

Running head: AUGMENTING BELIZE'S SCHOOL CURRICULA

Augmenting Belize's School Curricula
to Increase Indigenous Students' Engagement in Learning

by

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Abstract

Due to high drop-out rates for Indigenous students in Belize, there is an urgent need to explore ways to increase student engagement. The purpose of this research is to gather the voices of the local educational community, including Indigenous stakeholders, about their experiences with the current secondary school curricula and how it may be made more engaging to Indigenous students. This research is important because it not only expands upon on limited theoretical and quantitative data presented by prior studies, but also attempts to harness the qualitative lived experiences, stories, and narratives of the local community who seek to improve education through ensuring its cultural relevance. To gather the voices, I conducted focus group interviews with students, teachers and Elders, and I distributed surveys to administrators. The sample of 30 participants was purposively selected and inclusive of residents of Toledo, Belize. Interviews were video and audio recorded and transcribed. The data, which consisted of student attendance records, responses from the surveys, and transcripts from the interviews were reviewed, coded and then thematically sorted and analyzed. My analysis of the data revealed six themes among participant responses with the most prevalent being the recommendation to integrate Maya language and culture into the curriculum.

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Chapter One: Problem to be Investigated

Purpose of the Study

As part of the paradigm shift in K-12 education in the 21st century, many schools throughout the world have begun to promote more inclusive, relevant, and student-centered learning experiences (Espinoza, Ooijens & Tampe Birke, 2000). In Belizean secondary schools, formal education is provided using a nationalized curriculum that is based on the syllabi of various external exams, such as the General Certificate of Education (GCE) and the Caribbean Examination Council (CXC) according to World Data on Education (WDE) (2006). Teachers from the Caribbean region including Belize were involved in the initial development of the syllabi (WDE, 2006). However, much has changed in education in the last decade, and this exam-based curriculum is outdated; furthermore, it was not designed specifically for the people of Belize. While having a curriculum that is fundamentally focused on exam preparation is problematic in itself (Kanu, 2007; Kaser & Halbert, 2009), the most notable shortcoming is that the curriculum does not include or reference the Indigenous peoples of Belize (Palacio, 2013), and as a result, does not appear to effectively engage the young Indigenous learners of Belize in school-learning experiences.

According to Palacio (2013), major gaps exist between Indigenous and non-Indigenous students' academic performance within high schools in the Toledo district, Belize. Moreover, these gaps lead to high drop-out rates of Indigenous high school students, which percolate into greater societal ills such as crime, violence, and unemployment (Palacio, 2013). Vairez, Hermond, Gomez and Osho (2017) also found major disparities in performance on the Primary School Examinations between students from the Toledo district when compared to other parts of

the country. Overall, students from the Toledo district performed significantly lower than their peers in other districts (Vairez et al., 2017).

The purpose of this study is to investigate multi-generational Indigenous perspectives on education and gather feedback on how these insights might be incorporated into the current curriculum to increase Indigenous students' level of engagement in secondary schools in Toledo, Belize. Thus, the primary goal of the present study is not only to gather the voices and perspectives of the educational community, but also to make these insights available to pertinent authorities and researchers as a possible means to inform educational policies in Belize.

Justification of the Study

The endorsement of human rights and self-determination in the Americas at the turn of the millennium has propelled many countries, including Belize, to adopt Indigenous education in their school curriculum (Espinoza et al., 2000). With the assistance of the United Nations Educational and Scientific Organization [UNESCO], Belize has since revised its educational principles to accommodate this shift (WDE, 2006). UNESCO has spearheaded many projects that have highlighted five dimensions of quality secondary education using a human rights approach in Latin America and Belize including “relevance to students’ needs, pertinence to culture, equity, efficacy and efficiency” (UNICEF-Belize, 2016, p. 8). Yet, there is little evidence that Indigenous students have increased their academic performance as a result of these intentions in Belize (Palacio, 2013).

Interestingly, Baines and Zarger (2017) attempted to develop and pilot a primary school curriculum that integrated aspects of Indigenous Maya traditional knowledge in a school in Toledo, Belize. The researchers found that there was a strong relationship between the integration of cultural perspectives into school curriculum and wellbeing and engagement of

Mayan students of Toledo, Belize (Baines & Zarger, 2017). The primary school curriculum was developed mostly on theoretical ideas and anthropological studies related to health and well-being.

In another study, Middleton, Dupuis and Tang (2013) used semi-structured interviews, field notes and observations to explore the factors that motivated students as science learners in primary schools in Belize. They contended that in Belize, a relationship exists between students' socio-cultural contexts and the formation of their cultural identity as learners (Middleton et al., 2013).

In Canadian schools, Preston and Claypool (2013) reported higher levels of engagement by Indigenous students when curricula were taught using Indigenous perspectives. Preston and Claypool (2013) used individual semi-structured interviews of 12 Indigenous students to determine the scope and depth of their engagement. In addition, Preston and Claypool (2013) found that when Indigenous perspectives were respectfully and authentically integrated into public schools, greater awareness and better social relations between Indigenous and non-Indigenous peoples were attained.

Research further suggested that students experienced a greater sense of belonging and connectedness when they were taught using culturally relevant curricula that could encourage engagement in school and community (Kanu, 2007; Middleton, Dupuis & Tang, 2013). Kanu (2007) asserted that Indigenous students' success in completing academic programs is highly dependent on "microstructural variables", such as a culturally responsive curriculum, as well as "macrostructural variables" including socioeconomic status, parental influence, and role models in the community (p. 38). Furthermore, Kaser and Halbert (2009) advocated that if education is to be equitable and engaging, educational leaders of the 21st century should continuously search

for ways to revise and improve curriculum, organizational structures, staff development, and teaching strategies that engage and embrace diverse cultures.

Hence, compelling evidence suggests that a culturally relevant curriculum would increase students' engagement in schools. One recommendation for the development of a more culturally relevant curriculum in Belize, according to Baines and Zarger (2017), is the integration of traditional Mayan ecological perspectives into science classes. Several far-reaching implications of using said curriculum could include increased parental involvement (enthusiasm to teach children about culture, and in assisting children with assignments); enhanced teacher-community relationships; and the development of a deeper appreciation for cultural identity among students (Baines & Zarger, 2017).

Despite the convincing evidence that a more culturally relevant curriculum could have substantial benefit for the people of Belize, to date, no research has yet sought to gather the views and perspectives of the Indigenous Maya people about the matter. As an educator in Belize, I can attest that the current curriculum in Toledo, Belize, does not yet reflect Indigenous principles or cultures, particularly in the secondary levels. The novelty of this research was therefore the gathering of the voices of the local community about what the Indigenous students need and how these needs might be met at the secondary level of education. The following research question was carved with the intention of gathering the authentic voices of the local educational community including the Mayan people while simultaneously honoring and respecting our traditions.

Research Question and Hypothesis

The research question asked in the present study was: What does the local educational community suggest would increase cultural relevance in general curriculum to better engage Indigenous Maya high school students in Belize?

My hypothesis was that Elders, students, and parents may have had some insights and recommendations that may have included the incorporation of Indigenous ways of knowing, such as bringing Indigenous language, traditions, stories, and lifestyles into the curriculum. Because my intended approach was simply to gather the voices, I did not pursue proof of my hypothesis but rather felt curious to hear what the local community would say and how this might have aligned or contrasted with my hypothesis.

Definition of Terms

With such a diversity of Indigenous cultures in the world and even within my own community, it was important to be clear which Indigenous group I was consulting in my study and what informed my definition. The terms *student engagement* and *curriculum* also have varied and complex definitions difficult to define. In this research, these three pertinent terms or core constructs were frequently used. I provided the following definitions to encourage clarity and understanding as well as to set the parameters of my study. I went into these constructs in further detail in Chapter Two.

Mayan Indigenous perspectives refers to cultural practices and beliefs based on Mopan or Ketchi Mayan tradition in Toledo, Belize (Minority Rights Group International, 2018). Historical records showed that the Indigenous Maya people may have settled in Belize as early as 2000 BCE (Minority Rights Group International, 2018). Belize, an integral part of the ancient Maya civilization, is home to three groups of Maya peoples: Yucatec, Mopan and Ketchi Maya. We are

the direct descendants of the original inhabitants of the Yucatan Peninsula (Minority Rights Group International, 2018). Although there are two Indigenous groups in Belize, the Maya and the Garifuna peoples (Palacio, 2013), this study focused on the indigeneity of the Mopan and Ketchi Maya of Toledo, Belize.

The curriculum refers to both the content and process by which students were taught in secondary schools in Belize, over a four-year period (WDE, 2016). For the first two years, students took English, Spanish, Science, Mathematics, Social Studies, Religion and Literature (WDE, 2016). For the subsequent years, students were streamed into three or more tracks including business, secretarial and academic studies (WDE, 2016). Academic studies included further Science, Mathematics, and the Arts (WDE, 2016). The content of the curriculum itself was based on syllabi of various external exams such as the GCE and CXC (WDE, 2016). The process by which curriculum content was taught is not clearly defined but may be influenced by a focus on preparations for students to sit external exams (WDE, 2016).

Student engagement refers to meaningful student involvement throughout the learning environment (Martin & Torres, 2016), specifically by meeting the diverse needs of students and the community (Parsons & Taylor, 2011). I adopted Martin and Torres' (2016) definition, which encompassed three dimensions: (i) behavioral engagement which emphasized participation in academic, social and co-curricular activities, (ii) emotional engagement which focused on positive and negative reactions to teachers, classmates, academics and school, and (iii) cognitive investment which focused on student investment in learning (p. 2). However, engagement also involved a focus on the *process* of learning rather than strictly on the content of learning (Parsons & Taylor, 2011). Therefore, the voices of the local educational community, including

those of students and teachers, were key factors to be considered in engagement (Parsons & Taylor, 2011).

Brief Overview of Study

The study sought to determine the ways in which the current curriculum might be augmented according to members of the local educational community of the Toledo district in order to increase Indigenous students' level of engagement in learning. In Chapter Two: Literature Review, I explore key constructs of Indigenous perspectives, culturally relevant curriculum, and student engagement. In Chapter Three, I describe my methodology, methods and the process through which students, teachers, Elders, and administrators participated in semi-structured interviews and surveys. I articulate how interviews and surveys were transcribed verbatim and later thematically analyzed. Field notes and vivid extracts were compared with the themes gathered, and corresponding verbatim extracts representing each theme are presented and discussed in Chapter Four. In Chapter Five, I provide a brief summary of findings, limitations of my study, as well as suggestions for further research.

Chapter Two: The Literature Review

Introduction

The purpose of this section is to provide a background on the study, to critique the current research being done, to define key concepts, and to identify gaps in research or literature. I searched and accessed literature and various studies through Vancouver Island University's online library as well as recommendations and readings from professors from the Faculty of Education. In this chapter, I first discuss the impacts of a culturally irrelevant curriculum. Next, I attempt to define Indigenous perspectives on identity to provide readers with a background of what Maya perspectives might entail. I briefly identify a few examples of initiatives that sought to create a more culturally relevant curriculum. Then, I examine student engagement as a global issue and the impact of a culturally relevant curriculum. Finally, I highlight gaps in research concerning culturally relevant curriculum in Belize.

Impact of Culturally Irrelevant Curriculum

Pioneering research by Palacio (2013), studied the underachievement of Indigenous Garifuna students in Belize and revealed major gaps between these students and their non-Indigenous peers. Palacio's (2013) work also highlighted the reluctance of the educational system, including the government of Belize and the churches, to make a concerted effort to consolidate the voices of the Indigenous peoples of Belize. Moreover, Palacio (2013) asserted that a culturally relevant curriculum could assist in engaging Indigenous students and thus ameliorate the gaps between academic performances of Indigenous and non-Indigenous students in Belizean schools. In this paper, many parallels were drawn to Palacio's (2013) essay, as it was one of the few works that examined stratification in education based on ethnicity, a topic which has been considered taboo in the political arena in Belize.

Similar work by Middleton et al. (2013) revealed that one of the major problems surrounding education of Indigenous students in Belize was the lack of relevance in their learning experiences. The absence of consideration for students' socio-cultural context, beliefs, and values within school curricula had major implications on the academic outcomes of Indigenous students, including performances on standardized tests and high school completion (Middleton et al., 2013). Hence, Middleton et al. (2013) concluded that a culturally relevant curriculum would increase student engagement. Baines and Zarger (2017) further claimed that a culturally relevant curriculum provided more holistic learning experiences for Mayan students.

Vairez et al. (2017) conducted a study of performance on the Primary School Examinations, a measuring stick for academic achievement of students in standard six (equivalent to Grade 8) in Belize. He and his team found major gaps between students from urban and rural schools (Vairez et al., 2017). Students from the Toledo district performed substantially lower than their peers in other districts (Vairez et al., 2017). Furthermore, students who had English as their first language performed better on the exams than those who did not (Vairez et al., 2017).

In Canada, many educational researchers claimed that a culturally responsive curriculum, relevant teaching methods and techniques, positive teachers' attitudes toward students, and real-life learning environments could increase Indigenous students' performances in schools (Kanu, 2007; Kaser & Halbert, 2009; Kim, 2017; Preston & Claypool, 2013).

Indigenous Perspectives on Identity

While Maya belief systems are wide ranging and complex (Edmonson, 1997, p. 42), Baines (2012) and Saqui (2012) highlighted some ethnographic patterns among Maya perspectives on identity in Belize. Connectedness to others, land, plants and animals, for

example, was one of the patterns that resonated in studies about the Maya (Baines, 2012; Saqui, 2012). Connectedness to land and all living things is so deeply embedded in Maya culture that it can be considered inseparable from the ways of thinking and learning of Maya students (Baines, 2012).

