USING GLOCALIZATION TO IMPROVE STUDENT ENGAGEMENT IN QATARI PRIMARY SCHOOLS

A Record of Study

by

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ABSTRACT

The goal of glocalization in education is to enhance learning outcomes by fusing local and global concepts. Glocalization emphasizes the importance of the global perspective while also acknowledging the differences within contexts, calling for the utilization of local knowledge. The purpose of this record of study is to identify the level of students' engagement in lessons that are implemented using a glocalized focus to the curriculum and the grade four teacher perceptions of the impact of a glocalized unit plan on student engagement. Three teachers and five students participated in this qualitative research study. Their experiences were observed during a six-week unit of study. Data for this qualitative research were collected from face-to-face interviews and classroom observations. Using an in-vivo coding technique, the interviews were written down and subsequently analyzed. Before, during, and after the classroom observations, field notes were also taken. Data were analyzed through thematic coding. The results of this study suggest that when there is a glocalized focus, student engagement increases, and therefore, learning outcomes become more apparent. One conclusion is that schools should use resources supporting glocalized learning to enhance the quality of education. Recommendations for further research and implications are also discussed.

DEDICATION

This work is dedicated to my family for all their love, encouragement, and support.

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Contributors

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CHAPTER I

INTRODUCTION: CONTEXT AND PURPOSE OF ACTION

The Context

National and Global Context

In an ever-changing world, with technology at its core, people have access to more knowledge than ever. Today, it is common for a household to have multiple devices used for learning. Whether with a smartphone, iPad, laptop, or touchscreen computer, one can access knowledge with just a click, and the information received is almost limitless. Because people can access any knowledge and get information on anything they desire, learning outcomes have blended learners together no matter where they live. In other words, technological advancement has created a learning world without borders. These dynamics have and will continue to shape education today and in the future. For example, the significant distance reduction has encouraged the adoption of global citizenship education to help people appreciate the planet's everyday problems, such as climate change and human rights.

However, global citizenship education is controversial because it is more theoretical than real. After all, every person has a place they call home (Mannion, 2015). Critics say that another problem of globalized education is that it aims to create standardization and universalism, forgetting differences within the world population, such as environment, culture, and legal requirements (i.e., Bakhtari & Shajar, 2011; Misra, 2012; Hughes, 2018). The promotion of popular ideologies are scaring away students from global education. Thus, new concepts like glocalization are needed to help students comprehend and respond to lived realities.

Glocalization is a recent term used in education to describe a blend of local and global factors, integrating curricula and issues affecting the world into a local context to enhance

student engagement and learning outcomes (Alsharairi et al., 2018). Glocalization acknowledges that local context is always with and in the global or that the global idea has a local context for effective actualization. When contextualized within the local context, learning becomes effective because the context utilizes the learner's experiences and lived realities.

Glocalization in education will need to become more prevalent for increased authentic learning. Unfortunately, curricula do not change quickly enough to align with what students must learn or adapt to within their current environment. Mehdi Benchaabane, director of Qatar Academy Doha (2021), has stated, "Authentic learning is, more than ever, something we need to think about, and it won't be authentic if it doesn't have local value as well as global interest."

Like other Arab countries, Qatar embarked on extending and transforming education as the most essential factor for future economic, political, and social advancement. With this vision in mind, Her Highness Sheikha Moza bint Nasser, Chairperson of Qatar Foundation, established the Qatar Foundation (QF) in 1995 in Education City, Qatar. The QF is a non-profit educational institution offering learning possibilities for students from six months old to doctoral candidates.

As QF expanded, it established Pre-University Education (PUE) to support, build, and develop schools and curricula. Five academy schools comprise PUE: Qatar Academy Doha (QAD), Qatar Academy Al Khor (QAK), Qatar Academy Al Wakra (QAW), Qatar Academy Sidra (QAS), and Qatar Academy Msheireb (QAM). Pre-University Education specialized schools include Qatar Academy for Science and Technology (QAST), Qatar Leadership Academy (QLA), Awsaj Academy, Renad Academy, Academyati, Tariq Bin Ziad School, and Academic Bridge Program (ABP). The Education Development Institute (EDI), a center for professional development and learning, is also part of PUE.

In 2020, the idealization of glocalization ensued within QF under the leadership of Sheikha Noof Al Thani, Executive Director of Strategic Initiatives and Partnerships in PUE. QF's "Glocalization Initiative" was established with Sheikha Noof Al Thani's guidance. In collaboration with QF schools and institutions, the Initiative created curricula, resources, and professional development programs, working to produce global citizens proud of their national identities and driven to contribute to Qatar society. PUE defined glocalization as "linking the global context with the local knowledge, local innovation, Arabic language, local values, local heritage and culture" (PUE, 2020, p. 2). This linkage entails learning global themes using examples, experiences, meaningful action, and reflection on a local and national scale.

Situational Context

This Record of Study occurred at the Qatar Academy Doha primary school, the first school built by the Qatar Foundation in 1996. QAD holds International Baccalaureate (IB)

Primary Years Program (PYP) and Council of International Schools (CIS) accreditations. The IB

PYP is an internationally accredited program for children in primary school. QAD primary school consists of 720 students from kindergarten to grade 5, of whom 91% are local Qataris.

The remaining 9% include international students from the United States, Australia, Bahrain,

Belgium, Britain, Canada, Egypt, Guinea, Jordan, Lebanon, Morocco, Pakistan, Saudi Arabia,

South Africa, Syria, and Yemen. English is a second language for 98% of students at QAD.

QAD is a private school that attracts Qatari parents who prefer a school that not only has a strong English international curriculum, but also upholds strong Islamic values and an Arabic language program. This is reflected in QAD's 98% Qatari population. More expatriates enroll their children in private international schools, which may not offer Islamic studies or a robust Arabic language curriculum.

The American Education Reaches Out (AERO) standards and the IB PYP framework are integrated into QAD's curriculum. According to IB, PYP education is based on a transdisciplinary learning approach, in which a teacher's role is to facilitate and guide inquiry, leading to student discovery. Teachers plan and apply the transdisciplinary approach thematically (IBO, 2007). The PYP is an inquiry-based framework of six transdisciplinary units of inquiry: Who We Are, Where We Are in Place and Time, How We Express Ourselves, How the World Works, How We Organize Ourselves, and Sharing the Planet (IBO, 2018). The concept-based learning approach is based on the unit of inquiry in which teachers design each unit to contain a central idea (statement summarizing the main idea), key concepts (form, function, causation, change, connection, perspective, responsibility, and reflection), related concepts (subject-specific ideas relating to the central idea), and lines of inquiry (provides an outline for the scope of the inquiry).

PYP is not solely about acquiring content knowledge. It also focuses on student values and behavior to develop internationally minded students through the ten learner profile attributes (inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective) (IBO, 2013). Additionally, students acquire learning (ATL) skills (thinking, social, communication, self-management, and research skills) within the units of inquiry.

There are more than 2,118 PYP schools worldwide. In Qatar, currently, 12 schools offer PYP education, including QAD. In addition to the PYP framework, QAD uses AERO standards. AERO is a United States-based program using American standards designed to prepare students for college. At QAD, the AERO standards for reading, writing, and math integrated within the PYP units of inquiry follow a vertical alignment scope and sequence created for primary school.

In grade 5, the last year of the PYP journey at QAD, students must participate in an exhibition unit highlighting their primary years' learning journey. As part of their PYP exhibition, students are required to partake in collaborative inquiry to demonstrate student agency and advocacy by taking action on a global real-life issue or opportunity. The QAD has used the UN-SDGs (United Nations- Sustainable Development Goals) to support and guide students' exhibition topics over the past two years.

Global issues are an essential discussion in many PYP units of inquiries; nevertheless, I observed that some students found such topics challenging and began to withdraw from the units. As a result, I aimed to raise student engagement to improve learning outcomes by making glocalization more prevalent at QAD.

As a PYP teacher, I felt a sense of responsibility to enrich PYP units with a combination of local and global content so that students had a strong foundation of local knowledge to support their learning when they entered grade 5. To accomplish this, I personalized the QAD PYP unit of inquiry for our student population to make instruction relevant and relatable. I assumed that personalization would lead to a deeper understanding of global concerns if students first related to the unit of inquiry from their local perspective. Teachers require professional development, cultural awareness enhancements, and appropriate resources accessible to make the curriculum relevant to students' local context.

As I prepared my Record of Study and developed teaching practices in my classroom, focusing on local and global content, PUE fortuitously announced the commencement of the "Glocalization Initiative" in December 2020. After the announcement, I applied to be a committee member for this project and was nominated to represent QAD by my school. My enthusiasm and passion for glocalization grew as I began to understand the topic better in

preparation for QF's new project. As I use it here, glocalization in education is the process of infusing the local context with the global context, which can include knowledge, culture, language, heritage, and values.

The Problem

Why is there a need for a glocalized curriculum in countries such as Qatar? Qatar is an international country in terms of population, with its large number of expatriates and its location as a trade, travel, and transportation hub linking West and East. Nevertheless, Qatar also has a rich local culture. Connecting the two factors, the global and the local, is the purpose of glocalized education, and it provides Qatari students the opportunity to learn global issues through their local context and can stimulate and promote student engagement in the classroom (Ahmed, 2019; Powell, 2014; Vora, 2014). Through a glocalization infusion, students are more likely to develop connections and deepen their understanding of the taught curriculum.

