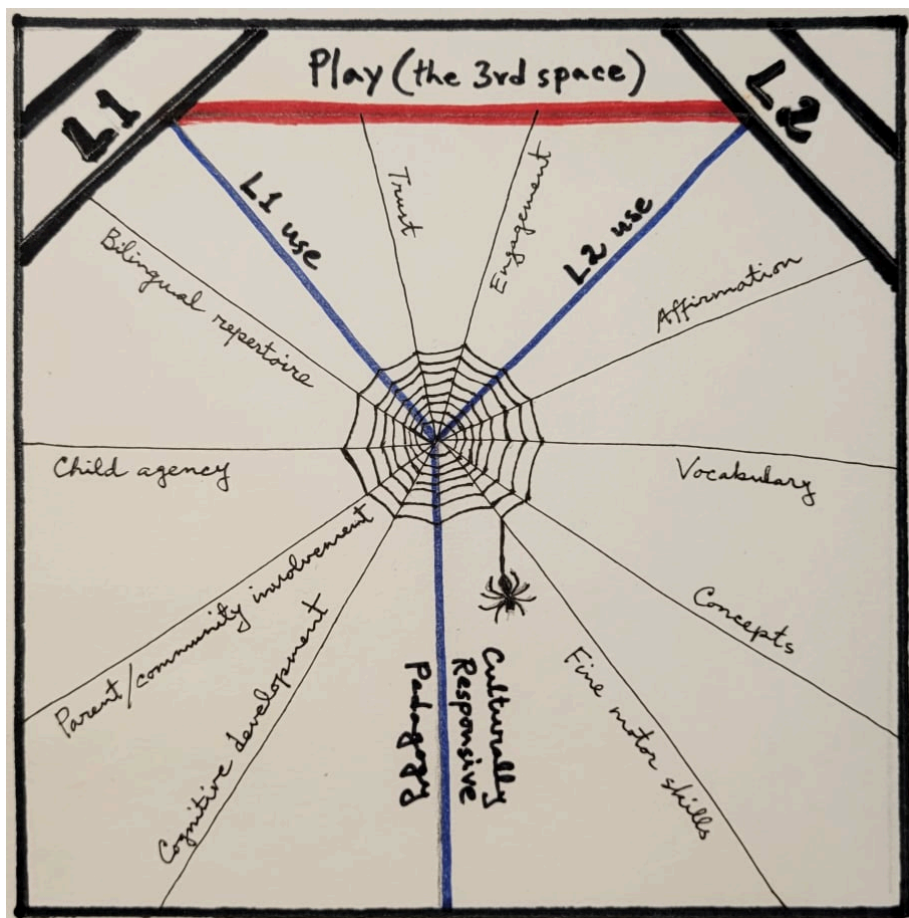
*Figure 28.* Visual representation of findings, illustrated through a spiderweb metaphor.

Key features of a spider's web are integrity, durability, connection, strength. Like the first connecting strand of a spiderweb – made strong by overlapping threads – that the rest of the web hangs from, the play-based programming creates a connection between L1 and L2 culture within the third space, and provides a strong support for culturally responsive bilingual practices. The Y-shaped threads that creates the initial structure for the web represent the extensive use of L1 and L2, as well as the culturally responsive approach that the program designing provides. Teacher centrality, which emerged as the single most important finding of this study, and her discretionary actions such as dialogic talk, differentiated instruction and decision making, especially with regards to balancing the use of L1 and L2, are what enables the program to reach

its full potential by eliciting results, i.e. engagement, affirmation, trust, child agency and self-esteem, vocabulary and concept development, cognitive and fine motor development, developing a bilingual repertoire, and encouraging parent and community involvement in the children's learning.

**5.1.1 Question 1.** How does *play based learning* support/encourage/promote cognitive and language development in a bi-lingual transitional K program?

Play is a cultural universality that taps every child's intuitive drive to engage with their material environment (Vygotsky, 1967/2016). Whether it is child initiated or adult initiated, within a controlled environment or not, play allows children a certain degree of freedom to act with the simple purpose of enjoyment and fulfillment. It helps them acquire and/or develop important cognitive and motor skills before they are fully ready to begin learning from a formal schooling experience, as observed in case of the youngest participants of this study. A unique feature of this classroom was welcoming students even before they reach the age of registration, which allows them opportunities for early development that they may not have had access to at home, whether due to differences in home literacy practices, or a lack of parent-child interaction, especially in families of low socioeconomic status. This kind of early start was made possible largely because of the play-based nature of this pre-school program, as young children are able to participate in the activities by a predisposition for play.

At ages 3-6 children are seen as concrete operational learners (Belyh, 2019; Elkind 1968) benefiting most of all from experiential learning (Dewey, 1897) and direct involvement in the material world. This develops the hand-brain complex that leads to constructing internal mental models of the external world that children eventually access through language. Adult initiated or guided play provides a scaffold for the children to work with. It gives them appropriate

challenges within their ZPD while they experience the new and unfamiliar with direct sensory engagement. Play especially gives children a lot of opportunities to use and develop their fine motor skills through tactile engagement with materials, including familiar ones from their everyday life, for example playing with a kitchen set or simply, some sticks.