According to Saqui (2012), Traditional Mayan Ecological Knowledge (TMEK) has been denigrated in Belizean society including in its educational system. Saqui (2012) referred to TMEK as a system of philosophy, ecology, emotions and aesthetics that has enabled the Maya people to survive despite the adversities that they have experienced throughout history (p. 71). This concept involved the traditional “milpa system of planting corn (*Kol*) and the socio-political structures used to implement and sustain this system (*Tzik*)” (Saqui, 2012, p. 11). Understanding TMEK required that one understood the behaviours, values, and skills that are associated with these systems (Saqui, 2012, p. 140). Additionally, Saqui (2012) claimed that implementing TMEK in schools could help to foster a sense of community and ecological connectedness among the people of Belize. I argue here that TMEK might provide insights on what Mayan Indigenous perspectives may entail and what the voices of the local educational community might mean.

In his research, Palacio (2013) described the concept of *Garifunaduau* (p. 142), which referred literally to one's identity as a Garifuna or one's Garifunanness. Palacio (2013) found that many of the students in his study were not actively conscious of their *Garifunaduau* and many of those who were perceived it as a negative factor to their motivation in school because of the stereotypes and racism that they had experienced. When examining Indigenous perspectives through Saqui's (2012) and Palacio's (2013) lenses, it was important to note the abstractness and

undesirable sentiments people may experience when they discussed Indigenous perspectives and cultures in Belize.

In addition, Middleton et al. (2013) highlighted the relationship between Indigenous students' socio-cultural context and the development of their identity and motivation as learners. In their study, in-class observations and semi-structured interviews were conducted with students about their learning experiences of science at school, home, and in the community to identify the factors that influenced their motivation as learners (Middleton et al., 2013). Two Indigenous communities were studied, including one in Belize with 18 Mopan Maya students and the other with 18 Attayal/ Sediq students in Taiwan (Middleton et al., 2013). Students from both cohorts were one year away from entering secondary school (Middleton et al., 2013). The cohorts were chosen for the study based on the rurality of their school and the large number of Indigenous students in their schools (Middleton et al., 2013).

The study revealed a strong correlation between the socio-cultural contexts of students and the formation of their cultural identity and motivation as learners (Middleton et al., 2013). This relationship between cultural contexts and student motivation was manifested through three socio-cultural practices: The type and level of academic support students experienced with teachers, parents and other community members; the quality of the teacher–student relationships, including use of native language in classrooms; and the motivational climate that students experienced through acceptance and appreciation of their Indigenous cultures (Middleton et al., 2013). Moreover, results revealed that these socio-cultural factors influenced students' motivation differently in Belize from Taiwan (Middleton et al., 2013). More Indigenous Maya students of Belize were motivated toward mastery goals, that is, attaining skills to improve their livelihoods than were the Attayal students of Taiwan (Middleton et al., 2013). More Attayal/

Sedq students were motivated toward performance goals, that is, getting higher grades on standardized tests than were Mayan students (Middleton et al., 2013). Similarly, Saqui's (2012) study ascertained that Mayan culture is centered on real-life experiences and the continuation of Mayan livelihood. Hence, Maya students are more motivated to learn when curriculum is relevant to their lives, not exam scores or performance. Yet, Belize's high school curriculum remains very exam focused.

Towards a More Culturally Relevant Curriculum

Currently in Belize, the secondary school curriculum is based on syllabi of various subjects geared toward preparing students for standardized exams such as the CXC and GCE (WDE, 2016). The following core subjects comprise the curriculum: Math, English, Social Studies, Biology, Chemistry, Integrated Science, Physics and Spanish (Ministry of Education, 2012). There has been a recent revision to include Information Technology and Belizean History as part of the core subjects ("Coming up with a relevant curriculum", 2017); however, the textbooks used in secondary schools are created in Jamaica and are based on modules of the CXC syllabi (Ministry of Education, 2012). According to the Chief Education Officer, Deborah Domingo, the Ministry of Education "has recently embarked on an effort to rationalize and diversify the curriculum at the high school level . . . to pull our stakeholders together to have us develop a profile of who the high school graduate for Belize should be . . ." ("Coming up with a relevant curriculum", 2017, para. 2). However, to date, no documented initiative has been taken by either the Ministry of Education or any other stakeholder to include Indigenous Mayan perspectives into the adaptations of the curriculum. Hence, the high school curriculum still lacks authentic Belizean cultural identity.

In his essay, Palacio (2013) highlighted some of the major causes of the underachievement of Garifuna students in Belize. He and his team gathered suggestions from the local Garifuna community about ways to help address these problems (Palacio, 2013). According to the community, one of the major setbacks they experienced was a lack of cultural relevance in the educational system (Palacio, 2013). In response, they expressed a clear recommendation that a culturally sensitive curriculum that can help to rebuild cultural identity at the community level be created for schools. Palacio (2013) further emphasized that the Garifuna community should utilize its educational leadership to promote *Garifunaduau* in the education of its children in areas where there are opportunities to celebrate and elucidate Garifuna culture, such as through music, dance and spirituality.

In British Columbia (BC), Canada, various innovative strategies have been implemented over the past ten years that have had positive impacts on both Indigenous and non-Indigenous students (First Nations Education Steering Committee, 2017; Networks of Inquiry and Indigenous Education (NOIIE), 2019). According to NOIIE (2019), one of the ways they have fostered Indigenous education is “by reaching out to knowledge keepers in their communities and integrating the wisdom teachings that are rooted in their territory” (Indigenous Education, para. 6). Moreover, Robyn Gray, District Principal of Aboriginal Education for the Nanaimo School District, stated that “some of these strategies include the hiring of Indigenous teachers’ assistants to support, monitor, and mentor Indigenous students and to assist teachers with resources to teach about Indigenous education” (R. Gray, personal communication, October 8, 2017). Gray also stated that a committee—including various stakeholders in the community—has worked on “the development of a revamped cultural language curriculum that is continually revised through dialogue with Elders, parents, and school representatives to chart the way

forward” (R. Gray, personal communication, October 8, 2017). Therefore, BC’s initiatives could possibly offer some insights about how Belize can promote Indigenous education. Perhaps a way forward is to put into action the words reiterated by the Chief Education officer of Belize, Deborah Domingo, “rationalizing and diversifying the curriculum starts with gathering the voices of stakeholders” (Channel 7 News, 2017, para. 2).

Furthermore, Baines and Zarger (2017) conducted ground-breaking research by attempting to determine the possible impacts of piloting a curriculum that integrated traditional Mayan ecological perspectives into primary school students’ learning experiences. Using observations and ethnographic studies, this pilot study was done over a period of three years, from 2009 to 2011 (Baines & Zarger, 2017). Nineteen primary school students from Mopan and Ketchi communities in Santa Cruz, Toledo, between the ages of 7 and 12 took part in the studies (Baines & Zarger, 2017). The curriculum and Indigenous perspectives were based mainly from observations and field notes of lived experiences with the Maya people (Baines & Zarger, 2017).

Baines and Zarger (2017) found that utilizing a culturally relevant curriculum in schools can lead to a healthier population and promote holistic learning experiences of Mayan students in Belize. According to the researchers, teaching about and with Indigenous knowledge transcends classrooms because these methods harness the knowledge of the entire community and so empower its members (Baines & Zarger, 2017). By integrating cultural perspectives into school curriculum, health and well-being and motivation to attend school increased among Mayan students (Baines & Zarger, 2017). Baines and Zarger (2017) also found that when students were taught about traditional medicinal plants in class, they would ask questions to their parents and grandparents about their traditional Mayan heritage. Students also increased participation in class

by sharing stories and asking questions to teachers and peers about Mayan culture (Baines & Zarger, 2017).

Although Baines and Zarger's (2017) study revealed innovative ways to create a more engaging learning experience for Indigenous students, it focused mainly on primary school science. Perhaps, direct input from students and community members at the high school level could provide further insights about what a culturally relevant curriculum is for them and can help illustrate the impacts it has on student engagement in high schools.

Engaging Indigenous Students: A Global Issue

In a review of literature about student engagement in Canada and the United States, Parsons and Taylor (2011) claimed that there has been a shift in focus from shaping students into schooling to shaping schools to fit the needs of students. Due to the change in our understanding of the world, our humanity, and the way we learn, Parsons and Taylor (2011) suggested that our view of engagement should also change. Previous work has given emphasis to the content of learning and not the process of learning (Parsons & Taylor, 2011). Most notable in past studies of engagement has been the lack of teacher and student voices or perspectives about what engagement is and how it could be improved (Parsons & Taylor, 2011). The researchers also found that, in some cases, students gave different responses about engagement than teachers (Parsons & Taylor, 2011). According to Parsons and Taylor (2011), most teachers viewed engagement as a classroom management strategy where students were cognitively, behaviorally and psychologically on task (p. 21). Students on the other hand, focused on engagement as meeting their social, emotional, psychological, and to a lesser extent, academic needs (Parsons & Taylor, 2011). These needs included the ability to solve real-life problems, make a difference in the world, feel respected, and learn through dialogue and collaboration with peers and the

community (Parsons & Taylor, 2011). Despite the differences in opinions about engagement, there were several overarching correlations between teachers' and students' responses (Parsons & Taylor, 2011). These included embedded collaboration and relevant learning experiences through connections with real life through culture, technology, and the social contexts of learners (Parsons & Taylor, 2011).

When it comes to students' engagement, Duran (2015) also argues that a culturally relevant curriculum is crucial, especially for marginalized groups of students who struggle to discover and maintain their cultural identities. Duran (2015) examined the relationship between culturally relevant curriculum and student engagement across four aspects including cognitive, academic, social and affective domains among students of minority groups in California, United States. It was found that when students were taught using native language, stories, and perspectives, students were more engaged across all four domains (Duran, 2015, p. 126). Based on the findings of the research, Duran concluded that the following eight themes are key to developing a culturally relevant curriculum: (i) building relationships with community, (ii) enriching cultural identity, (iii) making connections with the environment, (iv) harnessing human resources, (v) using nature to teach about life, and (vi) sharing stories and oral tradition (Duran, 2015, p. 118).

Moreover, great disparities in academic performance exist between Indigenous and non-Indigenous students in the Americas (Cueto, Guerrero, Leon, Zevallos, & Sugimora, 2009; Vairez et al., 2017). According to Ames (2012), although research has continuously shown that Indigenous students in Peru encounter numerous challenges when transitioning into school such as language barriers, loss of cultural identity and lack of support from their teachers and educational community, little has been done by educational leaders to address the problems. As

a result, enrollment rates and engagement of Indigenous students are well below their non-Indigenous peers (Ames, 2012). Ames (2012) suggested that the language used to teach students should incorporate Indigenous language and that a culturally relevant curriculum would help to build identity and increase engagement of Indigenous students.

For many countries throughout the world, the attempts to promote cultural relevance in schools have produced notable positive outcomes for Indigenous students (Ames, 2012; Guilherme & Hüttner, 2015; NOIIE, 2019). In Brazil, Guilherme and Hüttner (2015) wrote about the challenges and successes of promoting Indigenous education. They shared that although there were many areas where Indigenous education could be improved, in schools where Indigenous languages and cultures had been integrated, the results were extensive (Guilherme & Hüttner, 2015). In each case where these schools have experienced success, the local community has played an integral part through dialogue with educational stakeholders about culture and education, the translation of books, and the teaching of Indigenous languages, as well as in promoting a sense of connectedness and pride of their Indigenous cultures (Guilherme & Hüttner, 2015). Guilherme and Hüttner (2015) therefore suggested that a way forward for Indigenous education in Brazil is to embrace Indigenous communities with a sense of partnership, intercultural exchange, and open dialogue, thus allowing Indigenous peoples to take ownership of their education.

In Belize, Vairez et al. (2017), showed major gaps exist between students from rural and urban communities on academic performance and standardized tests. The purpose of Vairez et al.'s (2017) study was to determine the extent of the gaps by employing statistical techniques such as chi-square and t-tests and to identify key factors that contributed to maintaining these gaps (p. 92). Using raw scores and demographical data from the Ministry of Education's

database, Vairez et al. (2017) examined the performance of students who sat the Primary School Examinations in Belize from 2004 to 2011. Vairez et al. (2017) found that there was a statistically significant difference in performance on the examinations between students from rural and urban communities in Belize. Students from rural communities performed significantly lower than their peers from urban communities (Vairez et al., 2017). Second, the linear regression tests revealed that the three main factors that contributed to the disparity in performance included the student's age (younger students performed better than older students); school location (rural students scored lower than urban students); and first language (students who did not speak English as their first language generally performed lower than students who did) (Vairez et al., 2017).

Although highly empirical in nature, Vairez et al.'s (2017) research lacked the voices of the local educational community. Moreover, despite the sample population being highly representative of the group under the study by Vairez et al. (2017), the data was obtained from only one source, namely the Ministry of Education's database in Belize. If additional measures and other methods were employed by Vairez et al. (2017), such as interviews and surveys, other variables may have surfaced, such as the level of students' engagement in schools and their socio-economic backgrounds and how these impact on their performance.

Addressing the Gaps in the Literature

While several researchers have pointed out the gaps between Indigenous and non-Indigenous students at the primary school level, little work has been done at the secondary school level where Indigenous students may encounter numerous challenges when transitioning from primary to secondary school (Ames, 2012). As highlighted by Ames (2012), this transition is marked by an ardent search for cultural identity compounded with the challenges of puberty in

the Indigenous adolescent. Furthermore, Palacio (2013) and Baines and Zarger (2017), asserted that in Belize, Maya communities viewed attending high school as a means to acquire the skills needed to survive and sustain Mayan livelihoods. As such, there is an additional expectation placed on the Maya adolescent to acquire these skills (Saqui, 2012; Baines & Zarger, 2017). And yet, high school curriculum remains primarily focused on academic subjects and exam preparations. Thus, how engaged are Maya students in schools if they feel that they are not acquiring the skills that they need to survive? Since current scholarly literature appears to be defunct in this regard, the intention of this study is to utilize a holistic and grassroots approach to gathering the Belizean voices to learn what might better engage Indigenous high school students.