Taking a foreign curriculum and transforming it to be more "glocalized" does not just mean recognizing a student's cultural background, but it requires delving into the local context and making connections between it and the global environment. A teacher can enhance the curriculum by focusing on the local and global context. To do this, teachers must adapt their teaching strategies to create student-centered lesson plan units representing their students' culture, enhancing the curricula and student learning (Alsharairi et al., 2018; Can et al., 2020; Patel & Lynch, 2013). However, teachers must have the right resources and a deep understanding of their student's language, culture, and local context to accomplish a high level of successful glocalized integration in a predetermined curriculum (Alsharairi et al., 2018; Can et al., 2020; Patel & Lynch, 2013). This is an issue especially for international teachers who come to Qatar to teach. These teachers need a rigorous professional development program designed

exclusively for teachers of Qatari students. Professional development and creating targeted resources are essential to support a glocalized unit plan.

Relevant History of the Problem

According to Abdullah et al. (2016), professional development in Qatar is provided by three primary sectors: the national government (Ministry of Education), universities and training institutes, and non-governmental organizations, such as embassies. QF's new "Glocalization Initiative" aims to offer schools the necessary professional development and resources to guarantee that local values, language, and other cultural factors are used to connect local and global contexts. Placing themes and issues affecting the world into a local frame should enhance their relevance to students, making learning enjoyable and engaging.

In support of students' deeper understanding, Brown et al. (2018) highlighted the importance of making connections between teaching and learning and cultural relevance to enhance student engagement. Culturally responsive teaching is critical to advancing student learning. Coincidingly, glocalized curricula, according to research, showcase a student's local culture while deepening their understanding of global contexts. Proof of this can be found in Hynds et al.'s (2011) study of a unique professional development program in New Zealand designed to build relationships between teachers and their Māori students. The authors found that 75% of the teachers in the program indicated a moderate-to-high implementation of effective teaching practice. Teachers reported a change in their understanding of relationship-based pedagogies and guidelines for supporting student engagement by building relationships with the students and understanding their prior knowledge, background, experiences, and interests (Hynds et al., 2011; Lakhwani, 2019).

Lakhwani (2019) used a Likert-scaled evaluation system to study the need for culturally and locally aware teachers. This researcher found that teachers at all levels of seniority gained significant knowledge and skills after participating in a targeted professional development program. Moreover, Penner-Williams et al. (2019) found that professional development programs for teachers of English learners can increase the effectiveness of student learning outcomes by supporting their teacher's quality of instruction.

According to the research, when teachers are provided with effective professional development, they can build greater connections in their classrooms by combining their existing expertise with their new knowledge because "effective professional development promotes deep, principled conceptual understanding by engaging teachers in in-depth inquiry" (Fickel et al., 2017, p. 393) of their content knowledge and critical self-reflection of knowledge, experiences, and beliefs. According to the authors, a specific professional development program should include: a) unpacking assumptions as teachers self-reflect and proactively face potential challenges they may encounter in the classroom; b) appreciative inquiry; c) shared tools and dialogue through ongoing professional learning development reevaluated to keep cultural needs in mind; and d) evaluation capacity development, which is when participants look into different theoretical frameworks of evaluation, how they lead to continuous improvement and best teaching practices (Fickel et al., 2017).

A glocalized unit plan might enhance and promote self-identity and self-awareness for students. Because students naturally draw connections with their local context, a glocalized unit plan could also encourage students to move from being passive recipients to gaining a deeper understanding of the content being taught. To produce a glocalized unit plan, a purposeful focus on conceptualizing local and global contexts is necessary. As mentioned above, this may be

accomplished and supported through targeted professional development and appropriate resources.

Significance of the Problem

QAD has adopted the PYP framework and AERO standards for its curriculum. QF uses Measure of Academic Progress (MAP) standardized testing as a tool to identify student achievement and progress across all their schools. The MAP assessment aligns with the AERO standards. This raises the issue of whether, when adopting an American program, Qatari schools should train teachers to implement AERO standards through a local and global lens. Doing so could potentially increase student engagement, thereby increasing achievement. Through this study, I intended to show how we can improve student engagement and learning by implementing a glocalized unit plan.

Personal Context

Born and reared in Dallas, Texas, I have always had a special attachment to The Lone Star State. I take the expression "everything is bigger in Texas" literally, which contributes directly to my desire to select my Record of Study topic. There are many great things about Texas —the amazing rivers, the best food, the biggest sports fan base in the country, and, especially, the cultural diversity, which makes me proud to be a Texan. Growing up as an American Muslim with a Palestinian heritage has led me to respect and admire different cultures around the world.

The teaching profession has attracted many members of my family, most notably my mother and sister. Our inspiration came from one of the teachings of Prophet Muhammad (Peace Be upon Him) when he said, "The best of people are those who are most beneficial to people."

Although this may come across as a pure cultural impact, I feel it is also a regional attribute of

being a Texan. People, in general, are very friendly in Texas, and I pride myself on making a difference in other people's lives through teaching. Aside from that, my parents' efforts to instill a love and appreciation of education in my family have made teaching come naturally to me.

I was 17 years old when I became a teacher. I had just graduated from high school and had about 30 college hours. My dad moved us overseas due to work relocation, and I had to continue taking college classes only offered online. At that time, my mom was teaching at an international school that desperately needed a 3rd grade English teacher. I went in for an interview, and the principal offered me the job on the spot. I was super excited as this experience was the jumpstart to my career as an educator. Two years and a tremendous amount of experience later, I moved back to Dallas after being accepted to the University of Texas at Dallas. I had the opportunity to complete my Bachelor of Science in Child Learning and Development with a Generalist Teaching and English as a Second Language certification.

As I gained experience, I felt the need to develop myself as an educator further, so I decided to go for my Master's in Educational Leadership. A few years later, I began my journey as a doctoral student in Curriculum and Instruction at Texas A&M University. I was impelled to do this because I had many ideas and questions about the different approaches to teaching and learning. By this time, I had gained a new outlook on education and was less concerned with my teaching than with the school. I wanted to mentor teachers, give valuable advice, continue growing as an educator, and make learning my number one priority for students. Throughout my education, I developed a passion for teaching with a focus on cultural identity for my students. I decided to move to Doha, Qatar, to experience a new culture firsthand.

In Doha, I have had my challenges. Nevertheless, it has been an amazing journey filled with many great new experiences. For the past two years, I have worked on creating, improving,

and implementing American-specific objectives with PYP IB objectives for English learners in an international school. Teaching in a classroom with a majority of local Qatari students sparked my interest and enthusiasm for glocalization in the school curriculum. I discovered that my students found it challenging to connect with American lesson objectives within the local context. That was when I decided I wanted to lead, discover, and apply my knowledge to better serve my community in Qatar to take all the knowledge I gain from this research to lead my school and community by successfully implementing improved inquiry units through glocalization. My goal aligns with the QF's aim of creating sustainable school curricula across the country.

Significant Supporters of the Record of Study

The major contributors to this Record of Study are the grade four teachers at QAD for the 2021-2022 school year. They provided a range of data through their documented experiences that informed the development of my Record of Study artifacts. The grade four teachers' eagerness to provide insights helped develop a glocalized unit of inquiry for their students at QAD. Other contributors included EDI, our school director, the primary school principal, administrators, and students. This combination of stakeholders contributed to the successful completion of this study.

Important Terms

The essential terms utilized in the study are defined briefly here.

Global: According to the Cambridge dictionary, *global* means "relating to the whole world."

Glocalization: Glocalization in teaching and learning refers to the curricula coherency of the global and local context (Can et al., 2020; Hirakubo, 2015; Patel & Lynch, 2013).

<u>Local</u>: According to the Cambridge dictionary, *local* means "existing in, serving, or responsible for a small area, especially of a country."

<u>Qatari</u>: An Arabic term meaning belonging to Qatar or people from Qatar.

IB PYP: International Baccalaureate Primary Years Program

Early Childhood: Defined here as the primary grades, Pre-K through 4

Student Engagement: According to "The Glossary of Education Reform," student engagement "refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation, they have to learn and progress in their education."

Student Achievement: How much a student has learned in a given period.

Closing Thoughts on Chapter 1

Transforming curriculum to meet the needs of both local and global contexts can be challenging. Glocalization in education can become the next best practice for schools worldwide. Glocalized education, aligning the curriculum with local and global contexts, can increase student engagement and achievement (Ahmed, 2019; Powell, 2014; Vora, 2014). Transforming the curriculum to meet the needs of our current students, as citizens of Qatar and the world, is essential. Professional development is required for teachers to implement a glocalized unit plan effectively.

In Chapter 2, I look more closely at the history and definition of glocalization. Specific information about the development of a glocalized unit plan. The methodology for determining the effectiveness of the glocalized lesson plan for enhancing student engagement and achievement are introduced and explored in Chapter 3. The analysis and results follow in Chapter 4, and Chapter 5 presents the conclusion.

CHAPTER II

LITERATURE REVIEW ON GLOCALIZATION

Introduction

In this section, I present a literature review and discuss the implementation of glocalization in the school curriculum and teaching practices. This literature review is presented to analyze the following topics: the history and definition of glocalization, the movement from globalization to glocalization, and the need for integration of glocalization in the curriculum in Qatar.

Defining Glocalization

Glocalization, in essence, stemmed from the concept of globalization and is the process of blending some of the globalization trends while maintaining local cultural roots in the areas being impacted. The meaning of globalization needs unpacking to help better define glocalization. The World Health Organization (WHO) said that globalization is

the increased interconnectedness and interdependence of peoples and countries is generally understood to include two inter-related elements: the opening of international borders to increasingly fast flows of goods, services, finance, people and ideas; and the changes in institutions and policies at national and international levels that facilitate or promote such flows. (WHO, 2020, p. 1)

Globalization brought many benefits to societies worldwide, including easier entry to new markets, spreading technology and innovation, and lowering production costs across borders. Globalization made it easier for different cultures to engage with one another for mutual benefit, bringing about inherent cultural challenges in the process. There is a downside, however. As Can et al. (2020) said, "one of the chief complaints about globalization is the undermining of one culture by another, resulting in an imbalance which can impact local values, traditions, and cultures" (p. 56).