Play works as a host to the 'third space' that children negotiate and navigate as they bring their home life to school and their school life back to their family and community life (Dewey, 1897). A key aspect that enables them to do so is deep engagement with the world around them as well as the classroom culture and people through play.

In addition to itself being a cultural universal, play also exploits other cultural universals such as music and rhyming for children to be able to explore a new language before entering the context of formal learning. This saves the children the disorienting feeling of culture shock, which happens often when Indigenous children begin schooling in the L2 mainstream after having spent the first few years of their lives in an almost exclusively L1 lifestyle that grows around family and community. Play makes it more natural for the children to engage with new elements coming from an unfamiliar place. It allows them a safe space for risk taking and meaning making by utilizing their existing linguistic repertoire.

Due to a flexibility in structure, a play-based curriculum also makes it easier to implement culturally responsive practices including the use of culturally relevant materials, and the involvement of family and community members, creating an overall culturally responsive environment within the classroom.

**5.1.2 Question 2.** What dimensions of teachers' *instructional repertoire and presence* in the classroom make a difference by supporting, encouraging and engaging young learners in

actively making meaning, and developing cognitive skills and understandings through guided play in L1 and L2?

In this study, teacher presence was found to be the single most important element of the play-based bilingual program in focus. Aspects of this include – decision making, differentiated instruction, teacher talk, and relational.

As any teacher, especially with young kids, is required to do, the teacher in this program made numerous in-the-moment decisions based on situation, classroom diversity, language needs, learning opportunity etc. With the increasing classroom diversity in today's world (Volante, DeLuca & Klinger, 2019) it is also crucial that the teacher is able to see the students as individuals with unique needs and strengths. It was observed as strength of the program that it provided broad instructions on topics that require a certain level of teacher discretion which made way for the teacher to draw information from her students and surroundings to aid in her decision-making process. Combined with her own instincts, she can make decisions on matters of L1 and L2 use (e.g. balancing between the languages, translating, transferring, translanguaging, code switching etc.), establishing authority (setting boundaries and expectations in the form of routines, rules and roles for everyone), promoting student self-esteem (through culturally responsive practices among other strategies), engaging community members etc.

Teacher discretion is especially important when the class is comprised of students of a varying demographic and language needs. *Differentiated instruction* (Tomlinson et al, 2003) made it possible for the program to accommodate a diverse array of students from mixed age groups, socioeconomic background, personalities and abilities. For example, while in group with the 3-5 years old students during a pre-writing activity, the teacher provided scaffolding by hand-over-hand support (see *Figure 29*) for the young learner just starting with a pencil grip. She also

approaches with adjusted expectations for the young learner with a developmental delay, and

accommodates him when he needs more time than his peers in meeting certain goals of the

program.



*Figure 29.* Teacher providing hand-over-hand support to young child during pre-writing.

*Dialogic talk* or talk with pedagogical intent was a key feature of her instructional

repertoire in interacting with and supporting the students. Among other types of talk is

affirmation that bolsters a student's identity and sense of self as an individual.

The role of teacher-talk and her discretionary use of L1 and L2 to support transition was

noted in the findings.  Further, she drew on children's familiar world and their complete

repertoire of cultural and linguistic capital (Moll et al, 1992).

Enormous flexibility to include a diverse age, ability etc. and an effortless, seamless

ability to respond to children as individuals, for example, allowing a child the freedom not to

'take time off' from an activity because of personal reasons, reinforces the child's dignity and

sense of self worth.

**5.1.3 Question 3.** How does *culturally responsive pedagogy* create a learning environment that promotes a sense of empowerment, agency, self-esteem that underlies risk taking and discovery?

A culturally responsive approach in teaching draws on a child's full range of existing cultural and linguistic capital in both languages (Moll et al., 1992). It gives the child an opportunity to become aware of and utilize their own knowledge in navigating the classroom and L2 culture, thus affirming their identity and bolstering self-confidence.

In the program under observation, children are encouraged in contributing to a lesson by adding their own inputs related to personal experience, which is often guided by the teacher, through conversation or sharing her own experience. Use of their L1 is welcome in these activities, leading to students making use of their complete linguistic repertoire, occasionally by way of translanguaging. This creates a place of respect within the classroom where the children's L1 is given validity and status (Cummins et al., 2005). This can be further reinforced by introducing more culturally relevant materials and making use of rich cultural resources such as the knowledge of elders and practices of artistic expressions, including music and craft (Morcom & Roy, 2019).

A teacher belonging to the L1 community can especially bring value to this practice by relating to the students through their shared cultural experiences. Having an L1 role model within the classroom strengthens the students' sense of pride in their culture.