Intentions of Inquiry

As a researcher, I desired to see how integrating local Indigenous culture would influence students' engagement. In keeping with research methods that honor Maya traditions, such as dialogue which is held as a respectful way to share perspectives (Caracciolo & Staikidis, 2009), I gathered Indigenous perspectives and voices by dialoging with local community members through focus group interviews. My intention was to have this research offer insights into how we can begin creating an authentic Belizean curriculum to address the major disparities seen between Indigenous and non-Indigenous groups. Furthermore, the findings of this study could help to inform policy makers in the Ministry of Education in ways that they might improve curriculum and pedagogy to better meet the needs of Indigenous and non-Indigenous learners. Moreover, implementing the recommendations made by participants of this study, may help to ameliorate the unprecedented drop-out rates of these students, which can eventually lead to unemployment and high crime rates such as those currently plaguing the Toledo district. The

findings from this research are not only a matter of educational concern, they are likely to have social justice and moral implications.

Chapter Three: Procedures and Methods

Introduction

In this chapter, I describe my methodology, methods, procedures, and means of data analysis. I also discuss briefly the validity of results. The following is an overview of the research design.

Qualitative Methodology

Due to the nature of this study and the participants within it, I felt that qualitative methodology was the best choice. Most of my data came from semi-structured interviews with focus groups to gather the stories and voices of the local people. I reviewed publicly accessible school records about enrollment and graduation rates to confirm what research notes as the disparities between Indigenous and non-Indigenous student engagement and achievement. For confidentiality reasons, I used open-ended survey questions to gather data from administrators. The survey data was treated as interview data; I asked similar open-ended questions. My analysis methods were based on Braun and Clarke's (2008) qualitative thematic analysis methods.

Description of Methods and Instruments

While quantitative research can point to the statistical evidence of high school drop-outs and lack of engagement (Vairez et al., 2017), it does not necessarily tell you why that is the case. Because my intention was to listen to and collect the narratives of the people directly impacted by the curriculum and a lack of student engagement, it was important that the method I chose captured the authenticity and depth of the conversations with participants. According to Saqui (2012), Duran (2015), and Caracciolo and Staikidis (2009), the best method to utilize when gathering the voices of community members was a qualitative, dialogic or narrative approach. To capture people's stories, narratives and lived experiences, Saqui (2012) and Duran (2015)

suggested semi-structured interviewing because this would have allowed participants to freely provide vivid descriptions and enriching details. Furthermore, according to Cohen and Crabtree (2008) (as cited in Robert Wood Johnson Foundation, 2011), the major advantage of using the semi-structured interviews was that it allowed for detailed insights into specific situations. Semi-structured interviewing also provided a unique opportunity to observe and understand the topic under study in new ways by generating comparable data (Fraenkel, Wallen, & Hyun, 2015). Moreover, data from interviews revealed unique patterns and themes that could be used as a basis for further research and new hypothesis generation (Fraenkel et al., 2015).

Semi-structured interview/focus group. A paper-based guide containing the following questions was used during the semi-structured interviews with students, teachers, and parents/Elders:

1. How would you describe your (your students') level of engagement in school?
2. In what ways is your culture reflected in your learning/teaching?
3. What do you think would help Indigenous students to be more engaged in schools?

I probed participants during interviews for examples and descriptions. If an explanation for a term such as "engagement" was requested during the interviews, I asked the participant to give her/his own definition of the term. If necessary, I referenced the list of definitions provided in Chapter One.

In focus groups, I interviewed participants about their perspectives of the current curriculum and then asked for their recommendations to increase students' engagement. Interviews were conducted using a semi-structured design in which I provided a guide with a list

of questions and topics. See Appendix E. Moreover, I designed the questions to be open-ended, and I prompted participants to provide as many details whenever possible.

At the start of the interviews, I asked participants about their level of engagement in school. Then, I asked them about what they thought about the current curriculum. I provided a sample of the curriculum to participants, if they were not familiar with it. Furthermore, I asked them to suggest ways in which they thought that the curriculum could be augmented to be more engaging to Indigenous students. Recognizing that sharing school experiences might be an emotional trigger for some participants, I had contact information for a counselor or local community member to support participants during the interviews. Finally, I gave them the opportunity to revise, add, or change points raised during the conversations.

With the help of a technician, I was able to record and transcribe all interviews verbatim. I took some notes during the interviews; however, I relied upon the audio and video recordings transcripts for data.

Open-ended surveys for administrators. To mitigate the risk of having the identity of Indigenous school administrators revealed due to their small numbers, the school administrators were not interviewed in focus groups. Instead, I distributed surveys to them to complete that included five questions that were similar to those used in the interviews. The only difference was that I asked school administrators to provide written answers. I gave administrators a few additional questions on the surveys to obtain in-depth perspectives. See Appendix F.

Student records. Because little data about Indigenous students in high schools in Toledo has been documented, I asked administrators to provide some statistical data concerning enrollment and completion rates of students, which confirmed the presence of gaps and

disparities between Indigenous and non-Indigenous students, as was noted in some of the research discussed in the literature review.

Description of the Sample

The sample for the present study consisted of 30 participants: 26 from two high schools in the Toledo district and four from a village near the high schools. Five focus groups were interviewed including two groups of five students, two groups of five teachers, and one group of four Elders. I also distributed questionnaires to six school administrators. This was done to ensure a safe space for teachers and administrators to express their views, given the low number of Indigenous school administrators in Toledo.

Teachers', parents'/Elders', school administrators' groups. I used purposive sampling to select participants for the focus groups and surveys. Except for the Elders group, each focus group consisted of at least three people who identified as Indigenous Maya and the two remaining participants identified as belonging to another ethnic group. Participants in each focus group came from a wide range of ages, socio-economic backgrounds, and academic training; however, these factors were not considered part of the purposive selection criteria. The Elders for the sample were also required to have been living in Toledo, Belize, for at least five years, be knowledgeable about the history and needs of the village and be able to attend a session at a public center.

Students' groups. In recruiting students, the only criterion was that they identify as Mayan high school students. I began recruitment by asking for recommendations from teachers. Five names were then drawn from a hat. Of those students selected, each was given consent forms, and if under the age of 16, was also given consent forms to get permission from parents.

Only those students who had parental consent could participate. If they were not allowed, names were drawn until there were five students with signed parental consent forms.

Purposive sample. I had built relationships with participants for the purposive sample, having worked with the Indigenous Mayan communities in Belize for over six years. I made visits to participants and kept in contact with them through telephone and emails. All participants were given an oral explanation of the purpose of the research and consent forms to sign during my visits. I also informed them that they could choose to discontinue the study at any time, without penalty. If participants withdrew from the study, I drew from a hat filled with a list of participants who had given their names during recruitment.

Furthermore, I chose a purposive sampling for this research because I felt that participants would feel safe and respected about sharing their stories and perspectives if they trusted me as the researcher. According to Fraenkel, Wallen, and Hyun (2015), a purposive sample involved a group of pre-selected participants with a desired characteristic. Because I sought to gather the voices of the local educational community including the Indigenous voices, I desired to have participants who identified as Indigenous Maya and who were residents of the Toledo district. However, I also included non-Indigenous participants to get diverse views.

Although purposive sampling was advantageous in this research, it may have had some disadvantages such as undue pressure on participants because they had trusting relationships with me as the researcher. It may also have decreased the generalizability of the findings since the research was biased toward Maya Indigenous perspectives. To alleviate this shortcoming, I included participants from non-Indigenous Maya populations including Creole, Mestizo, Garifuna and East Indian to be part of the focus group interviews. Generally, the focus groups consisted of 60% Maya Indigenous participants and 40% non-Indigenous participants.

Explanation of the Procedures Followed

Ethics. I adhered to the *Tri-council's Policy Statement of Ethical Conduct for Research Involving Humans* (TCPS2) (2014) and sought approval of my thesis proposal from the VIU Research Ethics Board (REB) prior to conducting the research. I also visited the district education center in Toledo to request permission from the Ministry of Education to conduct research involving high schools in Toledo. I was informed that there was a research protocol, and thus proceeded to write a letter of request to the Chief Education Officer. On July 2, 2018, I was granted permission by the Ministry of Education to conduct my research in Toledo.

Building relationships. The first step I undertook was to foster trusting relationships with the educational community. This meant that I visited schools and engaged in informal conversations with school administrators, teachers and students. I also made home visits to Elders and engaged in informal conversations to build relationships.

Recruitment. For the second step, I gave a letter requesting permission from school administrators to recruit participants and conduct research in two high schools. See Appendix A (i). I also gave a letter requesting permission to conduct research to the Chairman of the Board of the high school to recruit participants of the study. See Appendix A (ii). I asked the educational community if they would have liked to participate in the study. Recruitment was done on a one-to-one basis when I visited the Elders, teachers, students and school administrators. I regularly visited these participants to foster trusting relations. I gave teachers, students and administrators a letter of introduction and wrote their contact information. See Appendix B (i). I also gave Elders a letter of introduction. See Appendix B (ii). I gave participants the consent forms during one of the visits and asked them to read and sign it. I also informed them that they could choose to discontinue the study at any time, without penalty. I stored all documents containing

confidential information, such as notes containing participants' names and all consent forms, in a locked cabinet and was the only person who accessed it.

Informed consent. I explained the purpose of the research to all participants through one-on-one conversations and by letter of introduction. Participants were then given a consent form and confidentiality agreement to sign. They were informed that they could withdraw from the study at any time without penalty. They were informed that while my intention was to ensure anonymity, there was no guarantee due to the group process where participants may have shared information to others outside of the focus groups. See Appendix C (i) for a sample of the consent form and confidentiality clause issued to participants.

For students under 16 years, parents were required to sign the consent forms to permit the students to participate in the study. I visited parents if necessary and provided a verbal explanation of the research and what students were required to do. See Appendix C (ii) for a sample of the consent form issued to parents on behalf of children.

Gift or token. After the interviews with the focus groups, I provided snacks, finger foods and fruit juices as tokens of appreciation to participants.

Once all transcribed notes had been analyzed and themed, a report of the findings was drafted. All participants had the opportunity to review the report, if they wished, and had two weeks to request any revisions.

Data Collection Details

During the school semester, September to December 2018, I conducted face-to-face semi-structured interviews with focus groups consisting of teachers, students and Elders who either attended or were affiliated with two high schools in Toledo, Belize. To provide a safe space for

participants, interviews were conducted within a private room at the school on a date when the participants were available. Interviews with Elders were done in a private space within a public center. I began each focus group session with an introduction of the members of the group, an explanation of the purpose of the study, and context and rules of the interview. See Appendix E. Next, I reminded participants that whatever was said in the interviews should be kept confidential. Then, I asked participants questions on the script. The sessions were audio and video recorded by a professional technician, and I made field notes. The technician was hired to video tape and assist with transcription of the interviews. He signed a confidentiality form and agreed to the conditions thereof. See Appendix D. To close, I thanked participants for their input, debriefed and then gave time for a question period and the opportunity for further input from participants.

Although a set of predetermined questions (Appendix E) were on hand for the interview, I probed as necessary so that participants could have elaborated on their answers. To develop rapport and dialogue during the interviews, I wrote only main ideas from the conversations and maintained eye contact as much as possible. Moreover, near the end of the interview, I summarized key ideas. I also gave participants the opportunity to add, clarify, or revise any point brought up in the conversation. I provided participants with my contact details and how they could obtain a draft of the final report. I informed participants that they could review a final draft of the report and would have two weeks to request revisions, if necessary. Finally, I thanked the participants for their input in the research and served refreshments.

Transcription. Next, with the assistance of the technician, the interviews were transcribed verbatim for analysis. During the transcription, we used pseudonyms, such as “administrator, student, teacher, Elder” to identify participants as it was important to identify

differentiating themes noted between different focus groups. All personal names were removed from the transcripts. All electronic transcription data were stored on a password encrypted flash-drive and were deleted after the research process. Although pseudonyms were used to identify participant groups, all participants were given a draft of the report and the opportunity to retract their statements, if they so desired, without penalty. Thereafter, field notes were compared with any relevant themes gathered from the transcriptions.

Data Analysis

Braun and Clarke (2006) describe six “phases of thematic analysis” (p. 87) to ensure a thorough, rigorous and reliable thematic analysis of data. They suggest (1) first getting familiar with the data, (2) creating initial codes as you read and re-read (or listen), (3) constructing themes by combining or comparing coded data, (4) reflecting upon or reviewing themes, (5) naming and redefining themes to tell the narrative or story, and (6) writing up the report choosing specific “vivid, compelling extracts” (p. 87) as examples.

Thus, to begin my analysis, I examined my entire data corpus to get a holistic impression of the rich data. As I listened multiple times to audio recordings and watched the videos, I laughed, cried and felt deeply moved by the experience of listening to people's stories. I vividly recalled each interview, the expressions, the emotions and voices as if it were only yesterday. There were moments of much joy and laughter as participants shared jokes and stories about childhood but there were also moments of hurt and anger, disappointment and confusion. I also noticed that although most participants were confident and vocal, some were shy and somewhat uncomfortable when sharing their stories. For my holistic impression, I initially wrote words and phrases that were repeated and noted in the transcripts where participants laughed together as a group, when they agreed with each other, or when they showed deep emotions like pain and hurt.

Initial codes. My second step was to review the focus group interviews individually. Because I had set up the interviews based on participant type, I started with the Elders' group. As I listened to and watched the video, I noted words and ideas that were repeated. I also noted on the transcripts where participants showed deep emotions such as laughter, hand gestures and changes in tone. Moreover, I noted where participants agreed or disagreed with each other and denoted these as group consensus/non-consensus. Next, I reviewed the video a third time. Now, I focused on the three questions that I had initially asked about student engagement and curricula. Under each question, I noted individual responses from participants as they went around the circle in the focus group, especially if the participant showed much emotion or when there was agreement from others in the group. I then compared my notes from the second and third video reviews and noted similarities and differences. Over a period of several weeks, I completed this process for all five interviews.

For the surveys, I used a similar process. I gathered a holistic impression by noting words and phrases that were repeated. Words were highlighted based on prevalence. I made brief notes about writing styles and tones. Next, I examined each survey individually and wrote words and phrases that were repeated, and I noted where there was a change in writing style or tone. I then examined each survey once more noting responses under each question. I then compared my notes from my second and third review of the surveys.