At the onset, the impact of cultural merging on different aspects of society was not apparent. Globalization for international trade, however, overlooked the impact of cultural merging in exchange for economic benefit. Globalization is the compression of world cultures into a single culture, and in some discussions, it has been linked to imperialist motives and elements of cultural domination and subordination through colonization (Ritzer, 2003; Yang & Li, 2022). However, the challenges that stemmed from cultural mixing were more or less passive regarding economic trade. Over time, companies that adapted to the local environments in which they engaged saw more success than companies that maintained their global presence.

In the 1990s, researchers often discussed the relationship between globalization and glocalization through a story about Sony Corporation's CEO Akio Morita in Japan (Alsharairi et al., 2018; Goffman, 2020; Hirakubo, 2015; Robertson, 1995, Roudometof, 2018). Sony used the concept of glocalization in its advertising plans to develop products envisioned for the global market but tailored to local culture, which meant that Sony could better meet the needs at a local level. The Japanese word for this concept of global and local relationships is called *dochakuka* (Alsharairi et al., 2018; Goffman, 2020; Hirakubo, 2015; Robertson, 1995, Roudometof, 2018).

Because Sony demonstrated success through this effort, other countries started adopting the idea. Sociologist Roudometof (2015) disputed the Sony story and claimed that the glocalization concept originated in Germany at the Global Change Exhibition. During the

exhibition, Dr. Manfred Lange referred to the Eco-Cube on display, making connections to the global and local context of ecological research (Goffman, 2020; Roudometof, 2015). At the time, this was known as the Rubik's Cube of Ecology, and the concept portrayed different links while connecting and bringing about a deeper understanding of the topic at hand. Then, the concept of glocalization emerged throughout commercial practices, where it gained traction.

In the business world, fast-food chains, such as McDonald's twist on a McChicken sandwich, exemplified glocalization as fast food in America looked different from food at the same chain in Japan (Can et al., 2020; Giulianotti & Robertson, 2012; Robertson, 1995).

Comparatively, car companies will offer a localized model for a particular country. Certainly, glocalization has been referenced since the 1990s; however, only recently has the specific topic of glocalization been discussed in the education sector. Table 1 has multiple definitions of glocalization from various researchers.

Table 1

Definitions of Glocalization

Author and year	Definition of glocalization
Alsharairi et al. (2018)	International accounting harmonization as the process of
	adopting global accounting standards but customized to suit
	local differences
Hirakubo (2015)	a portmanteau of globalization and localization

Table 1 (continued)

Author and Year	Definition of glocalization
Lusianovv (2020)	the modification of a global product to meet local needs and
	norms
Oxford Reference	portmanteau term (globalization + localization). A term that
	emphasizes that these two concepts do not exist in polar
	opposition but operate in mutual interdependence in a
	globalized world.
Patel and Lynch (2013)	the merger of global and local perspectives on the socio-
	economic and political impact of all phenomena that affect local
	and global communities.
Powell (2014)	global principles and norms have been accepted and emulated
	but also adapted to fit the particular social and religious
	environment
Ritzer (2003)	the interpenetration of the global and local, resulting in unique
	outcomes in different geographic areas
Robertson (1995)	the simultaneity—the co-presence—of both universalizing and
	particularizing tendencies

Despite the various definitions, glocalization is a term associated heavily with a form of globalization that many researchers have described as a blend of global and local concepts. The purpose of glocalization is to preserve the local circumstances while valuing the global context.

Globalization to Glocalization

The fundamentals of globalization were based on societal advancements that were made all around the world. The advancements stemmed from new information technologies and the internet. Together, these advancements paved the way for innovation in all aspects of life, particularly knowledge sharing. As knowledge became more easily accessible worldwide, it naturally created an environment for learning, and thus, a culture for knowledge consumption was more prominent throughout societies everywhere (Patel et al., 2012). As a result, educational systems worldwide were influenced by globalization.

Globalization pushed education to become more standardized with the same values and ideologies aimed to produce a certain quality level of education. There are countries all over the world that have launched large-scale reforms to transform their educational system thoroughly with this premise. However, the education system abroad, where American values and ideologies have been adopted as part of the education system, has not translated into the quality of education expected, at least not everywhere. This section of the Record of Study contains a detailed inquiry will be made into the educational reforms launched and implemented throughout Asia.

As different countries aim to embrace globalization, educational reforms will vary depending on the region and cultural diversity in those areas. Yang and Li (2022) studied China and Singapore, which implemented education system reforms around the premise of closing the gap between values and ideologies to transform to align with a globalized or Americanized

ideology. Policymakers assumed that if an education system is more aligned with the globalized or Americanized ideology, it will produce a higher quality level of education. This assumption was not based on scientific and supportive evidence and did not respond to the need for a local connection. Yang and Li (2022) stated:

The debate on the cultural appropriateness of imported curricula, the criticism toward the progressive curriculum reform, the contradictions between policy and practice, the demonstrated belief-practice gap, and the call for Chinese characteristics in early childhood education (ECE) practices have altogether pointed to a common concern shared by Chinese early childhood professionals. (p. 4)

Therefore, it is important to delineate the cultural thread that runs through the early childhood curriculum (ECC) from three interrelated levels: formal, perceived, and operational.

The formal level of educational reform is simply the establishment of curricula and the formalization of related policies and procedures. The perceived level is how educators disseminate knowledge through their experiences, cultural norms, and subjective characteristics. The operational level comprises what can actually be observed within a classroom and measured with the performance results of the students within those classrooms.

Cultural forces stemming from globalization drastically impacted education by overlooking subject content and ecological contexts, particularly in the early years. Research suggests that culture and environment play an essential role in establishing educational curriculum policies and practices (Hollier, 2018; Rai & Deng, 2016; Yang & Li, 2022). Instead of focusing on textbooks and content-driven instruction in China, alternative teaching methods

were introduced that promoted more student engagement and active classroom participation (Rai & Deng, 2016; Yang & Li, 2022). This approach became known as competency-oriented learning, which is now viewed as better than traditional subject-based learning in closing the cultural gap in education (Yang & Li, 2022). Singapore also has adopted competency-based learning and formulated curricula emphasizing imagination and creativity to achieve a holistic educational experience.

The ideal curriculum must be constructivism-based, child-centered, and interactional (Yang & Li, 2022). Furthermore, research indicates that, even when a dominant Western ideology is present, a hybrid system that focuses on the local culture is essential for the successful operational implementation of any curriculum (Yang & Li, 2022). The local culture and environment play a significant role in implementing curricula, regardless of the dominant Western ideologies inherent in the plan (Hollier, 2018; Rai & Deng, 2016; Yang & Li, 2022).

In education, planning sets the foundation for quality learning, but the process of implementing the planned curriculum is inseparable from the foundational elements of any curriculum. Teachers are responsible for executing educational programs; therefore, it is essential to understand their perceptions about implementation and the different dynamics at play in the process, especially the cultural factors. As Yang and Li (2022) said, "the early childhood practitioners in both China and Singapore have encountered huge challenges in putting these formal curricula into practice due to an absence of contextual considerations and cultural responsiveness" (p. 18).

As education systems worldwide continue to push for more advanced teaching practices, tailored curricula, and an increase in student engagement within the classroom, it is clear that cultural and environmental factors must be considered in the planning of structured

curricula. Yang and Li (2022) said, "Cultural perspective allows us to rethink how glocalization as a fusion of globalization and localization can shape ECC, especially in the Eastern world" (p. 19). Clearly, cultural and environmental dynamics play a major role in how we perceive and communicate with the people around us. Therefore, a natural impact on educational reforms is to adopt a balanced hybrid approach to curriculum implementation.

A concept known as *curriculum hybridization* was coined to reflect the essence of *cultural glocalization* (Yang & Li, 2022). This phenomenon happens when cultural influences of globalization, imported culture, and local culture mix. Additionally, because there is no universal culture that can be applied no matter where educational reform is taking place, there must be natural discrepancies inherent in implementing a glocalized curriculum. Research has shown the importance of creating a balanced framework when creating curriculum policies and practices to increase traction and acceptance among practitioners and students (Hollier, 2018; Rai & Deng, 2016; Yang & Li, 2022). Furthermore, teacher educators and early childhood practitioners, including administrators and teachers, should be trained and supported in implementing a fully coherent and balanced framework.

According to Yang and Li (2022), curriculum hybridization is the process of learning from diverse curriculum models and approaches; this can be applied to the concept of glocalization. Successful implementation, traction, and acceptance of a balanced framework may lead to innovation and improvement in policymaking, teacher education, professional development, and early learning experiences. This process can increase student interconnectivity to global issues and local cultural values and context and should inherently result in more student engagement. Increased interconnectivity will positively impact the operational execution of curricula, ultimately leading to a better quality of education.

Transformation in education will continue occurring worldwide, and educational performance results will vary due to factors such as government, culture, and environment. In this Record of Study, I based my research on this premise, aiming to understand how these factors impact the quality of education in Qatar, and I compare similar elements and attributes to the other countries. I hope to discover that a more glocalized education system in Qatar will improve the quality of teaching and learning, increase student engagement inside the classroom, and retain educated students to serve the State of Qatar now and in the future.

Glocalization in Education

Glocalization is a term coined for the concept of making global knowledge comprehensible to a local public by portraying it through the lens of the local culture and environmental surroundings. As mentioned previously, glocalization in education refers to the curriculum coherency of the global and local context (Can et al., 2020; Giulianotti & Robertson, 2012; Hirakubo, 2015; Patel & Lynch, 2013). It involves adopting a glocal curriculum tailored and personalized to fit the local context (Alsharairi et al., 2018; Can et al., 2020; Patel & Lynch, 2013). According to Patel and Lynch (2013), "glocalized learning and teaching refer to the curricula consideration and pedagogical framing of local and global community connectedness in relation to social responsibility, justice, and sustainability" (p. 223).