Besides reinforcing cultural pride, culturally responsive pedagogy can also affirm children's sense of individuality and self-esteem (Morcom, 2017), especially through activities where their similarities and differences, and respective home life are explored. For example, the

sharing activity where each talk about their own clothing, including colours and stories behind them.

Exercising choices during lessons, volunteering for tasks, having roles during team activities and play, responsibilities such as cleaning up after oneself, raising hand in order to be picked etc. also evoke a sense of self-esteem within the child.

**5.1.4 Question 4.** How does the bi-lingual transitional K program invite involvement and participation of the larger school and Chakma community?

The Integrated Community Development Project was initiated with the aim of promoting community involvement in their own welfare, starting with the construction and maintenance of the Para Centre itself. This attitude extends into the pre-primary program. The teacher, as para worker, has regular communication with the parents of the students which revolve around various activities concerning the village. In the process she has built a strong and lasting relationship with them based on trust. This trust allows the teacher to approach them within a degree of comfort regarding their home literacy practices and help them contribute in the learning of their children., as they also consider her a reliable authority on these matters.

The community's shared connection to the Para Centre also allows them to have candid knowledge of their children's education. Immediate and extended family members can be present in class and occasionally accompany the children during activities. A culturally responsive play-based approach enables them to get involved within the limitations of their socioeconomic and educational backgrounds as well as availability, which can often be difficult in the context of a rural farming community.

The following part of the discussion talks about some of the strengths of the program and some missed opportunities that can potentially be made use of towards a stronger culturally responsive bilingual pedagogy.

**5.2 Strengths of the Program**

This pre-school program ensures early intervention for the children of the community, which gives them a strong head start before starting mainstream schooling in L2. Early play-based interventions such as this help avoid remedial efforts down stream, which usually prove to be less effective, more costly, and often leaving lasting negative impacts on sense of identity and self-esteem.

Culturally responsive practices are employed in the classroom through use of relatable materials from everyday life within the L1 community, and culturally relevant lesson contents including images, stories, and participatory input from both the teacher and the students. Such practices create a two-way dynamic of 'the third space' at the intersection of the L1 and L2 cultures that enable the children to bring their home life into school and vice versa (Dewey, 1897), potentially transforming home literacy and parenting practices for the better.

However, the biggest strengths observed in this study are probably the implementation of play-based programming, and the para worker.

*Figure 30.* Children engaging in guided play with teacher. Arranging felt shapes into patterns provided in activity book.

The program exploits the potential of play in engaging children in activities (see *Figure 30*) that lead them into interactions with their environment and the people within it (Vygotsky, 1967/2016). Through play they get to take part in experiential learning within their appropriate age groups, which is beneficial in early childhood development (Dewey, 1897; Belyh, 2019; Elkind 1968).

The teacher, who also serves as the para worker, is selected from within the village and serves in the role of a representative in community building activities, thus forming strong bonds with community members including students and their families. This establishes a sense of trust integral to her teaching practices (Roessingh, 2006). Her membership in the community, bilingual repertoire, and long-term familiarity with the children play important roles in her strength as a teacher.

Particularly noteworthy is the fact that the teacher is allowed discretion in exercising pedagogical practices which enables her to make extensive use of L1 both in building relational

within the classroom and in the learning of L2. In the process, some progress is made in the development of their L1 which, albeit unintentional, comes as a serendipitous bi-product out of the program design.

**5.3 Missed Opportunities**

Despite having multiple strengths, the program unfortunately misses out on some opportunities when it comes to making use of the children's cultural capital.

The teacher training and guidebook teach a culturally responsive approach and recommend use of culturally relevant materials beyond those supplied or suggested by the program. However, the classroom displayed a scarcity of such materials and lack of activities that make use of them. The program itself provides mostly Bengali and western-inspired play materials and relies on the teacher to provide local and cultural items. There is much potential to engage children in activities involving colorful threads, beads, buttons, local plants, seeds, bamboo, pebbles, Chakma style fabric, basket, kitchen and farming equipment etc. The revised Para Workers Guidebook (ICDP, 2015) does show some promise in making improvements in this aspect, but at the time of this study the changes had not been implemented yet.