When I determined patterns showing similarities and differences among participants for each focus group interview and the surveys, I placed them in a table and compared them. I selected patterns and ideas showing similarities for each focus group. Then, I compared the patterns among all the focus groups and surveys and noted similarities. Using words that were repeated by participants as well as the questions I asked during the interviews, I generated the

following three categories: *Challenges* of engaging Indigenous students, *Opportunities* to engage Indigenous students, and *Suggestions* related directly to curriculum.

After writing the codes, I noticed that the codes could have been divided into two categories: those related to *student and community needs* and those directly related to *curriculum* (content vs. process). Table 1 shows codes related to student and community needs, and the map in *Figure 1* on the following page shows those codes related to curriculum.

Table 1
Initial Codes Related to Students' and Community Needs

Challenges of Engaging Indigenous Students	Opportunities to Engage Indigenous Students
Loss of cultural identity	Community involvement
Westernization (too academic)	Mayan leaders
Language Barriers	Empowering youths/ females
Low socio-economic backgrounds	Sustainable tourism
Oppressive systems	Family values (Milpa)

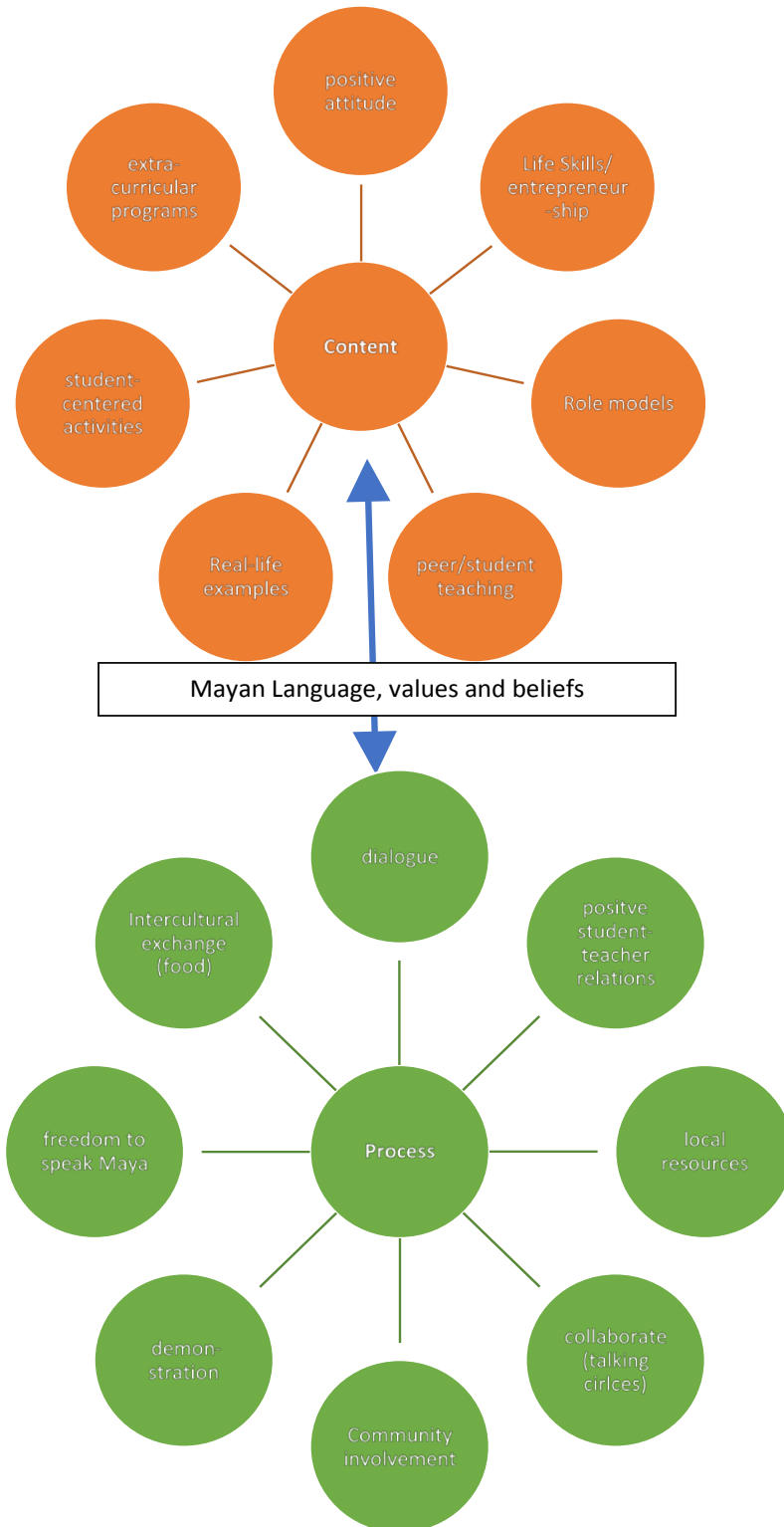


Figure 1. Map showing codes related to curriculum: Content vs. process.

Figure 1 shows initial codes related directly to curriculum. After sorting the extracts, I noticed that participants were talking about two main ideas: What should be taught in the curriculum and how it should be taught. I, therefore, created a map using the subcategories of *Content* (what should be taught) and *Process* (how it should be taught). The bubbles surrounding these subcategories represented the codes that were elucidated by participants. The code at the center of the map (Maya language, values and beliefs) connects the two subcategories, *Content* and *Process*. This connection is denoted by a double headed arrow to show that participants accentuated that Maya language, values and beliefs were the links between the Content and Process of curriculum needed to engage Indigenous students, much like the Great Ceiba tree that connected the heavens to the underworld in Maya mythology (Edmonson, 1997, p. 80).

Development of themes. To obtain themes, according to Braun and Clarke's (2006) thematic analysis process, I compared the codes from *Figure 1* to my field notes as well as the notes I took when I did my holistic impressions. Next, I noted similarities amongst the three sources and collated these codes into ten initial themes, as follows: Maya language/beliefs, Student-teacher relationships, Student-centered activities, Real-life examples/life skills, Dialogue/freedom of speech, Local role models/resources, Community involvement, Extra-curricular programs/sports, Inter-cultural exchange, and Socio-economic backgrounds.

Using the initial themes, I reviewed the data once more and sorted extracts. I then attempted to define those themes based on the extracts and field notes. I noticed again that some extracts could be placed under more than one theme and that some definitions were similar. I decided to collapse or collate some themes and eventually remained with six themes. The six themes that I determined were: Maya culture, Student-centered activities, Real-life stories and exemplars, Collaboration, Relationships, and Local role models/resources.

I then proceeded to check the prevalence of these themes by tallying the number of extracts under each theme and then calculating this as a percentage of the total number of extracts. As shown in Chapter Four in *Figure 3*: Maya culture was most prevalent at 27%, followed by Student-centered activities at 19%, Real-life stories and exemplars at 16%, Collaboration at 15%, Relationships at 12% and Local role models/resources at 11%.

From the data, it appeared that most participants were suggesting that Indigenous students would feel more engaged if the Mayan culture (language, history, and way of life) were included in both the content and process of the curriculum. I elaborate on this and the other themes in Chapter Four.

Discussion of Validity

As an Indigenous person, I was aware of the protocol concerning research with Indigenous peoples in Belize. This association to the Indigenous people was advantageous because I was able to recognize and interpret things that a foreigner might have overlooked such as norms, gestures, expressions, mannerisms and customs in the Maya culture. Yet, I may also have been ignorant of some cues as an Indigenous person or failed to take note of them.

In terms of the sampling techniques utilized, Fraenkel et al. (2015) asserted that one of the disadvantages of purposive sampling is that the researcher may misjudge the representativeness of the sample or their expertise on the topic under study. Hence, my judgment of the expertise of the participants for the present study might have been erroneous. To minimize this threat, the sample consisted of a multi-generational scope and Elders were sought based on their knowledge of the needs of the local community, their involvement in the schools, such as through PTA meetings, and the number of years that they had been living in the community. Moreover, both Indigenous Mayan and non-Indigenous participants were sought and partook in

each focus group discussion. This ensured that both Indigenous and non-Indigenous voices were shared and used in the research. Moreover, being purposive in nature, participants may have felt undue pressure to participate and respond in certain ways because of my relationship with them. Hence, I had informed participants that they could choose to withdraw from the study at any time without penalty, which some chose to do.

In Chapter Four, I delve into the themes and stories I gathered from the attendance reports, interviews and surveys. Using graphs, rich descriptions and direct quotes, I attempt to illustrate the vivid experiences of listening to and recoding my participants' stories. As an active observer in the research, I also share my own stories and experiences with the hope of presenting an authentic experience of the voices of my local educational community.

Chapter Four: Key Findings Based on Prevalence and Potency of Responses

Introduction

In this chapter, I briefly present the statistics that I gathered from the schools that I studied to provide a background for my research. Next, I describe the key findings or themes that I defined and what the themes meant. In Chapter Three, I presented the codes in table and bubble map formats; in this chapter, I discuss these codes and thematic patterns further and provide a bar chart and line graph to show *prevalence* of themes. Using a line graph, see *Figure 4*, I demonstrate through comparison how different participant types valued each of the different themes. Finally, I demonstrate the *potency* of themes by using vivid extracts taken from the interviews.

Enrollment and Completion Rates

Because I could not find data about Indigenous students from the schools who participated in this study, I asked the school administrators to provide data about enrollment and completion rates. Since the high school programs in Belize extend for four years, I decided to collect data on enrollment rates for 2013 and completion rates for 2017. Based on the statistics that I collected from the two schools under study, the enrollment rates of Maya Indigenous students for School A in 2013 was 65%; that is, 15 students of 23 enrolled identified as Indigenous Maya. For school B, the enrollment rate of Maya Indigenous students was 76%; that is, 215 of 283 enrolled identified as Indigenous Maya.

Furthermore, School A had a completion rate of 60%; that is, nine of the 15 Indigenous students who enrolled in 2013 completed their programs in 2017. Moreover, School B had a completion rate of 55%; that is, 119 of 215 Indigenous students who enrolled in 2013 completed

their programs in 2017. As shown in *Figure 2*, there were lower completion rates than enrollment rates in both schools from 2013 to 2017. Thus, I became curious to know why a substantial number of Indigenous students did not complete their high school programs in these schools. Moreover, I wanted to find ways to help address the situation by listening to the voices of the local educational community, particularly about increasing engagement through cultural relevance in the curriculum.

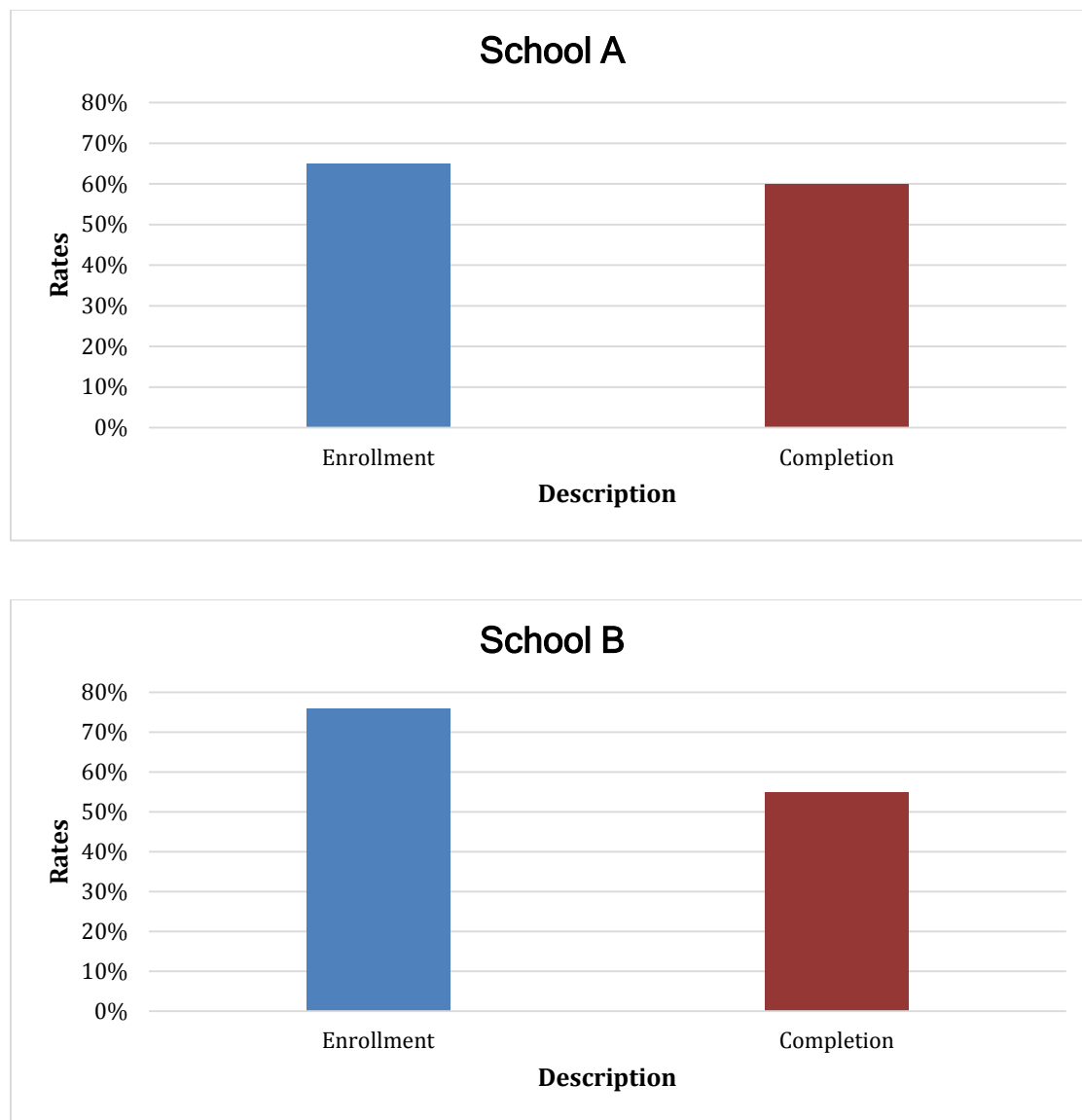


Figure 2. Graphs showing attendance rates of Indigenous students in Schools A & B.