It is essential to express that *glocalization* in this Record of Study is not defined as merging or blending local and global contexts; the local and global elements remain distinct and are shown to complement each other (Ritzer, 2003; Giulianotti & Robertson, 2012). Ritzer (2003) emphasizes the importance of cultural diversity that is the result of this environmental amalgamation, calling it "the interpenetration of the global and local, resulting in unique outcomes in different geographic areas" (p. 193). As expressed in the slogan, "Think Globally,

Act Locally," glocalization in education maintains and preserves the local elements but adopts a global context to work toward a sustainable future for learners. Additionally, glocalization in education embraces and promotes meaningful connection and engagement in the classroom and school community, and these dynamics naturally create a positive learning experience and encourage dialogue among students (Hriabuku, 2015).

The association of knowledge with the local culture can significantly enhance language learning. Rai and Deng (2014) noted that, from the education perspective, the context should be the first thing to be considered before any methodological or language system decisions are made, noting "language teaching is essential from full attention to the context in which it operates" (p. 128). This perspective means learning objectives should be balanced when integrating global and local contexts to achieve full contextual knowledge.

In this Record of Study, glocalization emphasizes the importance of context. This is especially true when cultural differences make it more challenging to understand the English language; consequently, this is where glocalization would help with the language barriers when making connections to local contexts. Integration of culture and language instruction can result in increased engagement, understanding, and long-term sustainability (Can et al., 2020; Rai & Deng, 2014). Furthermore, it is essential to consider external factors that may impact learners' responsiveness and engagement. Some factors include emotional, physical, or economic conditions directly related to the learners (Hollier, 2018). Therefore, focusing on context for glocalization will result in better student engagement and, in conjunction with other external factors, will lead to further achievement and sustainability.

Researchers have used case studies to examine the issue of local context in language learning. A case study in China demonstrated the importance of associating the local situation

with global awareness to incorporate English for daily use in Chinese contexts (Rai & Deng, 2014; Yang & Li, 2022). As a byproduct of globalization, it became necessary to speak English in China. Therefore, the term "Global English" became known for its benefits in increasing communication competence and more native-like language proficiency (Rai & Deng, 2014). The case study concluded that the learning process must come from easy association dialogues from local to local, local to global, and even global to local contexts.

Another case study conducted in Turkey demonstrated the importance of culture as part of the learning process (Can et al., 2020). The authors said that it was easier for students to learn a language when they were interested in the culture and the society of their native country (Can et al., 2020). This case study found that responsiveness and engagement decrease when the cultural topics are not attractive to learners. Thus, these two case studies concluded that a cross-cultural, *glocal* approach would best promote student learning.

Glocalization in the Curriculum

An aligned curriculum incorporating local contexts and global ideas can be instrumental in increasing student engagement (Patel & Lynch, 2013). Well-established curriculum programs relevant to the learner, including key components such as instructional methods and student learning outcomes, are essential for improving student engagement and achievement. (Alfauzan & Tarchouna, 2017; Biggs & Tang, 2012; Estrada, 2014; Meij & Merx, 2018). Making learning outcomes visible and reflecting on the learning process is necessary for effective student engagement, an idea embodied in Bigg and Tang's (2012) curriculum model. The authors also saw increased student achievement and learning outcomes through a constructive curriculum alignment.

Alfauzan and Tarchouna (2017) employed the Bigg and Tang model of constructive alignment to adjust the curriculum for English learners in Saudi Arabia, which led to an increase in student achievement. Estrada (2014) concluded that a realignment of the curriculum to integrate culture and identity better supports English learners. Educators enable achievement and engagement when a curriculum is tailored to meet the specific needs of learners, taking into account their cultural and heritage backgrounds (Alfauzan & Tarchouna, 2017). Just as glocalization transformed business practices to align with the needs of the local communities, the school curricula must be aligned with the needs of learners.

Glocalization in the curriculum allows learners to think critically and inquire beyond the realm of modernization. Learners will build knowledge and stimulate discussions of local and global topics addressed in the curriculum. Researchers have suggested a crucial need for schools, teachers, and students to act locally and globally for glocalization to actuate within the curriculum (Gleeson et al., 2020; Redding-Jones, 2002). According to Patel and Lynch (2013), glocal learning inspires creative and innovative ways of practice and engagement. Further, making the global content relevant to locals will stimulate more engagement through understanding and contextualization. Through the glocalization of the curriculum, locals feel a sense of belonging and ownership (Can et al., 2020; Patel & Lynch, 2013; Rhedding-Jones, 2002). Therefore, glocalizing curricula may heavily influence student learning outcomes and student engagement.

Can et al. (2020) claimed that English learners in Turkey benefited from embracing the local context while in their English language classes, and this glocal piece allowed students to connect with the English content meaningfully. In another location, Alsharairi et al. (2018) studied the impact on Jordanians from an internationalization perspective, and they found that

this perspective significantly influenced students due to local integration regarding economic, social, and cultural features. Gleeson et al. (2020) discovered a shift from knowledge to skill concerning the modernization of educational curricula in Australia and Ireland. The goal was to encourage a more glocalized focus as doing so heightens the level of understanding for students. Furthermore, Hollier (2018) said that Finland's success in education was primarily due to teacher preparation promoting local and global context in their curriculum.

Rai and Deng studied (2014) glocalization in English language learning in China. They suggested that the English language became easier while bringing in the local context for Chinese learners. In addition, they emphasized that approaching global material without key components of the local context would make learning the English language more difficult (Rai & Deng, 2014). Attempting to describe the effect glocalization has on learners, Porto and Belmonte (2014) noted that students in Spain could use digital stories to visualize and construct meaning within a local context while simultaneously gaining an understanding of the global environment.

As these researchers have shown, glocalization, when implemented as part of education, allows students to connect to the content more easily and, thus, become more engaged and receptive to their learning (Can et al., 2020; Hirakubo, 2015; Roudometof, 2019). The more connected students are to the content presented, the more open they are to new knowledge. According to Patel and Lynch (2013), glocalization is empowering, inspiring, and socially responsible. If change is needed at a local level, glocal education can encourage learners to take action to promote a sustainable future in their community. In short, numerous studies on the issue strongly suggest that glocalization may be a viable system for schools to explore further (Alshare & Sewailem, 2018; Goffman, 2020; Powell, 2014; Weber, 2013)

Although many researchers have conducted studies, there are still some issues to address. For example, how has glocalization been used in English language teaching for primary students? What impact has glocalization had on primary students learning and engagement? What are primary teachers' perceptions of modified glocalized lessons? Would it be effective in Qatari schools?

The following section takes a closer look at the glocalization of English language curriculum in Qatar. As mentioned before, it is important to consider that the country aims to implement sustainable education goals, and the plan's success depends on how to translate the global goals for local classrooms.

Glocalization in Qatar

Qatar, a country with a population of approximately three million in the Arabian Peninsula, is one of the wealthiest countries in the world. It is governed by His Highness Sheikh Tamim bin Hamad Al-Thani (Qatar Statistics, 2020). Since the middle of the 1800s, the Al-Thani lineage has been in power (Powell, 2014), making the nation an absolute monarchy. With a Muslim majority, the country follows Islamic Shariah Law (Fletcher & Carter, 2017). Arabic is the native language; however, English is predominantly used, as most of the population consists of expatriates from around the world. Despite being a relatively small country, Qatar has a flourishing overall population, and an estimated 15% are local Qataris (Statistics Authority of the State of Qatar, 2021). According to the 2021 census, 735,341 are female, and 1,941,660 are male. A substantial percentage of the men are considered migrant workers in Qatar, residing in the nation for a limited period, whereas women comprise the majority of participants in higher education. The predominance of females reflects local

standards of educational investment and international migration, as well as the gender imbalance in schooling and industry (Powell, 2014).

Although considered a minority group, locals (Qataris) are prioritized through Qatarization in all growth aspects. According to Qatar Foundation (2020), Qatarization stemmed from one goal of the Qatar National Vision 2030. Qatarization refers to a national policy promoting the production and development of a skilled Qatari workforce via education and training (Qatar Foundation, 2020; Vora, 2014). The goal is to provide significant, long-term employment to at least half of Qatar's population. In addition, the Qatar Foundation is committed to providing relevant career opportunities for Qatari nationals while also nurturing the potential of future Qataris, who will benefit from this ground-breaking effort. To achieve and support this goal, the Qatar Foundation works toward upskilling its students in Education City through successful planning, training opportunities, and implementation (Qatar Foundation, 2020). As the total population in Qatar increases, the country will need more improvements in K-16 education and help transition from school to work and career development.

Throughout its development, Qatar has prided itself on being one of the world leaders in education. Qatari leaders are attempting to go beyond the state's limited geographic and demographic size by investing significantly in Qatari national universities (Powell, 2014). Education City has become home to many prestigious international universities and has positioned Qatar to become a scientific hub in which global and local trends and forces are combined (Bianchi, 2012; Powell, 2014).

The combination of trends and forces is associated with glocalization effects. Powell (2014) stated, "higher education reflects 'glocalization as global principles, such as the nexus of

research and teaching, have been accepted and emulated, but also adapted to fit the particular social, political, and religious environment" (p. 272). Despite the focus on the global community, preserving cultural integrity is a crucial part of glocalization.

To fill the gaps in the Qatari workforce and minimize unemployment, it is essential to glocalize the school curriculum (Alshare & Sewailem, 2018; Weber, 2013; 2014). As Goffman (2020) explained, "we need a swift, permanent shift to a sustainable society based on a new version of glocalization with people deeply rooted in their communities and profoundly aware of global trends and necessities" (p. 51). This perspective suggests that glocalization is absolutely necessary and must be embraced early to maximize the potential impact for a viable future for the country.