Moreover, since the launch of official pre-primary textbooks by the Government, the program has stopped using their own textbook which was developed in collaboration with Indigenous artists and reflected culturally relevant images such as that of local bamboo housing, traditional farming methods, Indigenous people in professional fields of endeavour, and even lesson questions using examples of Para Centre and para worker (see *Figure 31*).
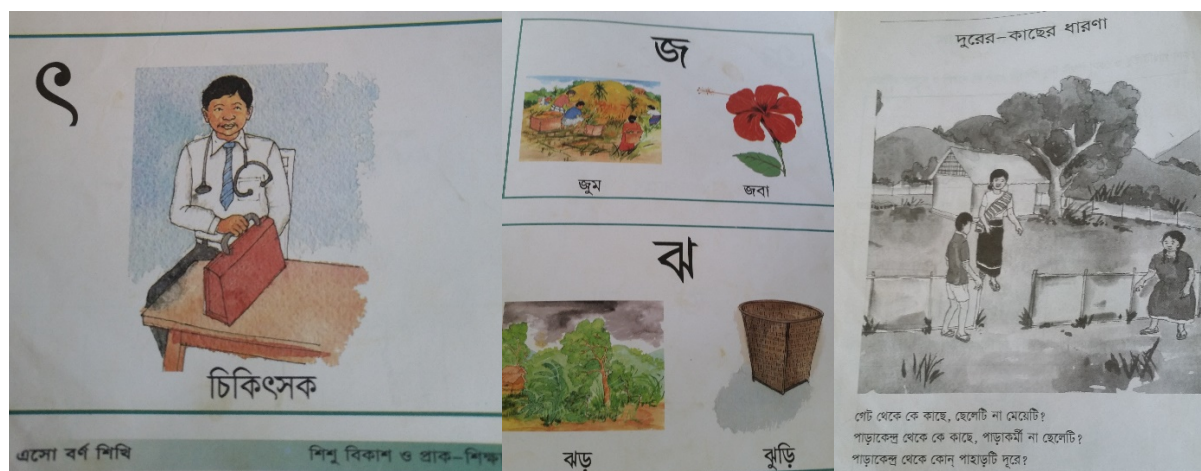
*Figure 31.* Textbook previously used in the program, showing culturally relevant content.

The program also does not involve parents and other family and community members in the lesson planning. They are welcome in the classroom which adds to the strength of the program, but it misses the opportunity to recognize and use the rich cultural resources they bring to the table. For example – one of the students' grandmothers was seen to be present during a storytelling activity. She sat in the circle with the children, as seen in *Figure 32,* and listened to the teacher as she told a story from a book. On such occasions the teacher can easily invite the elder to share stories of her own, adding to the richness of the culturally responsive pedagogy and L1 use in the classroom. Similarly other community members might be invited to circle activities and participate in making music or dancing with the children. In addition, just as the teacher is asked by the program to add to its collection of songs and rhymes in the Indigenous languages, other community members can also be asked to make such contributions.

*Figure 32.* Grandmother sitting in circle with children during storytelling activity.

To that end, dual language songs and rhymes can also be practiced in the classroom. Especially notable is the song 'We Shall Overcome' which is already taught to these children in Bengali. Since it is a song that is sung all over the world in many languages, it would be a great opportunity to translate it into Chakma and other Indigenous languages and shared between communities, not only as a way to practice one's L1, but also to promote pride in cultural diversity.

Though not part of the programming, use of technology was seen on occasion when the teacher or visitors shared YouTube videos of children's songs with the students after school hours. They were mostly focused around Bengali and English rhymes. The program could make use of the available technology in the community and promote Indigenous culture by recommending Chakma YouTube channels. Initiatives could also be taken to launch new YouTube channels and blogs focused exclusively on making and distributing L1 content for children.

**5.4 Lessons Learned & Potential Impacts**

As this case study offers an in-depth look at the teaching and learning practices in a bilingual pre-primary program, there are important lessons to be learned from it, in particular regarding the role of the teacher, the promises of a play-based programming, and the transitional nature of the program. The potential impacts of these findings in the language learning of these young children are far reaching and goes well beyond the confines of early childhood and education. This section draws on the findings as well as the literature review, which includes the broader literature on language development and language loss, to emphasize the importance of this study and the urgency to take action based on the cautions it raises. This discussion connects the findings back to the literature review from Chapter 2, including the theoretical framework.

While the classroom under study demonstrated good play-based programming for early childhood development, a threat of loss pervades the findings of this research. It includes the loss of L1 development for the children due to lack of emphasis on vocabulary, the loss of progress made in the early years for lack of sustained programming, and in the long run, the loss of proficient speakers for the Chakma language, leading to an eventual language shift and, possibly, language death.

**5.4.1 Lessons from the current inquiry.** The biggest insight garnered from this case study was the centrality of the teacher in a bilingual early childhood program. The teacher's own bilingual/bicultural repertoire and discretionary pedagogical practices are significant strengths when it comes to teaching young indigenous students and preparing them to function as bilinguals in an L2-dominated society. The study also highlights the crucial role of play, not only in early childhood development, but also when it comes to implementing culturally responsive practices in the classroom, in turn contributing to self-esteem and cultural identity.

The major concern regarding this pre-primary program is its transitional nature, making it a 'weak' bilingual program that may lead to subtractive bilingualism with devastating consequences for the language and its speakers (Usborne et al., 2009, as cited in Morcom & Roy, 2019). To make it into a 'strong' bilingual program, it needs to be aimed at the revitalization of the Indigenous L1 with a focus on extended and sustained use of the language and building proficiency in it. This would mean setting concrete milestone targets for both L1 and L2, with proper tools and strategies for assessment of progress (Ball, 2021).