Themes and Prevalence

As mentioned in Chapter Three, the six themes that I determined were: Maya culture, Student-centered activities, Real-life stories and exemplars, Collaboration, Relationships, and Local role models/resources. To show prevalence of these themes, I tallied the number of extracts under each theme and calculated this as a percentage of the total number of extracts. As shown in *Figure 3*, Maya culture was most prevalent at 27%, followed by Student-centered activities at 19%, Real-life stories and exemplars at 16%, Collaboration at 15%, Relationships at 12% and Local role models/resources at 11%.

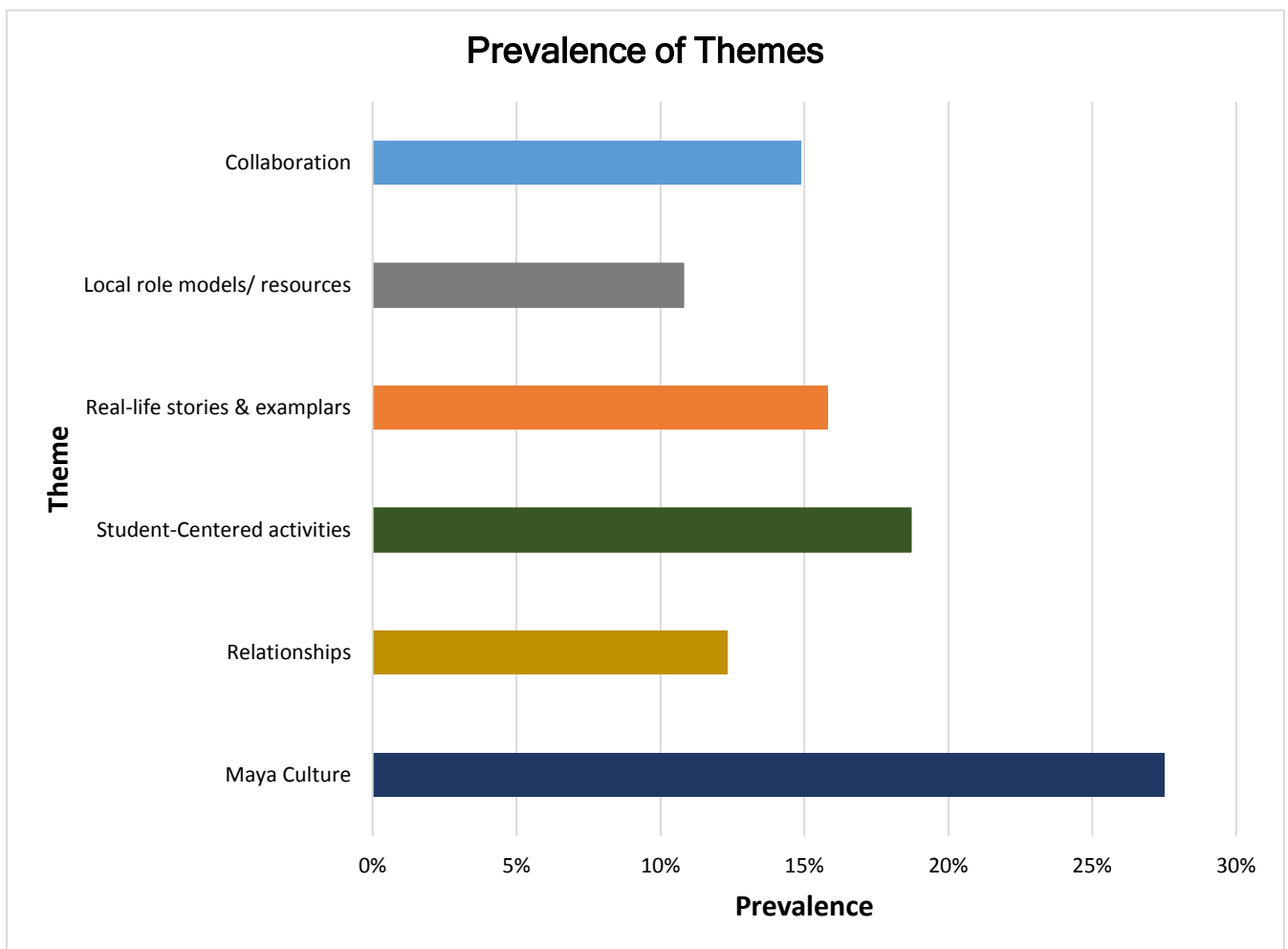


Figure 3. Bar chart showing prevalence of themes.

While exploring prevalence of some themes, I became curious about the prevalence of themes among different participant responses, and so I did a tally of which theme was mentioned most per participant type-students, teachers, Elders, and administrators. I calculated percentages by dividing the total number of extracts for each theme mentioned by each participant type by the total number of extracts for each theme mentioned by all participant types. *Figure 4* illustrates that the Maya culture theme was most prevalent among administrators (42%), the Student-centered activities theme was most prevalent among students (28%), the Real-life stories and exemplars theme was most prevalent among Elders (21%), the Collaboration theme was most prevalent among Elders (25%), the Relationships theme was most prevalent among students (18%), the Relationships theme was most prevalent among students (18%) and the Local role models/resources theme was most prevalent among the Elders (16%).

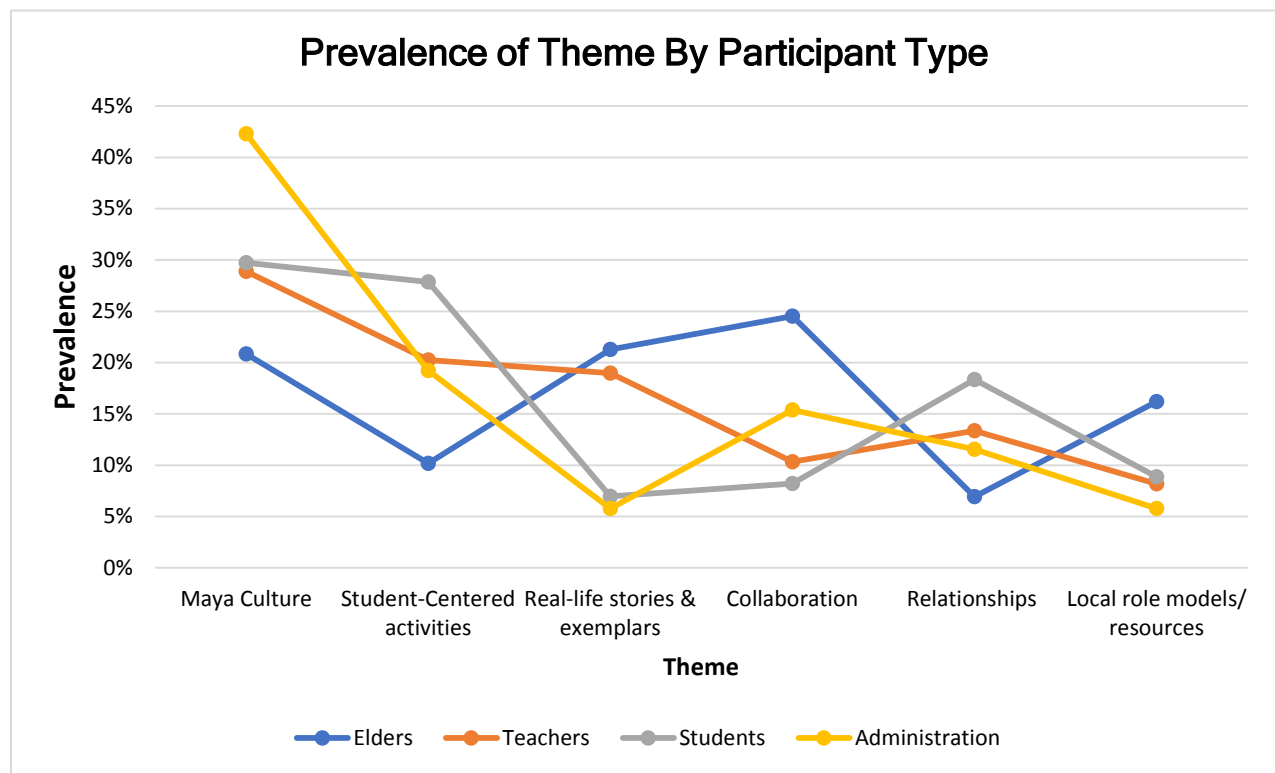


Figure 4. Line graph showing prevalence of the themes by participant type.

Themes and Potency

In the interviews, there were many times where participants became quite emotional or animated in their dialogue. This suggested that not only was there prevalence of several of these themes, but also potency; that is, these themes held a lot of meaning and emotion for some of the participants. In the following section, I used “thick descriptions” (Lincoln & Guba, 1985, as cited in Wiebe, Durepos, & Mills, 2010, p. 599) to more fully explain each theme, and I provided “vivid extracts” (Braun & Clarke, 2006, p. 87) from the interviews and surveys as a means to substantiate them.

Maya culture. The most frequently stated suggestion during the interviews and surveys was that Maya culture should be included in the curriculum to better engage high school students (27%); see *Figure 3*. Based on the way I sorted extracts under this theme, the term “Maya culture” included the Maya language, history and way of life. I also wrote down the phrase “Maya culture” many times in my field notes and usually with an asterisk next to it because participants showed both strong emotions and group consensus when it was said. My impression was that students showed the strongest emotions of all participants when they spoke about the Maya culture. They seemed hurt and frustrated that they were not allowed to speak the Maya language in school, yet most of them spoke positively and offered suggestions of how this might be done. They emphasized promoting the Maya way of life in school culture such as serving Maya foods in the school cafeterias, wearing Maya clothing and having the autonomy to speak the Maya language both inside and outside of the classroom. One of the potent extracts came from Student B who raised her voice, widened her eyes and made gestures with her hand as she said,

Why can't students wear their clothes...to show what their culture is of? And why can't the vendors or people cook the food for the Mayas? A-a-and then speak our language? When you say it in my language, I will understand more because it's my language.

Students also emphasized that Maya dance, music, art and craft, and agricultural practices should be taught in schools and during extracurricular activities, such as clubs. When Student M was asked how his culture was reflected in his learning, his emotions became so deep that it sent a ripple among the participants in the circle. His eyes became flushed with blood and he lowered his voice so low that I had to lean forward to hear what he was saying. I was almost brought to tears when he spoke, but I held them back and decided to give him my full attention and maintained eye contact as he said the following words through quivering lips,

Me...I actually live in this village, was born here, so my culture in this curriculum of the high school, well...none of it is being taught here... and the culture, history and language...so to me, Maya language should be taught here in high school and Maya stuff like weaving baskets with the plant we call in Maya, Me'z.

There was also a strong emphasis from teachers, especially Indigenous teachers, that students should be taught in their Maya language and that schools should use textbooks that are written in Maya. With vehemence and sharpness in her voice, and gesturing her hands to the group as if to make a strong point, Teacher C stated,

When it comes to expressing themselves [Indigenous students] or explaining how they get to a solution, I think sometimes if they were allowed to speak Maya to me, I think they can tell me it better in Maya than in English...or when I give instructions and they don't

get it, I say maybe if I speak to them in Maya, then they would understand it better. It could be beneficial if it was integrated.

With many nods of agreement from other participants in the circle, Teacher R, quite composed but firm, supported this idea by saying,

Like we said just now, let us feel like a part of the school by using our first language [Maya] from time to time... Students grasp the content easily and they still learn the English language and then they feel like a part of the class.

Moreover, *Figure 4* shows that of all participants, the theme of Maya culture was most prevalent among administrators. Whilst there was a strong advocacy for Maya culture to be integrated into school curricula, I noted that school administrators were cautious with their written tones and words, given that there are few Indigenous high school administrators in Toledo. A set back to using surveys with administrators was that I was unable to see their reactions and emotions first hand. Nevertheless, their perspectives were clear as was written by Principal I,

One of the challenges with working with Indigenous students is their lack of ability to speak the English language as confidently as possible. They cannot express themselves with the freedom and clarity that they would want...these are intelligent students, but the language barrier has an impact on communication.

This sentiment was further supported by Principal S, who expressed,

I believe that they [Indigenous students] should be offered an opportunity to prepare and portray all aspects of their culture all year round. At some point, they should be allowed to learn in their own language.

According to Palacio (2013), the local Garifuna community unequivocally recommended that a curriculum that could rebuild Garifuna cultural identity should be developed and implemented to teach Indigenous Garifuna students as a means to increase their achievement in schools. Palacio (2013) further indicated that issues directly related to culture and the identity of Indigenous people were sensitive topics, which is reflected in the cautious tones of the administrators' responses. Saqui (2012) also suggested that Maya culture be approached and explored with respect. As an active participant in this study, I felt that a similar negative sentiment was expressed by some participants when discussing about culture and education, particularly with students. These reactions may hold subtle clues about the disconnection that Indigenous students feel from their culture and how their engagement could be improved.

Moreover, another interesting finding from Palacio (2013) was that many Garifuna students were not aware of their *Garifunaduau* (Garifuna identity). Some students also negatively perceived their *Garifunaduau* and it thus became a hindrance to their motivation in school (Palacio, 2013). Saqui (2012) alluded to the abstractness and deeply embedded connections of Maya people to their land and culture. Based on the literature and the evidence that I have collected, I believe that the impact of not integrating Maya culture into the curriculum to engage Indigenous students could possibly be creating a demoralizing sentiment among Indigenous students toward education.

According to Parsons and Taylor (2011), students need to feel a sense of connection to what they are learning and the way they are learning in order to feel engaged. Duran (2015) claimed that connections to culture are of vital importance to the engagement of students especially from minority groups. Furthermore, Middleton et al. (2013) found that students identify with content and feel more engaged when teachers integrate local culture into their

teaching, such as using the Maya language to explain concepts and when interacting with students. Saqui (2012) also claimed that the Maya language and culture are pivotal in fostering connectedness in Mayan communities. Moreover, Baines (2012), through her extensive study of ecological heritage and health among Maya communities in Belize, reiterated the correlation between wellness of Maya students and connectedness to their culture. Therefore, it is of utmost importance to consider the voices of the local educational community that contend that Maya language, history and culture should be included in the curriculum.