As a result of rapid change in the educational development of Qatar, there is limited research on glocalization and its impact on Qatari students in their primary years. According to Ahmed (2019), the lack of glocalized integration throughout the primary and secondary years of IB and the Western curriculum weakens the educational framework for Qatari students in Education City. Several authors have recognized that a unique opportunity exists to develop a glocalized curriculum better suited for the needs of Qatari students (Ahmed, 2019; Powell, 2014; Vora, 2014). To preserve English medium instruction in higher education, Elsheikh et al. (2020) proposed a shift from globalization to glocalization, allowing students to engage globally and locally fully. "We should be talking about the dissemination of local and global ideas through the use of multiple languages-a glocalized education," the authors said (p. 632). Graham and Eslami (2019) agree, reporting that "glocalization is another dimension policy makers should turn their focus toward" (p. 25).

Glocalization must be tailored to the needs of Qatari students by considering their language skills, cultural background, and heritage. My aim through this Record of Study is to help the country move forward by examining how glocalization of the curriculum and lesson plan units may motivate teachers, promote student engagement, and improve educational outcomes.

Closing Thoughts on Chapter 2

This literature review has revealed the need for connecting the local and global context, particularly in education to validate the cultural and educational values of different societies while enhancing their participation in a global world. The more connected the global and local contexts, the more positive the results (Alsharairi et al., 2018; Goffman, 2020; Hirakubo, 2015; Roudometof, 2018). Because of this, Qatari schools should tailor curricula to address the specific needs of learners at any level. According to the literature, learners must deeply connect with the curriculum's content. The more they connect, the more receptive they will be, and the greater will be the benefit attained. In turn, students would be driven to pursue different ideas, think critically about meeting global and local challenges, and become productive citizens of their nation.

The transformation to glocalization of a country's economy strengthens the financial vision and promotes a sustainable economy (Hetman et al., 2019). A key finding in Borgos' (2016) study on International Branch Campuses (IBC) in three different countries: Qatar, China, and the United Arab Emirates, found that local and diversified offers in educational institutions strongly support future economic workforce growth. Borgos (2016) suggested that "the ability of IBCs to build associations and connections enabling a flow of information and knowledge about the local environment will be paramount to their long-term sustainability" (p.

285). A model structuring learning, influenced by the local environment, can greatly impact the future workforce and its sustainable development (Barth & Rieckmann, 2012; Borgos, 2016; Khandakar, 2020; Weber, 2013). According to Weber (2013), academic and training institutions in the country are not producing the right kinds of graduates for a knowledge economy. Glocalization of the curriculum in those institutions can help solve this problem and promote a sustainable future.

Although there are many studies on glocalization, there is little research on its impact in the Qatari context. Through this Record of Study I aim to fill the gap and build an understanding of how and why there is a need for glocalized education in the nation. The research design and methodology for this work are explored in Chapter 3.

CHAPTER III

METHODOLOGY

Introduction

As the literature indicates, providing students with the opportunity to learn through their local lens can help increase their engagement in learning. Furthermore, students can make deeper connections and attain a holistic understanding of the materials being taught. Additionally, a glocalized unit plan may empower students to reflect on the local context and understand the global context better.

Although a glocalized approach to teaching can lead students to develop a stronger connection with the local and global contexts, teachers must transform how they plan the process. Therefore, teachers require the necessary training and resources to augment the school curriculum with a glocalized perspective.

Research Questions

The purpose of this Record of Study was to measure students' level of engagement in classroom activities with a glocalized curriculum while concurrently quantifying teachers' perceptions related to the use and implementation of glocalized lessons. With student engagement defined as the degree of attention and interest that students show when they are being taught, which should promote their motivation to learn and progress in their education, this study intended to answer the following research questions:

1. What is the level of students' engagement in a six-week unit implemented in a fourthgrade Qatari classroom using a glocalized curriculum? 2. What are grade four teacher perceptions of the impact of a glocalized unit plan on students' engagement in a Qatari PYP six-week classroom unit of inquiry?

Glocalization Initiative Project Guidelines

As proposed in this study, a grade four unit of inquiry plan at the QAD was used and modified according to the QF's "Glocalization Initiative" project guidelines. The committee members who created those guidelines included teachers from across the five QF academy schools. The guidelines consisted of five key elements: local values, local knowledge, local innovation, the Arabic language, and culture and heritage (see Table 2).

Table 2

Glocalization Lesson Plan Guidelines

Element	Examples
Local values	develop and create educational resources on local
	values, such as using Islamic ethics curriculum
Local knowledge	connecting UN-SDG with the PYP curriculum using
	local events
Local innovation	visits to local organizations, such as Qatar National
	Museum, Qatar Environment & Energy Research
	Institute
Arabic language	develop and create educational resources that support
	dual-language education
Culture and heritage	Celebrate National culture day and traditions

QAD's glocalization team included eight primary, middle, and high school teachers. As a member of the glocalization team, I helped design and create sample lesson plans following the specific guidelines to ensure authentic, meaningful, and rigorous glocalized lessons. The guidelines helped develop the grade four unit plan for the transdisciplinary theme "Where We Are in Place and Time." This study took place for six weeks during the spring 2022 semester. There were three 50-minute lessons per week. Table 3 provides a brief overview of each unit.

Table 3 *Unit Overview*

Transdisciplinary Theme	Central Idea	Lines of Inquiry	Key Concepts	Related Concepts
Where We Are in	Human activity	Earth's natural	Change	Rock
Place and Time	and Earth's	processes		Formation,
	natural			Fossilization,
	processes	Solutions to	Connection	Time,
	cause changes	reduce the		Weathering,
	to the Earth's	impacts of		Erosion,
	landscape.	natural Earth		Observations,
		processes on		Evidence
		humans		
		The effects of	Function	
		weathering or		
		the rate of		
		erosion by		
		water, ice, wind,		
		or vegetation		
Glocalization Integration:				

- -A look at local and global natural resources
- Identify the Qatar vision of 2030 and make connections with Earth's natural processes.
- Identify the history of land formation in Qatar.

A detailed plan of the six-week unit can be found in Appendix E.

Study Context and Participants

Participants and Samples

Participants in the study were students and teachers. From the 118 students enrolled in grade four at QAD, five grade 4 students (one student from each of the grade 4 classes), were selected to participate in the interviews. Three boys and two girls were selected based on the representation of the average student population in grade four at QAD. Their achievement scores on their MAP standardized testing fit the average at QAD. There were three teachers involved in the study. Purposive sampling was used to select teacher participants. There were five homeroom teachers and two Arabic teachers in grade 4; the two homerooms and one Arabic teacher selected for the study who had the most teaching experience in grade 4. Pseudonyms are used to identify participants in order to protect the identity of the participants. For the purpose of this study, the teacher participants were identified as Sara, Diana, and Adam. The five student participants were identified as Ahmad, Abdulla, Muhammad, Maryam, and Sumayyah.

Research Paradigm

A philosophical paradigm refers to the entire set of theoretical and methodological assumptions upon which a piece of research is based. A philosophical paradigm can explain why a researcher chose a qualitative or quantitative research approach (Creswell, 2009). Like quantitative research, qualitative research must begin with a theoretical methodology to help

drive the research. According to Creswell (2009), there are four worldviews or paradigms: postpositivism, advocacy/participatory, pragmatism, and constructivism.

Postpositivists follow a predetermined theory to analyze and evaluate the reasons that impact results, such as those produced by experiments. A postpositivist's knowledge is built on meticulous observation and measurement of the objective reality that exists in the world (Creswell, 2009). An advocacy/participatory paradigm research inquiry must be intertwined with politics and a political agenda. Conversely, pragmatism focuses on understanding the research problem by analyzing the problem and emphasizing pragmatic alternatives and strategies. However, constructivism suits the qualitative research reported here because it supports using questions to allow participants to express themselves and focuses on how people learn and obtain information (Creswell, 2009).

Individuals attempting to understand the world in which they live and work are social constructivists (Creswell, 2009). Social constructivism is a learning theory that emphasizes the importance of social interactions and the function of culture in one's natural setting (Creswell, 2009). The research paradigm guiding this study was social constructivism because this study aimed to acquire the perspectives of teachers and students based on their own voices and contextualized realities. As a researcher, I used inductive reasoning to interpret the participants' individual contexts and cultural settings and to develop meaning from the data collected (Creswell, 2009). The social constructivist paradigm enabled me to conduct my study and derive meaning from the participants' experiences with the modified glocalized unit.

Through this research I present the results of a qualitative case study. Qualitative research relies on gathering information and understanding a topic by using observation and interpretation to develop context-based understanding of human behavior, experience, attitude,

intention, and motive (Batt & Kahn, 2021; Creswell & Creswell, 2018; Rahman, 2016; Rutberg & Bouikidis, 2018).

Through explanatory and open-ended questions, a researcher classifies qualitative research according to themes, characteristics, attributes, and other possible identifiers. The question "why" can be answered using qualitative studies. A researcher develops an initial understanding of the study results, leading to concepts or hypotheses for further investigation. The five major qualitative research methods are case studies, grounded theory, ethnography, history, and phenomenology. Of these, the case study was considered most appropriate for this study due to its focus on individual perspectives.

A case study is a type of research in which the researcher gathers extensive data and sets clear boundaries for the research focus over a period of time. As Creswell and Creswell (2018) stated, case studies are used to "develop an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals" (p. 14). When doing a case study, a researcher gathers comprehensive data over an extended period utilizing a range of data collection techniques (Creswell & Creswell, 2018). Case studies are a type of inquiry design that may be found in many domains, including program evaluation.