In addition to strong bilingual practices, this programming needs to be sustained into the years of primary schooling, at the very least, up to Grade 4, the first big literacy threshold. Abrupt shift into L2 at the start of primary may undermine and destabilize the child's L1 too soon (Cummins, 1982), leading to significant language loss.

Subtractive bilingualism among young learners not only results in the loss of one's L1 but can also affect L2 development due to weak underlying proficiency in L1. Here we can recall the metaphor of the iceberg illustrating that when L1 'melt' occurs we have shallow underlying proficiency for children to draw on for transfer to the L2 context. Often this melt goes unnoticed until Grade 3 or 4, and if we rely on remedial actions further down the road, we make the children aim for a moving target in L2 which they may never catch up with. In many cases, eventually the child ends up with underdeveloped proficiency in both languages, preventing them from ever achieving academic success (Cummins, 1982; Wong Fillmore, 1991).

Unfortunately, academic success is often the least of their worries when language shift and loss lead to the loss of culture and identity for a person, affecting not only self-esteem but also vital relationships within families (Wong Fillmore, 1991). The resulting disconnect has far reaching consequences well into a person's adulthood and beyond that can range from difficulty

carrying on family or cultural values to the loss of an entire knowledge system. This means that for Indigenous communities, especially those with cultures of orality, the urgency behind the call for better stewardship for the languages to be revitalized is much graver.

*5.4.2 A home you cannot return to* – **the theme of loss**. The most devastating consequence of losings one's language possibly comes in the form of a loss of identity itself. In the writings of authors who, whether personally or culturally, have experienced linguistic vulnerability, we see time and again the themes of disconnect, displacement, and an often-ineffable longing (Crossley-Baxter 2021; de Meijer, 2020). Looking to languages other than English for a way to capture the feeling it evokes, we find words like '*hiraeth*', '*saudade*', and '*gù xiāng*'.

*Hiraeth* is a heavily nuanced, highly cultural Welsh word, expressing a feeling which is unique but far from uncommon – a feeling summarized by Crossley-Baxter (2021) as "A blend of homesickness, nostalgia and longing, […] a pull on the heart that conveys a distinct feeling of missing something irretrievably lost". It is intrinsically connected to the Welsh identity, bringing together the entire Welsh diaspora in their sentiments about land, language and loss.

The word has been compared to the Portuguese word *saudade*, a sadness or longing for something that is absent. Portuguese lawyer, grammarian and historian Duarte Nunes de Leão (1530-1608) defines it as, "Memory of a thing with the desire for this same thing." (Santoro, 2013, p. 929)

*Gù xiāng* from Chinese, on the other hand, denotes a place. It shares the literal meaning of 'hometown' with another Chinese word *jiā xiāng*, except that is a hometown you can visit

anytime, while *gù xiāng* comes with a connotation of "no-moreness," not unlike *hiraeth* – it's a home you can no longer return to.

These words not only demonstrate the complex nature of losing one's sense of identity and connection to their origin, but they can also stand as examples of how, with the continued death of languages all over the world, we could be losing entire concepts from humanity's collective repertoire (Prodanovic, 2013). The death of a language, then, is really the death of a little part of humanity itself. And for an individual belonging to the language, losing it is losing something "essential for [their] sense of roots, security, identity, pride, continuity and wholeness" (Wallace, 2009).

I do not know if the Chakma language has a word that captures this sort of longing for land and roots, but this emotion of loss is felt nonetheless and can be seen reflected in works by Chakma authors. For Indigenous peoples the loss is all the more heartbreaking since, due to linguistic, cultural and political domination by those in power, the disconnect from one's roots is felt while standing on one's very own land. The *hiraeth,* that pull towards your language and culture, still remains though. As Sudipta Chakma Mikado (2013) writes –

> Where is our home, mom?
>
> This is our home, son.
>
> There, that hill and beyond it,
>
> your forefathers used to do their digging there.
>
> […]
>
> But back home, it's a story of deception and agony.
>
> The country has given them the right
>
> to usurp the indigenous.

Still – if I am asked

I would choose to be born here again

in this wonderful world

with my friends: we would have done the digging.

## Chapter 6: Summary, Conclusions & Recommendations

This chapter begins with a brief summary of the study and is followed by conclusions – framed as 'promises' and 'cautions' that connect to both the theoretical framework and extant research especially on early childhood second language and literacy learning among Indigenous youngsters. Recommendations and questions that evolve from this inquiry are presented next, including thoughts about gaps in our current understandings that future research can address, building on two Canadian studies cited throughout this thesis. The chapter ends on a hopeful note for the Chakma community.