Student-centered activities. The second most prevalent theme was student-centered activities (19%), as shown in *Figure 3*. According to the educational community, these were the activities that students wanted to learn and that would meet their emotional, psychological, spiritual and academic needs (Parsons & Taylor, 2011). These activities, they suggested, should be included in teaching methods, content, and in extra-curricular activities. Moreover, student participants claimed that they enjoyed learning activities such as public speaking, dialogue, learning circles, peer teaching and collaborative activities. They also mentioned that they felt more engaged when they were given the freedom to speak the Maya language during these activities. Student G vividly expressed this sentiment in her statement below, where she began in English and then broke into her Maya language and then in English again:

I like coming to school because of the activities... [laughs, closes her eyes and then speaks in Maya language and then translates in English language]...coming as a group, sharing your different opinions with each other so that you come together to get what people think and how they feel on something.

There were also numerous suggestions that participants made about extracurricular activities such as sports and clubs. Student J expressed that extracurricular activities that

included Maya culture provided a sense of belonging and fostered cultural identity and pride. They listed various suggestions for clubs such as weaving, playing marimba, and cultural dancing. Student J illustrated this point by saying,

Maybe they could have a club here, where you learn like how to play the marimba...It would be better to have a little club where they teach our students how to play instruments and just to continue into the next generation. And pass it on to other students... Do something that we love. [Other students smile and say 'yeah' to show agreement.]

According to Parsons and Taylor (2011), teachers need to be able to provide opportunities and activities that will allow students to explore, connect to their aspirations, and challenge them to broaden their life experiences. Duran (2012) also found that student engagement was dependent on students' abilities to connect assignments, projects, and theory with their lives. In addition, Palacio (2013) claimed that when the local Garifuna community was asked about how their culture could be integrated into curriculum, they suggested that students should be taught about Garifuna art, music, dance and spirituality. Both Saqui (2012) and Palacio (2013) claimed that one of the ways in which Indigenous people rediscover their identities and experience social and economic upliftment is through their art, music, dance and spirituality. Consequently, I believe that it is significantly important to pay attention to the assertions made by the educational community in this study that student-centered activities that integrate Maya culture both inside and outside of the classroom have a major role to play in Indigenous student engagement.

Real-life stories & exemplars. The third most prevalent theme that I gathered was real-life stories and exemplars (16%); see *Figure 3*. As participants spoke about this theme, there

were many moments of laughter especially when someone related past experiences or stories. There were also moments when participants nodded in agreement or said “yes” when a participant was talking. I noticed too that participants seemed extra attentive when stories were told, many of them turned their entire bodies toward the speaker and their eyes were completely focused on her or him. Moreover, the speakers usually spoke with high energy, alacrity, and made various facial and body gestures as if to animate their stories. They captivated the participants, including myself, and I couldn't help sharing in some moments of laughter.

Students claimed that they connect through real-life stories and feel motivated about school when they learn about life skills. By engaging in hands-on activities including vocational and technical skills, sustainable tourism and entrepreneurship, they felt more motivated to complete their high school programs because they felt that they were working towards a brighter future. With a broad smile on his face and heightened tone in his voice, Student J expressed this claim in the following,

In Agric department, they teach us how to like farming, like how to raise chickens and then the different times it needs to be slaughtered...you may learn like different skills, Miss. And then maybe like one day you might use them in your life to help you with your family.

There was also a huge emphasis on this theme from Elders. Elder B leaned forward with a sharp jerk, raised his hands, looked around the room at the other participants, and explained it this way:

I look at the agricultural aspect of it where they [students] do a lot of hands-on and field work: Planting, raising animals, gardening, which I believe actually reflects the culture of the people... because, as you know, agriculture is the backbone of our district.

Many teachers also shared this sentiment. Teacher C, for example, kept smiling throughout her explanation, breathed heavily several times, and kept moving her hands back and forth when she related her experience of working with students in the following:

When I deliver some of my content, I try to make it realistic...there will be something they can do outside of class... Go and measure the height of a pole, go and find angles between the steps coming down from one building to another... We use whatever we have outside to apply these concepts.

As the other teachers nodded in agreement, Teacher C continued with a broad smile on her face, beaming with pride and lowered her voice and said,

From past students, they say Miss, I like the way you taught us. You engaged us in these activities. I like having fun in class and... learning practical things.

Indeed, Saqui (2012) argues that knowledge transmission in Maya families and households occurs mainly through vivid real-life experiences in which Elders and parents teach younger generations through stories and daily interactions. Baines and Zarger (2013) supported the idea that Maya communities view education as a means to acquire life skills. Moreover, Preston and Claypool (2013) found that aboriginal students were highly motivated by real-life stories and by exemplars such as family members who had completed their high school programs. Similarly, among the Mayas in Belize, the idea of engaging students through real life

stories and exemplars seems highly palpable and substantial to engaging students, as evidenced by the voices of the educational community.

Collaboration. The fourth most prevalent theme was collaboration (15%), as shown in *Figure 3*. I felt that during the coding process, this was the broadest theme in that it was an underpinning for all other codes and themes. It encompassed the importance of community partnerships, parent involvement, as well as intercultural exchange. Most Elders (25%) and administrators (15%), see *Figure 4*, mentioned that collaboration was an essential theme that should be considered in augmenting the curriculum. In Saqui's (2012) study, he explained about the importance of community involvement in the survival and transition of TMEK in Mayan societies. This sentiment was reiterated by many participants in my study and can be summarized by Elder S, as he expressed with vehemence:

All of us have a role to play to get that [engage Indigenous students] done. From the time they are brought up as children in the family to the time they leave high school and have that vision to go further or to be self-employed. It has to be collectively done.

Stemming from the theme of collaboration was the importance of parental support. Teachers emphasized that parents pass family values and culture to students about education, and that most parents who supported their children and teachers had success with their children completing high school. As Teacher L related in a passionate story about his own struggles as an Indigenous high school student, he claimed that students were better engaged when teachers collaborated with parents. Teacher L raised his voice, lifted his hands, and focused on participants with eye contact, blinking and smiling now and again as he shared the following:

I think going back to communities as well. I come from a family of 15 persons, kids, and I am the eldest in the family. My father and mother are dependent on me to take care of the farm. So, from school, I go to the farm, before even doing any other homework. And that's throughout the entire week. Even now I have two siblings and they need to go to the farm. Because my father is a bush doctor or shaman, my brother needs to deal with that as well. So, there is a lot of things when it comes to the cultural part where parents expect that their kids do house chores before even doing school work. And I understand that about students because when they come to school, it's like they use school as resting time. So instead of giving assignments to students, I have them do it in class. So, when they talk to me about their situation, I get to understand how they come from very, very interesting families. So, I change the way I do things, so I can help them. [Smiles broadly.]

Interestingly, another major idea that stemmed from the theme of collaboration was intercultural exchange. Participants emphasized that sharing Maya culture with others was essential to engaging Maya students in a multicultural Belizean society. By having students experience their own culture and then share it with their peers and others in the community, they develop pride, identity, and connectedness (Guilherme & Hüttner, 2015). Although not as prevalent as others, this pattern was evident across all focus groups, as captured by Student J:

I'd like to see more interaction between the cultures and really get to know each other and experience the cultures as well...more intermingling, more bonding, more interaction and that it may help the generations to come to really and truly experience the learning experience to the fullest.

Elder B propelled this idea in his relation of a personal story as the other members in the focus group intently listened. Filled with emotions and speaking in local Belizean Creole, his eyes brightened, and he smiled:

That's true [denotes consensus from a previous story told by another Elder] because I could remember growing up in [small community] back in the '70's. We used to do a lot of that-food exchange. I would go under the school and get together, and boy you got yellow ginger and this and that. And you know, we share. Bwai, weh yuh got? Bwai, wi only bring corn tortilla and pepa. Bwai, gi mi dat! And I gi yuh my one. And wi exchange food.

This was a moment of laughter, as the participants and I felt a sense of connectedness. Many of the Elders nodded in approval and said that they had had similar experiences and could relate to the story. I felt moved and reflected about how my recent experiences of studying abroad had also been of intercultural exchange between Belize and Canada. I thought about the experiences that Indigenous students had when they shared laughs, stories and personal experiences in circles like the one I was in and wondered how it might impact their learning.

What makes the theme of intercultural exchange fascinating, is that it showed that the sharing of Indigenous culture might be equally effective in engaging Indigenous students as it is in ensuring the preservation of Indigenous cultures. While previous research by Saqui (2012) and Middleton et al. (2013) emphasized the importance of motivating and teaching Indigenous students by preserving culture and traditions, Palacio (2013) asserted the importance of having Indigenous students develop their cultural identities and then share it with other communities. Based on what I have gathered, I agree with Palacio in this regard, and I believe that intercultural

methods of teaching might be equally as important as intracultural methods of engaging Indigenous students in Belize.

Yet, how much have the Indigenous students of Belize learned about their cultures in high schools or at home to be able to share it with their community? While the local educational community indicated a strong thrust towards intercultural exchange, they also emphasized that pride, cultural awareness and appreciation of identity be fostered among Indigenous students first. Hence, I believe that we need to start with empowering Indigenous students with their Indigenous culture before considering engaging them through intercultural exchange.

Relationships. The fifth most prevalent theme was relationships (12%), see *Figure 3*. Most students (18%), see *Figure 4*, highlighted that student-teacher relationships were important. They felt motivated when teachers were supportive, positive, and passionate about teaching. They also mentioned that they felt more engaged when teachers made connections to their culture and when teachers showed genuine interest in using the Maya language and culturally relevant examples to teach them. Student A emphasized the importance of positive relationships with teachers in the following:

I love to interact with other students here and the teachers; they provide us with our needs, and they help us, especially like if you have problems. There is a counsellor you can go talk to. They also have the subject life skills and personal development. They also teach you about your self-esteem, to have confidence. [Other students nod in agreement.]

Moreover, with a broad smile, student B also agreed:

Well, my engagement in school is good because I participate in house teams. I participate in things for school. Nice teachers – like A said, – they are good. They are helpful.

Furthermore, teachers and administrators stressed that in addition to visionary, open-minded, and inspirational leadership, relationships that foster care, sensitivity, and kindness were needed to motivate Indigenous students. Teacher F breathed deeply and then stated with a strong and confident tone in her voice,

I believe that knowing their [Indigenous students'] language and their beliefs will help them to feel comfortable in the school environments because you would be able to understand their problems if you understand their beliefs. And like I said, it would help them to have a good school environment.

Duran (2012) in her work on culturally relevant curriculum and student engagement found that building caring relationships was a key component in engaging students of minority groups. Middleton et al. (2013) support this notion through their findings that, in Belize, building caring and trusting relationships between Indigenous students and teachers was one of the major driving forces for sustained student engagement in Science and Mathematics. It was no wonder then that most of the educational community agreed that relationships are extremely important in engaging Indigenous students.

Local role models/resources. The least prevalent theme of the six but certainly not the least important was the use of local role models and resources (11%) as shown in *Figure 3*. From the study, many Elders (16%), as shown in *Figure 4*, discussed the role that Indigenous leaders and heroes played in Mayan societies. They encouraged the use of stories about these local role models to teach and motivate students. According to Saqui (2012), stories, skills, and oral history, especially those that are shared by Elders, have great potential to influence younger generations in Mayan societies. This is reflected in the following statement by Elder R. I, as the

interviewer, and the other participants in the circle became captivated as he straightened his body, slowed down his speech, lifted his hands, took a deep breath, and related the following:

For me at Standard Six, I always used Julian Cho as a source of inspiration. I said, 'Do you know who is Julian Cho? Will his spirit live on or will it die?' He believed in something, if you follow his story. If Julian Cho went to high school and he survived...got educated and became liberated to fight for his people. He needed to find a way to help his people to go back out and to start a movement for his people. There is a vision. Do you want to be like him? Do you want to continue his legacy?

Another suggestion stemming from this theme was the use of local resources including nature-based products and talents and skills from community members. According to participants, this would ensure sustainable use of resources, especially in teaching Indigenous students with low socio-economic backgrounds. As Teacher O expressed with much joy and laughter,

I think that we as teachers need to learn to use our resources right in our community. For example, I could remember a time when I told my principal that I would take the opportunity to do the arts and craft exhibition, and so I thought about how we could use these things just around our neighborhood or around our house and everything...we use the corn cob and the corn husk and the corn hair. We made dolls... I went to Ms. Pop and asked if we could make something out of cohune leaf... I got her. She came in. She showed the students how to make things out of the cohune leaf. I got another student who knows how to make ash trays out of coconut shell. He came in and he showed it to the class, and we did all sorts of things. [Eyes brighten and laughs.] I got the children excited...and we took everything to the exhibition in town, and we won prizes. [Bursts out

laughing] There are so many things that they can learn and so many resources in our community that can come in and help. Local resources. [Smiles.]

Middleton et al. (2013), in their investigation about motivational factors of Indigenous primary school students, noted that students felt engaged when teachers used local examples. Students felt supported and were able to relate to the material being taught (Middleton et al., 2013). Saqui (2012) concurred with this premise by emphasizing that Traditional Ecological Knowledge in Mayan societies is passed down through stories and lived experiences from one generation to another. Preston and Claypool (2013) identified that the influence of role models in Indigenous families were a major motivational factor for students to complete their high school programs in Saskatchewan, Canada.