This case study sought to identify teacher perceptions and learning and engagement impact of a modified glocalized unit for grade four students in a Qatari academy school. Rich data from semi-structured interviews, observation, and planning meeting notes were collected and used for the analysis.

Before the data collection process, the modified glocalized unit for grade four, "Where We Are in Place and Time," was created using QF's glocalized key elements: local values, local

knowledge, local innovation, Arabic language, and culture and heritage. The modified grade four unit plan is presented in Appendix A.

Data Collection Methods

The researcher collected data through different sources: semi-structured interviews, classroom observations, curriculum planning meeting notes, and artifacts. The data collection methods utilized for this study are outlined in the section below.

Semi-structured Interviews

The researcher used semi-structured interviews to get insights from teachers and students and to gain a deeper understanding of the level of student engagement in the modified glocalized lessons.

The use of semi-structured interview questions for the teacher participants helped the researcher understand teacher experiences and perceptions of the impact of a glocalized unit plan on student engagement. The use of semi-structured interview questions for student participants helped the researcher understand student experiences, connections, and challenges. Interviews lasted approximately 20 minutes each. Depending on the preferred language of each participant, some interviews were performed in either English or Arabic. The interviews were recorded and then transcribed for further analysis.

Table 4 below displays a list of interview questions asked.

Table 4

Interview Questions

Students	Tell me about the unit.	
Interview	• Tell me about what you learned from it.	
Questions	• What were some challenges you faced with this unit?	
	Tell me about your learning experience with this unit.	
	What personal connections did you make with this unit?	
	What connections did you make that relate to your culture? and	
	heritage? language? values?	
	• Do you feel like you have a deeper understanding of this unit? Why?	
Teacher	What does the term glocalized mean to you?	
Interview	How do you think this glocalized unit has influenced your teaching?	
Questions	What challenges did you face implementing/teaching this unit in your	
	class?	
	• Tell me about your experience with this unit.	
	• Did you notice a change in student engagement and understanding?	
	• Were the learning outcomes met?	

Observations

I conducted three classroom observations of students and teachers as the glocalized units were taught. Each observation lasted 50 minutes. In addition to QAD's general administration observation form, I developed an additional observation tool for this project. The observation tool required drawing a classroom diagram, taking notes on the classroom environment, and

describing teaching methods and resources. The observation tool also featured a table adapted from Johnson Bailey Henderson McNeel (JBHM) Education Group (2012) tracking particular factors related to student engagement. The observation tool, located in Appendix D, includes a description of the classroom environment, a list of the resources utilized in the instruction, and indicators demonstrating a high level of student engagement.

Planning Meeting Notes

Curriculum planning meetings with the grade four homeroom teachers, curriculum coordinator, and PYP coordinator took place once a week for 50 minutes during the six-week unit. Their input and feedback on how the unit was progressing were valuable. Meeting notes were gathered and saved in my research drive folder. Lesson plans also were distributed and discussed in these meetings. I transcribed discussions from the planning meetings.

Artifacts

Artifacts gathered included students' work, lesson plans, unit plans, and field notes. These were photographed to document student learning and engagement. Appendix E contains examples of student work, such as group projects, graphic organizers, and gallery walks. Lesson and unit plans for the six-week unit, "Where We Are in Place and Time," can be found in Appendix F.

Justification of the Use of Instruments in Context

Roudometof (2016) indicates that "interviews have long been used in research as a way of obtaining detailed information about a topic or subject" (p. 43). The interview questions used here obtained information on the student's perception of their level of engagement in the lesson and determined the teacher's perceptions of the glocalized unit's impact on the students. The interview questions aimed to determine if students understood and could describe the glocalized

unit's concepts. Furthermore, the questions aimed to determine if students had a deeper understanding of the content in the unit and if they were aware of the local and global context. A small group of students and teachers evaluated these measures to ensure the interview questions were understandable. Piloting the questions helped eliminate unclear content and provided essential input on the interview structure and flow.

The purpose of the observation tool was to explore the research questions from a different perspective. The tool was designed to methodically identify occurrences and their connections and analyze the students' and teachers' meanings and experiences during the lesson. As mentioned, a table adapted from JBHM Education Group (2012) was included in the observation tool, which focused on aspects connected to student engagement.

Data Analysis Strategy

Thematic coding of transcribed interviews, observations, and field notes by color-coding and analyzing patterns helped the researcher understand how a modified glocalized curriculum can affect student engagement and experience. An in-vivo coding method was used to ensure that participants' voices were heard. Field notes were taken during and immediately after classroom observations. The field notes described student engagement and behavior, such as time-on-task, peer collaboration, teacher-student interactions, and content-specific discussions. In-vivo coding gives an in-depth understanding of the direct ideas expressed by the research participants. It is the appropriate method for this study because it relies on interviews or actual participants' spoken words (Saldaña, 2020). Thematic analysis utilizes the actual words from the interviewers and makes it easy to analyze extensive texts by generating simple codes, which helps save time. The validity of the results is evident in the transparency of the coding and theme-generation process. The process is flexible, meaning it is unnecessary to set up categories

in advance or train an algorithm. Thematic analysis involves assigning preliminary codes to the data, in this case through in-vivo coding, searching for patterns or themes in the generated codes from the interviews, and reviewing the identified themes before proceeding to produce a detailed report on the findings (Saldaña, 2020).

Reliability and Validity Concerns or Equivalents

In a qualitative study, multiple perspectives must be explored to ensure the validity of the findings. According to Wu et al. (2016), the "key to all qualitative methodologies is that multiple perspectives about a phenomenon of interest are essential" (p. 494), and diverse viewpoints are necessary to guarantee optimal representation. Through this Record of Study I measured student engagement in the classroom during the implementation of a glocalized unit plan, its primary purpose was to present the findings in a manner that would ensure the trustworthiness of those results. As such, I independently observed the classrooms during an active glocalized lesson and solicited feedback directly from the student participants upon completing those lesson plans. This study also sought to categorize the teacher participants' experiences upon the delivery of the glocalized lessons. The combination of trustworthiness in the results and quantifiable feedback of teachers as they convey the glocalized content should demonstrate a high level of credibility.

In qualitative research such as this, triangulation is used primarily to complement, deepen, or expand awareness of a particular topic (Ambert et al., 1995; Wu et al., 2016).

According to Creswell and Creswell (2018), the interpretation of qualitative data entails multiple procedural phases, including summarizing the comprehensive findings, comparing the findings to the literature, expressing personal viewpoints, and indicating any limitations and future research.

Dependability and Confirmability

The study procedure outline satisfies the dependability criterion by defining my role as a researcher, describing how participants were selected, explaining how the participants would be interviewed and observed, and presenting the data collection and analysis process. In qualitative research, this is aligned with research methodologies for dependability (Creswell, 2014). The participants' precise accounts are the main factors supporting the data's confirmability.

I have also been reflective of my subjectivity as an educator and researcher. According to Creswell (2014), being reflective indicates being upfront and honest about how the researcher's background influences a study. The combination of my background as an educator, the independent observation of the classrooms during active glocalized lessons, and the direct feedback of the participants all contribute to achieving dependability and authenticity of the output of data under this Record of Study.

Credibility and Trustworthiness

This study used triangulation of data to ensure the trustworthiness of the research. All data were transcribed and saved on Google Documents (See the observation tool in Appendix B). In addition, observations and interviews were shared with participants to review and validate what was documented. The accuracy of the process of gathering data from various sources and the perspectives of participants established credibility.

I gained the support of a colleague as an inquiry auditor to review the data collection and analysis to ensure trustworthiness. The inquiry auditor, a curriculum and instruction doctoral student in my department, has a strong cross-cultural background as a social studies teacher.

From that perspective, she assisted in the verification of the data analysis.

Closing Thoughts on Chapter 3

The modified unit plan for grade four was designed to improve student engagement by developing a connection between the local and global context in the teaching materials and teaching procedures used in the classroom. The modified unit provided teachers with the necessary training and resources to implement plans within their classrooms. Potential student outcomes from a modified glocalized unit in relation to engagement and higher outcome in course grade were explored.

The summary of the results and an analysis of the potential implications of this attempt at glocalization are explored in Chapters 4 and 5.

CHAPTER IV

ANALYSIS AND FINDINGS

Introduction

This chapter presents the findings, analysis, and implications of grade 4 students' engagement and teachers' perception with a modified glocalized unit. A modified glocalized curriculum can have various effects on student engagement and experience, which I discovered using thematic coding analysis of transcribed interviews, observations, and field notes by color-coding and examining trends. In addition to the thematic coding analysis, I applied qualitative content analysis. This allowed for expanded data interpretation that considered the theme and category of the glocalized unit being taught. For example, a science class would be hands-on and often technical. An Arabic class would have a theme allowing a non-native Arabic speaker to feel welcome, making for better learning outcomes when learning a second language. Learning outcomes will often vary from student to student due to their perceptions and interactions with the class material. Therefore, the overall environment was used to make valid inferences and interpretations of the collected data.

As discussed in earlier chapters, data analysis is based on three teachers and five grade 4 students. An in-vivo coding technique was applied to extract all feedback received from the participants. After that, interviews were transcribed and documented. Additionally, field notes were made throughout and right after the observations in the classroom.

The purpose of this research study was to answer the following questions:

3. What is the self-reported level of students' engagement in a six-week unit implemented in a fourth-grade Qatari classroom using a glocalized focus in the curriculum?

4. What are grade four teacher perceptions of the impact of a glocalized unit plan on student engagement in the Qatari classroom?

Thematic analysis helps interpret qualitative data by assigning codes to the data before reducing the codes into themes. Accordingly, in this study, I assigned codes to the data and added my explanations based on the data and field observations. Additionally, I analyzed data systematically to piece together how participants organized their thoughts and actions concerning the units under investigation.