### 6.1 Summary

This inquiry investigates the effects of an early bilingual play-based intervention among Chakma youngsters in the small, remote community in Rangamati, part of the Chittagong Hill Tracts area in Bangladesh. A case study research approach is adopted to glean deep qualitative insights into various dimensions of the program and its implementation while embedded in the classroom setting for 4 weeks. Photographic evidence, field notes and a reflective journal, interview data and artifacts of children's learning constitute the data, analyzed holistically for emergent themes. Three key themes are identified in the findings: the centrality of the teacher, the value of the first language and culture in accounting for a number of outcomes, and the importance of play as a space for engaging children in purposeful, meaningful 'work' that promotes the goals of early childhood learning – especially in setting the foundations of language and early literacy learning yet to come. A series of promises and cautions evolve from this inquiry. They are presented next.

**6.1.1 Promises.** Like many programs in the mold of 'Head Start' the rationale for an early start relates to the need to intervene in an early moment of children's language, cognitive, social, emotional and fine motor development in order to prepare them and level the playing field for their participation by Grade 1, especially among youngsters raised in poverty (Gray, 2020; Hechinger report, 2015) or of language minority status (Government of Canada, 2018; Short & Sutherland, 1989). Ignoring these early learning needs simply means remedial programing downstream when the achievement gap is more difficult to close, the costs of programming rise, and collateral effects such as lack of confidence with school-based tasks, low self esteem and lack of motivation for school too often lead to higher drop out rates (Ferguson, 2021). The immediate, short-term impact of the program appeared positive and was welcomed by the community as well. Children developed foundational Bangla and socialization patterns and expectations for attending Grade 1 by age 6. On the count of *timing*, therefore, the program under investigation looked promising.

Secondly, the program adheres to many tenets of good early childhood pedagogy and practices: play, music, story telling, artwork, a good focus on fine motor manipulative and fine motor literacy skills (Borghi et al, 2011; Eisazadeh, Rajendram, & Portier, 2017; Suggate & Stoeger, 2014; Suggate, Stoeger, & Pufke, 2016) and many efforts to engage children in active, motivating, authentic work. More academic-like work associated with decoding and reading can wait. In fact, premature focus on such skills might give a temporary boost to children, but these are found to wash out within a couple of years (Suggate, Schaughency, & Reese, 2013). A *play-based approach*, therefore, was a second promising choice.

Thirdly, the *judicious use of L1 and L2* allowed the children to build a bilingual repertoire. The program permits generous teacher discretion in deciding how much of which

language, at what time, and for what purposes. Thus, when explaining new concept information, she might use L1 but then teach for transfer to L2 in guided practice and reinforcement activities, gradually shifting to more L2 use as the school term unfolds. This, therefore, was another promising feature of the program.

Fourth, improved *home literacy* practices were noted as children 'take back' to their family ideas for early literacy learning, and the teacher communicates with the families to promote the use of tools for literacy development (chalk/pencil).

Finally, a sense of *cultural pride* and a fluid movement within what was earlier described as 'the third space' between first and second language and culture was visible in children's willingness to volunteer answers in class. The teacher perceived and exploited what is described in the literature as 'funds of knowledge' (Moll et al, 1992) within the broad frame of culturally responsive pedagogy.

**6.1.2 Cautions.** Despite the identified strengths of the program a number of cautions were also identified. Left unaddressed, these could have serious, negative consequences not immediately apparent.

First and most obvious among the cautions is the explicit goal of preparing the children for the *mainstream, inclusive* class setting coming in the year ahead (UNICEF Bangladesh, 2016b, p. 40). This goal is common to many early intervention programs mentioned earlier (e.g. Short & Sutherland, 1989), and no doubt is well intended and well received under the logic of equity in participation at least at the 'start line' of the grade 1-10 trajectory (primary to high school in the Bangladeshi education system). The hidden costs of mainstreaming and inclusion come only later and are elaborated below.

Language shift and gradual 'melt' and loss is possibly the most negative consequence of assimilationist models, resulting in *subtractive bilingualism*, or under-developed bilingual proficiency over time (Cummins, 1979; 1981). In a similar vein, it becomes important that young learners develop literacy in their L1, ideally to grade 4 level, a threshold identified by many as key to the ability to transfer to L2 literacy (Roberts, 1994).

Finally, low proficiency/beginner language learners are generally exposed to communicative language or BICS (Cummins & Man, 2007; Roessingh & Elgie, 2009), consisting of high frequency words also needed for early literacy development. It is important to also include rich opportunities for academic vocabulary learning, beginning at a young age (Roessingh, 2016, 2018). Read alouds from expository modes of discourse such as the newspaper, for example, can provide this input.

## 6.2 Recommendations

Several recommendations are identified from this inquiry for consideration.

First, 'don't throw the baby out with the bathwater' – that is, the *key promising practices* hold strong potential and should be retained, modified or adapted at the local level. We have already seen instances of such missed opportunity in this study with regards to the culturally relevant textbooks that were discontinued in favor of new government textbooks that are designed primarily for Bengali children. It is important that community engagement and utilization of local expertise and resources are part and parcel of the program design and development including considerations around CRP practices, and elder Indigenous members who can contribute so much in their position of knowledge keepers. The early onset and play-based nature of the program are features that need to be retained. The use of both L1 and L2 are

central, though should be adjusted. A stronger emphasis should be placed on developing L1. In this regard, programs that offer immersion in L1 with more gradual transition to L2 over time appear to have excellent potential as measured in language learning outcomes for both languages at the end of 2-3 years (Morcom & Roy, 2019).