My voice. As I took some time to reflect on the impact that role models had in my life, I became sentimental and filled with gratitude. My mother, being one of the first Indigenous women to attend and complete high school from her village, has been my greatest role model. My father, as an educational leader of mixed heritage, who has worked with the Indigenous Maya people for “donkey’s years,” has guided, loved, and supported me to pursue my dreams from since I was in the womb. Many of my teachers and friends of all ethnic groups inspired and encouraged me to be diligent and determined to complete my high school program. I then recalled my first presentation in kindergarten when I was dressed in my traditional Mayan outfit and sang the Belizean National Anthem with about ten other kids all dressed in their cultural outfits to depict the various ethnic groups in Belize. I remembered singing at the top of my lungs and feeling that wonderful feeling that I had a voice and that my voice was being heard. As tears rolled down as I digested these thoughts, I felt passionately driven to share my research story with fellow educators and to give my people the opportunity to have a voice in their education.

Thus, these themes that I have gathered and shared here are not only important but are essential to student well-being and engagement and are necessary to implement in our high school curriculum to ensure that our education reflects authentic Mayan culture.

In Chapter Five, I provide a synopsis of the findings and key learnings, discuss the implications and limitations of the study and then suggest some recommendations for further study.

Chapter Five: Conclusions and Recommendations

Summary of the Study

Because I have experienced first-hand the difficulties that Indigenous Mayan students face in striving to get a high school education, I felt compelled to research about ways to create equal opportunities in education for my Mayan students. While there was some literature showing the gaps between Indigenous and non-Indigenous students, there were few studies that gathered the voices of the Indigenous Mayan communities. Hence, I was inspired to collect the voices of the local educational community about what they suggested about the curriculum that could have it be more culturally relevant and thus better engage our Indigenous Mayan high school students in Belize.

I began by interviewing Elders, teachers, and students in focus groups, and distributed surveys to administrators. All interviews were videotaped and transcribed verbatim, and surveys were collected. After thematically analyzing the data and triangulating with field notes, I presented six themes. I also showed prevalence of these themes and then described and explained the potency of many of them using extracts from the interviews and surveys.

Research Questions and Methods

With the intention of collecting voices of the local educational community including Indigenous stakeholders, I carved the following research question: What does the local educational community suggest that would increase cultural relevance in general curriculum to better engage Indigenous students of Toledo, Belize? To gather the voices, I chose focus group interviews because I felt that participants would feel respected and appreciated if invited to share their stories and perspectives with others. I also felt that it was important to observe and

document where participants agreed or disagreed about the curriculum and how they portrayed emotions with their responses.

For analysis, I used Braun and Clarke's (2006) Thematic Analysis model. I chose this model because I wanted to portray the stories of the local educational community as realistically and authentically as possible. After transcribing the interviews, I did a holistic impression of my data and then reviewed each interview and survey questionnaire individually. As I looked for patterns, I noted prevalence and potency within participants' stories. Next, I determined codes that I used to sort extracts, and named my initial themes. I described these themes more fully. Finally, I refined and triangulated them using field notes that I had written throughout the research process. I used "thick" or "rich" description to support validity or veracity in reporting the findings and themes (Lincoln & Guba, 1985, as cited in Wiebe, Durepos, & Mills, 2010, p. 599).

Discussion of Key Findings

Based on the findings of the study, I concluded that six major themes were found: (i) Maya culture, (ii) Student-centered activities, (iii) Real-life stories and exemplars, (iv) Collaboration, (v) Relationships, and (vi) Local role models/resources. Table 2 on the following page shows a summary of the prevalence of themes per participant type.

Table 2

Prevalence of Themes per Participant Type

Theme in order of frequency (%)	Participant Type			
	Students %	Teachers %	Admin %	Elder %
1. Maya culture (27)	30	29	42	21
2. Student-centered activities (19)	28	20	19	10
3. Real-life stories and exemplars (16)	7	19	6	21
4. Collaboration (15)	8	10	15	25
5. Relationships (12)	18	13	12	7
6. Local role models/resource (11)	9	8	6	16

It was also interesting to document the emotions that participants portrayed when sharing their stories. I observed that most participants were emotional when they talked about their culture and when they shared their stories. In my opinion, students and Elders showed the strongest emotions. Students' nervousness and shyness seemed to increase when they talked about their culture and what they were learning in school. Elders on the other hand, showed charisma and a jovial mood when they shared their stories. Yet, they also showed firmness and some vehemence in their tones when they talked about teaching Maya culture in schools.

The pattern that was evident among all participants was that there was an urgent need for the high school curriculum to reflect Maya culture. As an educational leader, this meant to me that my local educational community did not feel that our culture was being reflected in the curriculum, and we therefore did not feel engaged in the learning process. Yet, many participants expressed a general feeling of hope that the young Mayan educators and leaders of Belize would

take up the challenge of ensuring that the voices of the Indigenous Maya communities be heard in Belizean education.

Implications, Meaning, and Significance

Due to the novelty of this research, it has numerous far-reaching implications. Throughout the history of Belize, there has never been a documented attempt to gather the voices of the local educational community, including the Indigenous Maya people, about how curriculum could be augmented to be more engaging to Mayan high school students. Hence, this research experience was not only significant to my community but also to my growth as a Mayan educational leader.

Sharing the findings with key stakeholders. Having collected the voices of my community and based on my own experiences of the current educational system, I felt compelled to share my findings with other leaders and stakeholders in order to chart a way forward to implement these recommendations. I am hoping to begin this process by sharing my research with the local educational community of Toledo, Belize.

Moreover, I plan to inform the Boards of Education about these suggestions on how to address the high drop-out rates of students and thus attempt to curb the increasing social ills in Toledo. Furthermore, I plan to share my findings with the larger Belizean community, including the University of Belize and the Ministry of Education. I am hoping that my findings will help to inform these stakeholders about some of the needs of the people of the Toledo district and to provide some ways in which the curriculum could be made more culturally relevant to promote authentic Belizean identity.

Finally, I plan to share my findings with the global community by publishing my thesis or on VIUSpace (<https://viurrspace.ca/handle/10613/3277>) and to submit articles based on this work to other research journals in Canada. I am hoping that the findings could assist anthropologists, environmentalists, health care workers and other researchers who are studying Maya ways of learning and living in Belize. I believe that by including the voices of the Maya people and other vulnerable populations in national and international issues, Belize better reflects its true culture and identity.

Limitations

Because of the nature of this research, there were many limitations. Working with a vulnerable population of Indigenous peoples, including students, had its ethical challenges. I felt self-conscious of my bias toward the voice of the Indigenous Maya people in the interviews and in my writing. I tried to offset this bias by examining literature from all over the world and triangulating my results with the literature, as well as with my field notes and holistic impressions. I checked my understanding with my participants. I used Braun and Clarke's (2006) Thematic Analysis six-step process in order to be highly reflexive, structured, and accountable in my analysis. I engaged Lincoln and Guba's (1985) approach of using "thick" description to ensure veracity in reporting my themes (as cited in Wiebe, Durepos, & Mills, 2010, p. 599).

As a Mayan woman, I must also acknowledge my own stereotypes in reporting participant voices and emotions. Certain mannerisms, expressions, and words spoken by Maya people may have meant things to me that may be interpreted differently by non-Maya people. Moreover, language was also a limitation, as some participants spoke in Maya or Creole, which I had some difficulty translating to Standard English. As the main interviewer in the focus groups,

I could have also added unintended but undue pressure to my participants and influenced the way they responded.

Furthermore, the sample I used was purposive, meaning that I had trusting relationships and personally knew my participants. Participants may have therefore felt compelled to give responses that they thought would please me or affirm my biases. Additionally, the sample size was small (30 participants), and therefore lacks generalizability. However, by being very precise and thorough in my descriptions of process, methods, and results, I hoped to ensure some potential transferability.

It is important to note that the sample consisted of voices from both Indigenous and non-Indigenous groups, and included inter-generational views starting with Elders to administrators to teachers to students, which potentially helped to validate findings. While this diversity may have been advantageous in gathering a wide range of perspectives, it may have influenced how participants responded. Dominant speakers and cultural differences may have influenced how participants responded to questions.

When it came to gender, the conversations during the interviews may also have been unbalanced because in some groups, females were reluctant to talk in front of the camera, while some males were more robust in their responses. Furthermore, there could have been shame, resentment, or emotional trauma that influenced responses, especially from students when they shared about their experiences at school in front of their peers or with participants who might be in a place of authority.

Resources were also a limiting factor in that there were instances where I had to use my own money to cover the expenses of my research. I had to walk on *picados* (tiny paths made by

cutting through forest with a machete) and sometimes for several miles before I could reach my destinations. Some participants such as teachers and students had to stay after classes to be part of the interviews, and then had to wait for hours to catch a bus to get home. Sometimes it was difficult to contact participants and schedule interviews because some schools did not have access to the internet or had poor phone service.

As mentioned previously, relevant literature was also limited in this area of research. With little exemplars to work with, I was walking into new territory without a map in some ways. With limited time and access to extensive international research, my choices were reduced. There may have been some studies that I missed as a result. However, I feel that my original intention – to gather the voices of the local Indigenous peoples – was not impeded by these limitations. I feel that their voices are well represented, and their insights and honest contributions will prove invaluable and influential in time. Much as the work being done on addressing Indigenous education in Canada or Peru informed my research practices, I hope my work serves to inform others.

Recommendations for Further Research

Although this was a good attempt at collecting the voices of the educational community including the Indigenous stakeholders, there were many other opportunities to gather the perspectives of other ethnic groups in Belize, such as the East Indian, Creole, Garifuna, Mestizo, and so on. In this study, the needs of the community and opportunities and challenges faced by Indigenous students were discussed briefly, but further investigation into these questions and issues might provide insights about why Indigenous students' drop-out rates were high and how they could be ameliorated. For example, I became curious about how much of the educational deficit experienced by the Mayas was caused or related specifically to socio-economic problems.

Furthermore, pilot projects about how different methods impact student engagement, such as learning circles and collaborative techniques, could provide further understanding of Indigenous ways of knowing and learning in Belize.

Although some data about prevalence of themes based on participant type was provided in this research, I did not explore the depth of this data as deeply as I would have liked. Thus, another suggestion for further research would be to explore why participants responded in the ways they did; that is, whether social status or professional roles (or lack thereof) influenced how participants viewed their educational experience.

The theme of collaboration through cultural exchange also came as a surprise to me because I felt that the local community would have suggested that collaboration may have caused a *loss* of culture. Hence, an interesting area to research could be about why participants felt that cultural exchange was important in the engagement of Indigenous students. Being one of the main themes elucidated in the research, it would also be intriguing to investigate how Maya language influenced students' learning. Furthermore, another area of research could be to investigate ways in which Maya language and culture could be integrated into teacher education certification in Belize.

Additionally, because I was able to experience some of the Indigenous cultures in Canada, I wondered if there were any correlations with Indigenous peoples in Belize. Has the loss of cultural identity affected the Indigenous population of Belize in similar ways to how it has affected those in Canada? Apart from gaps in standardized tests, what other gaps in education did Indigenous people experience in Belize and Canada? What similarities do Indigenous people all over the world share? How can I as a researcher give a voice to Indigenous

peoples? How can we make the world a place where the Indigenous perspectives are given equal respect and dignity as the more dominant voices?

Conclusion

As I venture forward, I feel enlightened by the voices I heard and the experiences that I have had throughout this research. I plan to continue to research in this field and work with the Maya people in Belize. I am fully aware that this has been but a slight glimpse into the Mayan perspective, and I am hoping that others may get inspired to do research in this area.

Nevertheless, I have learnt a great deal about my local educational community and my Mayan heritage throughout this research. From reviewing literature in the Vancouver Island University library to walking the picado roads to visit Elders in their homes, this research has affected my view of the world and my role as an Indigenous woman in educational leadership.

I have come to honor, cherish and more eagerly embrace my Mayan culture, and in so doing, I feel compelled to share my story with others. I have also become more passionate about giving voice to my students and other vulnerable populations in Belize. I would like to close with a phrase that my grandmother tells me whenever I leave on a journey because I feel that my journey has only just begun: *Ka wil'ah a' ba'hil*, which means "take care and enjoy the journey."

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Appendix A (i): Permission to Recruit Letter to School Administrators



Date

Toledo District

Belize, C.A.

Principal

_____ High School

Toledo District

Belize, C.A.

Dear Sir/ Madam:

It is an honor to visit _____ High School. Since leaving Toledo in February 2017, I have embarked on a journey toward a master's degree in educational leadership at Vancouver Island University, in British Columbia, Canada.

This semester I have returned home to conduct research on one of the most crucial issues in our district, "Augmenting Belize Secondary School Curricula to Increase Indigenous High School Students' Engagement in Learning." Recognizing the urgency to address student dropout rates in our district, I am seeking your cooperation in this endeavor. I am hereby requesting permission to recruit student and teacher participants for this study from your school and to

conduct two interviews at your school's library between September 10, 2018, to November 28, 2018.

I am also seeking school administrators who are willing to complete a survey. Interview of participants would include five teachers and five students. Survey participants would include five administrators.

All participants will be required to sign a consent form with a confidentiality agreement. Data will be used for thematic and research purposes only, and no names will be mentioned in the reports/thesis. The findings from this research will be made available upon request.

Should the need arise for further clarification, please feel free to contact me at -----.

I look forward to your cooperation. Please indicate below whether you grant permission to allow this research to be conducted at your school.

Principal Name _____

Principal Signature _____

Yours truly,

----- (Student Researcher-Vancouver Island University)

Appendix A (ii): Permission to Recruit Letter to Chairman of Board



Date

Toledo District

Belize, C.A.

Chairman of Board

_____ Village

Toledo District

Belize, C.A.

Dear Sir/ Madam:

As a young Mayan student, it is an honor to visit _____ Village. Since leaving Toledo in February 2017, I have embarked on a journey toward a master's degree in educational leadership at Vancouver Island University, in British Columbia, Canada.

This semester I decided to return home to conduct research on one of the most crucial issues in our district, "Augmenting Belize Secondary School Curricula to Increase Indigenous High School Students' Engagement in Learning". Recognizing the urgency to address student drop out levels in our district, I am seeking your cooperation in this endeavor.

I am hereby requesting permission to recruit five participants for this study from your village and to conduct a focus group interview at your Village Community Center between September 10, 2018 to November 28, 2018. Participants would include five parents and Elders who have been living in your village for at least five years and are knowledge about the history and needs.