Presentation of Data

In this chapter I illustrate the interactions with the participants and the sequences in which the study was formulated. As mentioned previously, to maintain confidentiality, teacher participants were referred to as Sara, Diana, and Adam. Likewise, student participants were referred to as Ahmad, Abdulla, Muhammad, Maryam, and Sumayyah.

Themes Emerging from the Data

The results revealed several important themes. Table 5 below categorizes the codes and lists the themes that emerged from the observed data.

Table 5

Emerging Themes

Code Categorization	Emerging Theme
Understanding of global and local concepts	Understanding of Glocalization
• Culture understanding	
• Proud of culture	

 Personal experiences 	
Familiar environment	
• Firsthand information	
• Use of own knowledge	
• Explain their thinking	Glocalization Increased Student
Increased engagement	Engagement
 Increased attention 	
Easily understand	
Take action	
• Learning made sense	
Easy to relate	
• Enjoyable lessons	
Solidify knowledge	
• Increased connections	
Deeper understanding	
 Understand and enjoy 	
• Innovative ideas	
Critical and creative thinking	
Increased understanding	
• Learning was fun	
• Come up with a hypothesis	

Made it their favorite subject	
Helped their learning	
 Increased connections 	
Increased teamwork	
• Easy to understand	
Very great	
Teacher learned	
Increased understanding	
• Supported learning	
• Very engaged	
Helped knowledge transfer	
• Limited resources, i.e., time	Inadequate resources, e.g., time,
 Vocabulary was difficult 	training

Through the research that has been conducted I have identified the themes listed in Table 5.

These themes are explored in detail in the next section.

Theme 1: Understanding of Glocalization

For this study, the term glocalization was used for lessons in which global knowledge was introduced to students in connection with their local context.

Teacher Interviews

I interviewed Sara and Adam in English and Dana in Arabic. Sara and Adam were grade 4 homeroom teachers at QAD for five years and two years, respectively. Sara is 38 years old,

married, a mother of 3, and originally from the USA, but has lived abroad most of her life, including more than eight years in Qatar. Her children are enrolled in QAD primary and secondary. She is actively involved in her children's education and can make inferences based on her experience throughout QAD. Adam is 33 years old, married, a father of two, and originally from the USA. His children are enrolled in a different international school in Qatar, and he constantly compares their learning outcomes to those of his students. As a result, his feedback naturally illustrates detailed observations from the different curricula he experiences. Dana is a grade 4 Arabic language teacher and was at QAD for three years. She is 35 years old, married, a mother of 3, and is originally from Lebanon. Her children are enrolled at QAD, and she is very passionate about teaching Arabic to native and non-native Arabic speakers.

One primary objective of the interviews was to identify what the term glocalization meant to the participants and to establish a baseline perspective for the study. Sara explained,

Glocalized or glocalization, to me, means that global concepts, such as something economic or political, are altered due to the cultures in which they are presented. For example, if we are talking about cars, a global car manufacturer might change the cars when produced for a specific region to meet the needs of that culture.

As indicated in this response, Sara understood glocalization to mean altering global knowledge without emphasizing local values and culture in any context. Moreover, there is an implication that when global knowledge is delivered, it could be perceived entirely differently than it would have been in its original meaning. For example, Adam said the following,

I am not sure what the word totally encompasses, but to me, it means learning or teaching that brings contact to a student's environment or basically providing text that students can relate to. It may also mean bringing the learning to their localized region in order for them to make sense of global content that is related to that local concept. That is what glocalized means to me.

Adam's understanding somewhat aligned with the concept adopted in this Record of Study, which defines glocalization as examining global issues through a local context. Although he touched upon the fact that global knowledge should be relevant to the local concept, he does not adhere to the understanding of knowledge as it is conveyed. Dana stated the following,

Glocalized means you think about a world issue or crisis and how we can make this problem relatable from a local standpoint. I remember the saying. 'Think globally, act locally.'

As indicated, Dana's understanding is partially aligned, similar to that of Adam, but from an opposite angle. This understanding reflects the importance of making global knowledge relatable to the locals while adhering to the local perspective.

The initial assessment to establish a baseline regarding understanding the meaning of glocalization indicated that the participants have varying understandings of the concept. To reconcile the varying differences and create one mutual baseline to achieve the highest level of reliability in the output results, I communicated to the teacher participants that the concept of glocalization that would be carried forward as part of this Record of Study is the following:

"Glocalization is used for the concept of making global knowledge understandable to the locals at the time it is conveyed." These conversations and explanations occurred during team planning sessions. Once all participants confirmed they had a common understanding of the concept and how it was to be portrayed, I carried forward with the study.

The second objective was to collect responses from the participants regarding how the concept would influence their teaching. Sara said,

With the proposed modifications that were enacted in the unit on natural processes, students in the PYP need to make connections at both the global and local levels.

Students can be introduced to a concept at a global level, and using their own knowledge make the connections to the local level. This same concept can be used in other units to boost the level of inquiry and validate the local knowledge, context and values of the students.

Sara actively deciphered the knowledge at the global and local levels by establishing authenticity based on encouraging students to become aware of their local situation first to fully understand the natural processes that may happen outside of Qatar. To link the learning, students engaged in critical thinking and, thus, became more involved in their learning through inquiries.

Adam stated,

It was a challenging unit, and the approach was a little different. It was a science unit, and we also delved into the global aspect, trying to relate the earth's processes to what we see in Qatar. For example, sandstorms affect drought, deforestation, the effects of erosion,

and land and soil erosion. Doing this provided students with the opportunity to related global environmental issues to their own context and connected it to the realities of their own context and living conditions. In that respect, it helped students understand the concept from both global and local perspective. As it was a science/social unit that had a lot of academic vocabulary, it helped students solidify their knowledge of these academic words as it brought it down to a level they could understand and make connections with.

As indicated, the glocalized unit took a challenging topic like science and allowed the students to connect with the local environment in a way they could observe. Dana explained,

During this unit, there was a strong integration of the homeroom English classes with the Arabic language classes. The students grasped the concepts of Earth's processes on how they related to them in Qatar.

Taking a language class like Arabic and utilizing a glocalized unit plan illustrated the importance of glocalization in learning. The students, being native Arabic speakers, would typically not be completely engaged in the lesson, but with the glocal approach, they understood what was being taught, when using a blend of both languages to better understand the academic content.

Student Interviews

Five students were interviewed at the end of the modified unit. Student participants were not expected to understand the term "glocalization," a concept that drove the learning that the students received. Although they were not exposed to this term, they understood the issue of natural processes happening locally and globally. This understanding was evident in several

instances. For example, Ahmad said, "I saw how erosion looks like in places like Al Zubarah, Qatar. Erosion looks different in Qatar than in the pictures we saw in other parts of the world." Furthermore, most students described the connections made during the lesson related to their culture and heritage. Maryam explained,

I learned that in Al Zubarah, Qatar erosion and weathering have happened. My teacher said we could go on a field trip to see it. My teacher showed us examples of erosion in Qatar and examples in Africa.

Clearly, they understood the comparison between their own country and other parts of the world. For example, Ahmad said,

We did a gallery walk, and we had to look at different pictures. We had to answer questions like 'Why does it look like that?' 'What may have happened?' 'What do I see?' We worked together to answer those questions. I thought that all the pictures were from Qatar, but I was not sure. At the end of the gallery walk, I found out that they were all from Qatar. I felt proud that I guessed that.

Classroom Observations

There were three classroom observations lasting for 50 minutes and were conducted during the UOI sessions. The first classroom observation occurred during the first week of the six-week unit, the second classroom observation in the second week of the unit, and the last classroom observation occurred in the last week of the six-week unit. During the beginning

stages of the unit, students asked many questions during different activities planned. For example, during an activity termed "KWL" (Know, Want, Learn)," students needed to write what they already KNEW from the lesson and what they WANTED to learn and then returned to the activity towards the end to document what they LEARNED. Appendix G shows student samples of the "KWL" activity. Below are examples of the students' questions:

I wonder how tornados are formed.

What are natural processes?

How do earthquakes happen?

I wonder if Qatar has any volcanos.

How come we have a different natural process in Qatar than in other countries?

As the data show, students could make relevant comparisons between local and global contexts, which showed their inherent understanding of glocalization.

Theme 2: Glocalization Increased Student Engagement

Student Interviews

During the interviews, most students mentioned working on experiments. They recounted that their favorite learning experiences occurred when teachers made connections to their local context. Abdulla specifically highlighted their firsthand experience with erosion as their favorite part of the unit,

I had to understand what erosion is and what happens to the land when flooding happens. My teacher made connections to the floods that happened in Qatar last year. This made me understand flooding because it rarely rains in Qatar, and we do not really see floods. The experiment was the most fun. We had to come up with a hypothesis before the experiment. I guessed that the water would overflow on top of the soil. I was wrong. I

saw that erosion happens when a natural process goes and washes away dirt and moves it into a different area.

Abdulla said,

I did not know that we had man-made islands in Qatar. Did you know that? In the Pearl, the islands are man-made. That was my favorite part to learn about.

Many students said their favorite part of the unit was using the academic vocabulary they had learned in class. However, most students commented on how difficult the scientific terminology was to understand, particularly in Arabic, their native language. Muhammad stated, In Arabic, it was difficult to write about the natural processes. I did not know some of the

words I needed to use. Learning the vocabulary words in both languages helped me.

This statement by the Muhammad illustrates a core challenge of learning academic language in either English or Arabic, but the concept of glocalization supported the learning of

vocabulary in both languages. However, despite the difficulties, the students were surprisingly

excited about their learning experiences with this unit. Sumayyah said,

When we first started this unit, I thought it was going to be hard. I also thought that I would not enjoy it, but when we did the erosion experiment, that was fun. I started to research more about other natural processes. Then we also got to make sedimentary rocks using Starburst candy. I got to go on a scavenger hunt and look for different types of rocks in Qatar. We made lots of connections to the natural processes we have in Qatar. I realized why, in Qatar, we have different types of natural processes because we live in a desert. Other parts of the world have different natural processes.