Secondly, there needs to be a more *deliberate focus on vocabulary development and explicit targets for L1 and L2.* In the studies reviewed for this thesis, vocabulary learning was confined to common, high frequency words (e.g. fruit, flowers, birds, colors). Appropriate learning/resource materials will need to be developed for L1 enrichment (Rodriguez, 2021).

Third and of critical importance, the promises of the early years' success that are recorded in the immediate aftermath of the program will be wasted if these efforts are not *sustained* until at least grade 4, mentioned earlier as a key literacy threshold for young learners. A current initiative in revitalizing Gaelic in Nova Scotia (Mercer, 2022) follows a similar program model as proposed by Usborne et al (2012), that is early immersion and gradual, transitional and sustained support for both languages until grade 4.

## 6.3 Questions for Future Research

Throughout the course of this inquiry, it became clear that the extent of research and publication in Indigenous language learning and language programing is under-developed. There is increasing momentum on revitalization efforts not only for Indigenous languages in Canada, but as mentioned other minority languages that are endangered and whose few remaining speakers long for their children to know their mother tongue and culture.

These initiatives hold rich potential for research, including longitudinal studies for achievement outcomes in both L1 and L2.  Assessment tools that are appropriate for children's

early and ongoing vocabulary learning need to be developed. Current assessment tools for vocabulary knowledge are too narrow and should be expanded to include storytelling tasks and picture prompts, to tap broader range of language, as well as the lived experiences of Indigenous children (Ball, 2021). L1 needs to be monitored to note if there is any evidence of language shift and loss as a consequence of spending significant parts of the day in L2.

Teacher preparation is another area of identified need. This study highlighted the centrality of the teacher. She was a community member and fluently bilingual with a broad repertoire of teaching insights and skills, broadly aligned with CRP. These insights would suggest direction for pre-service teacher preparation for working in settings with linguistic and cultural diversity, most especially the Indigenous communities like Bangladesh. The teacher's membership in the children's language community adds to the strength of the program due to their knowledge of their own language and culture. This indicates the need for more Indigenous teachers, as well as the inclusion of Indigenous knowledge resources within teacher preparation in general.

### 6.4 Conclusion – *While There's Still Time*

The Chakma proverb '*Jul thakke gado, somoy thakke ado*' [Stir while there's still sauce, walk while there's still time] emphasizes the need to act before it is too late and warns about time running out.

It is evident from this study and many others such as the ones cited here, that there is a pressing urgency for the preservation, revitalization and transmission of Indigenous languages to the future generations. Otherwise, we risk the loss of languages and so much more along with them.

However, there are reasons for optimism and clear signs of action to be taken on a number of fronts such as policy development, programming, materials design, pedagogical practices, and teacher preparation. There are already promising examples being set through initiatives with languages such as Mi'kmaq (Usborne et al., 2012; Morcom, 2019), Anishinaabemowin (Morcom, 2019; Morcom & Roy, 2019), Stoney Nakoda (Dormer, 2021; Rodriguez, 2021), Gaelic (Mercer, 2022), and Chakma, as seen in the current inquiry.

Especially for a language such as Chakma there is much hope. First and foremost, young Chakma children are learning the language within the setting of their linguistic community and culture, unlike the vast majority of Indigenous children in Canada, for example. In addition, Chakma has a literate form, an established bilingual program with promising aspects, the traditional land-based lifestyle still being maintained by many speakers, and good intent from the Government, especially in terms of providing literacy resources. It is crucial to recognize, though, the absolute necessity of teacher preparation around these resources (Manik, 2018; Dhar, Manik & Das, 2019), and a culturally responsive approach including culturally relevant content and materials, along with the significant role play-based learning has in early childhood education.

With the UNESCO International Decade of Indigenous Languages (2022-2032) (UNESCO, 2021) upon us, we have yet another reminder that it is high time for governments and international organizations to take action to this end, if only because the cost of giving up would be too high.

As we mourn the many languages already lost to extinction, we must recognize that there is still hope for the rest, and work to be done to prevent them from the same fate. Like the Welsh diaspora – connected by one word and the shared emotion it names – "fosters" *hiraeth*, and uses

its pull as a force for revival (Crossley-Baxter, 2021), we can revive hope in the face of loss by letting the call of our land and language wake us into action.

We only need to realize there is still time to save our Indigenous languages, and that time is now.

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## Appendix A

## Prompt Questions for Open-Ended Interview with the Teacher

1. How did you become interested to become a teacher in this bilingual program? Tell me a little about your experience so far.