Kindly note that all participants will be required to sign a consent form with a confidentiality agreement. Data will be used for thematic and research purposes only. No names will be mentioned in the final reports/thesis. The findings from this research will be made available upon request.

Should the need arise for further clarification, please feel free to contact me at ----.

I look forward to your cooperation. Please indicate below whether you grant permission to allow this research to be conducted at your village.

Chairman's Name _____

Chairman's Signature _____

Yours truly,

----(Student Researcher-Vancouver Island University)

Appendix B (i): Introductory Letter to Students, Teachers and Administrators

Toledo District

Belize, C.A.

My name is ---- and I am from ----. I am a research student at Vancouver Island University. To address some of the high school dropout rates in our district, I plan to be conducting research from September 2018 to October 2018, on what the educational community says about the current high school curriculum and how it could be made more engaging to Indigenous students.

This letter serves as an invitation to you to participate in this study. As a participant, you will be required to participate in a focus group interview/survey at ----High School between September 10, 2018 to November 28, 2018. Interviews/surveys will be recorded and documented for research purposes. Interviews will include three main questions about school experiences, curriculum and cultural perspectives and last approximately two hours. Surveys will include five main questions about school experiences, curriculum and cultural perspectives and last approximately half an hour.

If you wish to participate, please provide your name and contact information on the signup sheet. On my next visit, I will draw five students' (all Indigenous) names for Focus group 1, five teachers' (3 Indigenous and 2 non-Indigenous) names for Focus group 2 and five

administrators' (3 Indigenous and 2 non-Indigenous) names for the survey from those who sign up, and I will provide an official recruitment letter and consent form which must be signed before engaging in the focus group/survey. For those who are under the age of 16, parents will also be required to sign a consent form.

Should the need arise for further clarification, please feel free to contact me at ----. I am looking forward to hearing from you.

Yours truly,

-----, Student Researcher, Vancouver Island University

Appendix B (ii): Introductory Letter to Parents/Elders

Toledo District

Belize, C.A.

My name is ----- and I am from ----- . I am a research student at Vancouver Island University. To address some of the high school dropout rates in our district, I plan to be conducting research from September 2018 to October 2018, on what the educational community says about the current high school curriculum and how it could be made more engaging to Indigenous students.

This letter serves as an invitation to you to participate in this study. A requirement is that you self-identify as an Indigenous Mopan/Maya parent/Elder and have some experience with the school and community. As a participant, you will be required to participate in a focus group interview at a local community center between September 10, 2018 to November 28, 2018. Interviews will be recorded and documented for research purposes. Interviews will include three main questions about school experiences, curriculum and cultural perspectives and last approximately two hours.

If you wish to participate, please provide your name and contact information on the signup sheet. On my next visit, I will draw five names for the focus groups from those who sign up and I will provide an official recruitment letter and consent form which must be signed before engaging in the focus group/survey.

I am looking forward to hearing from you.

Yours truly,

-----, Student Researcher, Vancouver Island University

Appendix C (i): Recruitment Letter for Focus Group Participants Over 16 years**Augmenting Belize School Curricula to Increase Students' Engagement in Learning**

Principal Investigator	Student Supervisor
Student Researcher	-----
Master of Education in Educational Leadership	Faculty of Education
Vancouver Island University	Vancouver Island University
-----	-----

As a Master of Education student at Vancouver Island University (VIU), I am required to complete a research thesis as part of my studies. My research entitled, "*Augmenting Belize Secondary School Curricula to Increase Indigenous Students' Engagement in Learning*" aims to investigate what the local educational community suggests that would increase cultural relevance in curriculum to engage Indigenous high school students in Belize. My hope is that my research will contribute to the success of the children of Belize in completing their high school program.

As a participant in this study, you will be asked to participate in a group discussion with fellow peers. Discussion will include topics around learning experiences, school curricula, and cultural perspectives. A sample of the curriculum will be provided to the participants, if requested. The group discussion would be videoed, and audio recorded. Your responses will only be used for thematic purposes. Some quotes may be pulled out, but no names will be mentioned in the reports or thesis. The group discussion is expected to take two hours and will be conducted in the school library between September 10, 2018 to October 28, 2018. As part of the focus

groups, you will be asked to respect the confidentiality of all members of the group by refraining from disclosing the identity of other participants, or information shared during the group discussion.

Depending on the information you provide, there may be a risk that the information you provide might cause loss of social status and/or embarrassment. To mitigate this risk, all members of the focus group will be asked to sign a confidentiality clause. Moreover, you would have an opportunity to choose whether you consent to me quoting you in the products of the research. Nonetheless, because the discussion would be conducted as a group, of course the other participants would know your identity, and I have no control over what participants disclose.

The group discussion would be videoed, audio recorded, and later transcribed. You would be provided a draft report of the research and may opt to withdraw any comments that you recognize as your own, if you so choose, within two weeks of receiving the draft. Electronic data will be stored on a password-protected computer. Signed consent forms and paper copies of interview transcripts will be stored in a locked file cabinet in my home. Data will be deleted and shredded at the end of the project, approximately May 31st, 2019.

I plan to publish the results of this study in my Masters' thesis, and in conference publications, presentations, and in peer-reviewed journals.

Your participation is completely voluntary. You may withdraw from the study at any time up until two weeks after you have received a copy of the draft report, for any reason and without explanation. If you choose to withdraw from the study, all information you provided during the group discussion would be withdrawn from the study and destroyed.

I have read and understand the information provided above, and hereby consent to participate in this research under the following conditions:

I consent to the group discussion being video and audio recorded. *Yes* *No*

I promise not to disclose the identity of other participants, or information shared during group discussions *Yes* *No*

I consent to being quoted in the products of the research. *Yes* *No*

Participant Name _____

Participant Signature _____

I promise to adhere to the procedures described in this consent form.

Principal Investigator Signature _____ Date _____

If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics Board by telephone at -----.

Participants will be provided a copy of the signed consent form.

Appendix C (ii): Recruitment Letter for Focus Group Participants Under 16 years**Augmenting Belize School Curricula to Increase Students' Engagement in Learning**

Principal Investigator	Student Supervisor
Student Researcher	----
Master of Education in Educational Leadership	Faculty of Education
Vancouver Island University	Vancouver Island University
----	----

As a Master of Education student at Vancouver Island University (VIU), I am required to complete a research thesis as part of my studies. My research entitled, "*Augmenting Belize Secondary School Curricula to Increase Indigenous Students' Engagement in Learning*" aims to investigate what the local educational community suggests that would increase cultural relevance in curriculum to engage Indigenous high school students in Belize. My hope is that my research will contribute to the success of the children of Belize in completing their high school program.

As a participant in this study, your child will be asked to participate in a group discussion with fellow peers. Discussion will include topics around learning experiences, school curricula, and cultural perspectives. A sample of the curriculum will be provided to the participants, if requested. The group discussion would be videoed, and audio recorded.

Your child's responses will only be used for thematic purposes. Some quotes may be pulled out, but no names will be mentioned in the reports or thesis. The group discussion is expected to take two hours and will be conducted in the school library between September 10,

2018 to October 28, 2018. As part of the focus groups, your child will be asked to respect the confidentiality of all members of the group by refraining from disclosing the identity of other participants, or information shared during the group discussion.

Depending on the information your child provides, there may be a risk that the information he/she provide might cause loss of social status and/or embarrassment. To mitigate this risk, all members of the focus group will be asked to sign a confidentiality clause. Moreover, you and your child would have an opportunity to choose whether you consent to me quoting your child in the products of the research. Nonetheless, because the discussion would be conducted as a group, of course the other participants would know your child's identity, and I have no control over what participants disclose.

The group discussion would be videoed, audio recorded, and later transcribed. You and your child would be provided a draft report of the research and may opt to withdraw any comments that you recognize as your child's own, if you so choose, within two weeks of receiving the draft. Electronic data will be stored on a password-protected computer. Signed consent forms and paper copies of interview transcripts will be stored in a locked file cabinet in my home. Data will be deleted and shredded at the end of the project, approximately May 31st, 2019.

I plan to publish the results of this study in my Masters' thesis, and in conference publications, presentations, and in peer-reviewed journals.

Your child's participation is completely voluntary. You and your child may withdraw from the study at any time up until two weeks after you have received a copy of the draft report, for any reason and without explanation. If you and your child choose to withdraw from the study,

all information your child provided during the group discussion would be withdrawn from the study and destroyed.

My child and I have read and understand the information provided above, and I hereby grant permission to my child to participate in this research under the following conditions:

I and my child consent to the group discussion being videoed *Yes* *No*
and audio recorded.

I and my child promise not to disclose the identity of other *Yes* *No*
participants, or information shared during group discussions

I consent to my child being quoted in the products of the *Yes* *No*
research.

Participant Name _____

Participant Signature _____

I promise to adhere to the procedures described in this consent form.

Principal Investigator Signature _____ Date _____

If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics Board by telephone at -----.

Participants should be provided a copy of the signed consent form.

Appendix D: Confidentiality Agreement

As a hired research assistant, I understand that my role is to assist with video taping and transcribing the data provided to me by the contractor, for the research purpose that it is intended, "*Augmenting Belize Secondary School Curricula to Increase Indigenous Students' Engagement in Learning*". I promise not to disclose the identity of any participants, or information shared by participants in the interviews. I also understand that I will be expected to delete all information concerning the data provided, gathered and generated from this process, within the time specified by the contractor.

I understand that failure to comply with the ethical policies hereby stated in this contract may result in legal ramifications.

Name of Research Assistant _____

Signature of Research Assistant _____

Date _____

Name of Contractor _____

Signature of Contractor _____

Date _____

Appendix E: Script for Focus Groups

Introductions and greetings.

Script:

Thank you for being a part of this research about our community. Your presence here today means that you have agreed to participate in this study and have signed the consent forms distributed by the researcher. Having read those forms, I will ask that you kindly refrain from disclosing the identity of other participants, or any information shared during this group discussion.

Please note that your participation in this research is completely voluntary. You may withdraw from the study at any time, for any reason and without explanation. If you choose to withdraw from the study, all information you provided during the group discussion will be withdrawn from the study and destroyed.

You will be provided with a copy of the draft report and can make revisions, if you so desire, within two weeks of receiving the draft. Do you have any questions or concerns at this point?

I am conducting these interviews as part of my research thesis at Vancouver Island University. Kindly note that your responses may be used for research and thematic purposes only. No names will be mentioned in the final reports or thesis.

Protocols:

During the interviews, I will ask that you adhere to the following protocol:

1. Consent to participate in this interview shall be voluntary, informed and ongoing.
2. Respect yourself and other participants' point of view.

3. Kindly respect the confidentiality of all participants in this interview by refraining from disclosing the identity of other participants, or information shared during this group discussion.
4. Kindly allow all participants to speak freely. Each participant will be given the opportunity to speak but may choose to not answer a question if he/she so desires.
5. To ensure that the voices of each participant is clearly heard, only one speaker will be permitted at a time.
6. Should the need arise, a counselor will be on call to assist with any emotional or psychological distress experienced because of participating in this interview.
7. A sample of the curriculum will be available to all participants.
8. Kindly speak audibly and clearly so that your voices can be heard and recorded.

At the end of the interview, you will be given the opportunity to clarify or add to any point that you brought up during the interviews.

Interview Questions:

1. How would you describe your (your students') level of engagement in school?
2. In what ways is your culture reflected in your learning/teaching?
3. What do you think would help Indigenous students to be more engaged in schools?

Appendix F: Survey Questions and Consent Form**Augmenting Belize School Curricula to Increase Students' Engagement in Learning**

Principal Investigator	Student Supervisor
Student Researcher	----
Master of Education Leadership	Faculty of Education
Vancouver Island University	Vancouver Island University
----	----

As a Master of Education student at Vancouver Island University (VIU), I am required to complete a research thesis as part of my studies. My research entitled, "*Augmenting Belize Secondary School Curricula to Increase Indigenous Students' Engagement in Learning*" aims to investigate what the local educational community suggests that would increase cultural relevance in curriculum to engage Indigenous high school students in Belize. My hope is that my research will contribute to the success of the children of Belize in completing their high school program.

As a participant in this study, you will be asked to complete the following survey. Questions will include topics about learning experiences, school curricula, and cultural perspectives. Kindly note that this survey is voluntary and anonymous, so no names will be mentioned in the final products of this research. Only I (the principal researcher) will have access to your responses and the surveys will be stored in a locked cabinet at my home. You will be

provided with a copy of the draft report and can make revisions if you so desire, within two weeks of receiving the draft.

To exemplify certain themes, quotes from the survey may be used, however, pseudonyms would be used in place of names to protect participant anonymity. You will be given the opportunity to change or withdraw any statements you made within two weeks of submitting the survey. Data will be deleted and shredded at the end of the project, approximately May 31st, 2019.

I plan to publish the results of this study in my Masters' thesis, and in conference publications, presentations, and in peer-reviewed journals.

Your participation is completely voluntary. You may withdraw from the study at any time up until two weeks after submitting the survey, for any reason and without explanation. If you choose to withdraw from the study, all information you provided would be withdrawn from the study and destroyed.

I have read and understand the information provided above, and hereby consent to participate in this research under the following conditions:

I consent to participating in this survey *Yes* *No*

I consent to being quoted in the products of the research (no names will be mentioned in the data or final report). *Yes* *No*

Participant Name _____

Participant Signature _____

I promise to adhere to the procedures described in this consent form.

Principal Investigator Signature _____ Date _____

If you have any concerns about your treatment as a research participant in this study,
please contact the VIU Research Ethics Board by telephone at-----.

Participants will be provided a copy of the signed consent form.

Survey Questions:

1. What have been some of the challenges and opportunities of working with Indigenous high school students?

2. What are some strengths and weaknesses of the current curriculum used in high schools in Belize?

3. How would you describe Indigenous students' level of engagement in your school?

4. In what ways is Indigenous culture reflected in your school? How about curriculum?

5. What do you think would help Indigenous students to be more engaged in high schools?