2. What is a typical day like in the classroom?

3. Tell me about the languages you use in the classroom. Which (if any) language is used more and why?

4. What are the reasons you use first language in the classroom?
   How important do you think first language is in learning a second language?

5. What kind of materials do you think are important in a child's language learning process? How do they play a role in language learning?

6. Tell me about your overall approach to teaching. What kinds of activities work best in engaging children in language learning?

7. How much is it possible stick to the teacher training guidelines while teaching? Do teachers ever have to change the way of instruction depending on a particular student's needs or cultural practices?

8. How do a student's home literacy practices affect a teacher's classroom practice?

9. What kind of outcomes to you expect for a student at the end of this pre-school experience regarding their first and second language proficiency?

10. How are you supporting the ongoing development of the children's first language?

**Appendix B**

**Prompt Questions for Open-Ended Interviews with Parents**

1.  When you were a child, how did you learn your language (to talk or to read/write)?

2.  How did you learn Bengali? What did you find easy/difficult about it?

3.  Did you go to school? Tell me a little about learning everything in Bengali. What did you find easy/difficult about it?

    (Did you want to go to school? What were your expectations about studying in Bengali or Chakma?)

4.  Do you want your children to learn Chakma and Bengali the same way you learned them? Tell me a little about the reasons.

5.  How do you teach or talk to your children about the Chakma language? What kind of books or other materials (newspaper, calendar, cell phones, mail, packages of bought items etc.) do you show them?

6.  What do you know about the ICDP pre-school program that your child is attending? How do you get information about the school and classroom practices? Does your child tell you stories about school? What do you feel/think about the way they are learning Chakma and Bengali?

7.  Have you ever visited your child's school? Were you invited to visit? Do you have regular communication with the teachers? How much are you involved in your child's schooling and learning?

**Appendix C**

**Site of Study (Rangamati, Bangladesh)**
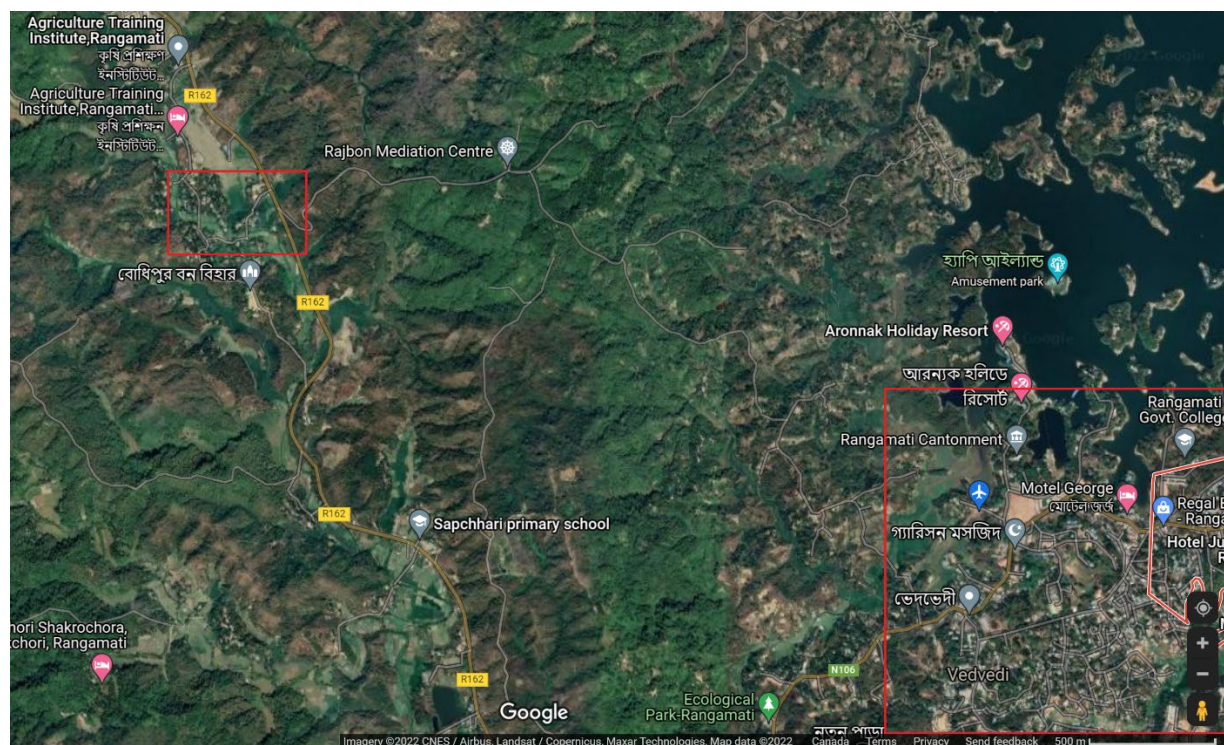


Description of image: Image shows site of study in the northwest corner, and Rangamati town in the southeast corner.