Most students mentioned how everything they learned in their English class was transferred to their Arabic class and vice versa.

Many students expressed the importance of how they felt their beliefs and values indicated the importance of protecting others from natural processes. Students reminded me that Islam emphasized that it was essential to help others. Abdulla explained,

In our Islamic studies class, we learned about a verse in the Quran that describes weathering and erosion. Our teacher taught us how significant this was because the Quran taught us scientific information before scientists even knew about it.

Other students made comparisons to countries around the world. Muhammad said, "It doesn't rain in Qatar as it does in London."

Some students described their end-of-unit project, where they had to pretend to be a meteorologist investigating a devastating process that can destroy the environment in Qatar. They had to write a news report or create a video addressing the following points: What is the process causing damage? Why is it a danger to Qatar? Is it natural or man-made? What can we do to protect ourselves from this process? The students demonstrated how they had to think outside the box. All teacher participants were pleased with the outcomes and showed their willingness and openness to adopt the concept of glocalization.

The students were engaged in their learning. Not only were they able to recall different parts of the lessons, but they were also expressing themselves in the process. Abdulla compared some of the content learned to his own country where he grew up. Muhammad could connect with different parts of the world as he would engage with different materials based on his past

experiences of vacationing in those parts of the world. As it happened here, glocalization aims to increase student engagement with the teaching material itself, which would pave the way to better learning outcomes.

Classroom Observations

The following paragraphs present a detailed account of each classroom observation with an overview related to Theme 2.

Classroom Observation 1

The first observation occurred in the opening week of the six-week unit, "Where We Are in Place and Time." An overview of the six-week units' planning document is found in Appendix E. The language of instruction by the teacher was in English. Students communicated mostly in English. There were 22 students in the class, which consisted of 12 boys and 10 girls. Students had just been introduced to the central idea and lines of inquiry. The central idea was that human activity and Earth's natural processes cause changes to the Earth's landscape. The lines of inquiry were:

- 1. Earth's natural processes;
- 2. Solutions to reduce the impacts of natural Earth processes on humans; and
- 3. The effects of weathering or the rate of erosion by water, ice, wind, or vegetation. The learning objective for the lesson was displayed on the Promethean board.

The teacher had a PowerPoint that guided the students learning. A copy of the PowerPoint can be found in Appendix E. Students were seated on the carpet in front of the Promethean board. Students were asked to read the central idea and then share with a partner what they thought it meant. They discussed the meaning of natural processes. A student stated, "it has to do with natural things that happened in the environment."

After the short discussion, students were asked to complete a KWL chart (see Appendix F). They wrote on post-it notes and put them in the appropriate category. They wrote down everything they already knew about the central idea (the K section), and they also wrote down what they wanted to learn more about (The W section). The teacher gave them 10 minutes for this activity. Students were engaged and immediately started on the task. At the end of the activity, the teacher had students share with the whole class. Only four students shared their reflections. Most students asked similar questions like, what is a natural process? A few students said they already knew what natural process means.

The teacher then asked the students to come back to the carpet. The teacher asked if they knew what erosion was. Only one student raised his hand and said, "it is like weathering when things break down." The teacher and students seemed comfortable and positive. At times throughout the discussion, the teacher redirected a few students to stay focused. After a short discussion, the teacher displayed a picture of erosion. The teacher prompted students by asking questions like; What could this be? What is happening? Where could this picture have been taken? The students shared their answers. The teacher then stated that the picture was of erosion that took place in Qatar in a place called Al Zubarah. The class went from a calm environment to a much more exciting mood. Students seemed like they were in disbelief. Most of the class was amazed and engaged. It seemed like they got excited that this happened in Qatar, saying, "Can we go visit this place? How did this happen here? Are you serious? This is in Qatar!

As the excitement level was high, the teacher brought their attention back to the lesson.

The teacher explained how they would be conducting an experiment to see how erosion happens.

Students were smiling and anxious to begin their experiment. The teacher first demonstrated the

experiment, and then the students worked in groups of four on a table. All supplies were prepared and placed on each group's table. The groups began to explore.

At this time, I moved around the classroom to hear the students' conversations. Some students were reading the instructions, some took on leadership roles, some were writing, and some were preparing the materials. Students started creating their erosion models, and the teacher supported the group's progress. The teacher also had a timer set up to keep students on task. After the experiment, the students shared their observations with the class and discussed erosion in more detail. They also seemed to understand erosion after the experiment and picture.

The teacher had them create a short reflection, and then the period ended.

Classroom Observation 2

The second observation took place in the second week of the six-week unit. The observation took place in a homeroom classroom. All instruction and student learning was mostly in English. At this point in the unit, students were already exposed to the first line of inquiry, "Earth's natural processes." They learned about weathering, deposition, fossilization, different types of rocks, and volcanos. This was evident from the planning guide and student work displayed in the classroom. Although the primary language spoken during the homeroom classroom was in English, a bilingual connection was also evident in the classroom. (Refer to Appendix F to view student samples). The homeroom teacher made connections to the Arabic vocabulary words that were displayed by the Arabic teacher, which were translated from English to Arabic. The learning objective for this lesson was, "Students can identify Qatar's natural processes and explore the possible impacts over time in Qatar," related to the second line of inquiry to develop solutions to reduce the impacts of natural Earth processes on humans. Before this lesson, students had already deconstructed the second line of inquiry.

There were 21 students in the class; 12 boys and nine girls. The lesson began with students sitting at their table groups. The teacher printed off the second line of inquiry and asked students to work as a group to brainstorm and identify what the word/phrase meant in the line of inquiry. Students brainstormed and created a mind map (see Appendix F) of what they thought everything meant. One student debated the definition of the word "impact." Several students described impact as "changing, destroying, or damaging."

After the 10-minute brainstorming activity, groups presented their understanding of the line of inquiry to the class. As students were listening to the groups, their engagement level seemed low. Some students were talking to others and disengaged, and the teacher had to redirect them. After the groups presented, the teacher explained that the class would participate in a gallery walk. The teacher had printed off pictures of the natural processes that occurred in Qatar. Pictures were on big chart paper around the classroom. Students were asked to go around the room and identify what natural process may have occurred and why they think so. The reflection questions displayed on the chart paper were What do they see? What may have happened? Why does it look like this?

Students walked around with markers and began to explore. During the picture gallery walk, a high level of student engagement was present when students discussed their reflections on each picture. Students had the opportunity to deconstruct the picture and conference with their teacher as the teacher floated around the classroom. They became more focused and engaged when the teacher suddenly visited them. Some groups had deep discussions without the assistance of the teacher. For example, students said: "What is this picture?" "I see cut down trees, I wonder why" "A flood could have happened." "This is a modern building" "This is in

Qatar!" "I see sedimentary rocks." During the end-of-lesson reflections, they were eager to learn more. Students mentioned wishing to share their learning with their parents at home.

Classroom Observation 3

Observation 3 happened in the last week of the 6-week unit. Students had been engaged in a summative assessment that consisted of taking on the role of a meteorologist, exploring a natural process, and creating a news report. The lesson I observed was a continuation of a lesson that had introduced the summative assessment project, and students were engaged in completing this project. There were 24 students in the class, and students worked in small groups of 3 and 4. English was the language of instruction. Although English was the language of instruction, students were encouraged to integrate Arabic into their project. Students discussed and reflected on how global complexities affect their daily lives in the real world. They discussed how the earth process they chose to present personally impacted them and how they plan to take action to help others. All groups used a technology piece to present their report. One group used iMovie, while another was using Google slides. Some groups were using iPads to record parts of the group's presentations. Most students were fully engaged, and the teacher rarely had to redirect a student to stay on task. Students were thrilled to be working on this project, and they redirected their groups to stay focused and complete their projects.

Student Engagement Conclusion

Based on my observation of students in the class, I would claim that overall, students were most attentive during collaborative learning and discussion when their local setting was highlighted. Teachers and students were happy and comfortable. Teachers were enthusiastic; in return, students were engaged, and there was a positive teacher-student relationship. It was evident that all the classrooms had a welcoming and positive environment. Teachers adapted and

developed connections with the local contexts to address the needs of each student. Teachers engaged all students in conversations and questions, monitored student engagement, and made necessary adjustments. Students showed pride in their work throughout various activities, specifically when connections were made to their local context.

Teachers ensured that the students were actively engaged. Teachers emphasized the value of creating a supportive environment in the classroom. There were many instances where teachers made connections to students' self-identities, culture, values, and even language. The students exhibited a sense of pride and self-assurance after making these connections.

Overall, student engagement was apparent and high at times in the lesson when local connections were made. The students that participated in the interviews were curious and wanted to know more about Qatar's natural processes. When responding to questions, students showed enthusiasm and appeared to remember the unit well. One student thought back on the six-week unit and recalled various aspects of it but were more explicit when describing their connection to the unit from their local perspective. During the lesson observations, I observed students posing detailed inquiries that extended beyond the subject matter covered. Due to their understanding of natural processes from their local context first, students were able to establish meaningful connections to the natural processes in the rest of the world. Their summative assessment project made this clear. Students were able to elaborate on and show in detail how the natural process they chose directly affected them and how they intended to help others.

According to research, giving students the opportunity to learn about global issues through their local context increases their interest in learning (Ahmed, 2019; Powell, 2014; Vora, 2014). When the student's prior knowledge, background, experiences, and interests were highlighted, teachers reported an increase in their students' engagement. As mentioned

previously, glocalized education- integrating local and global context within the curriculum can increase student engagement (Ahmed, 2019; Powell, 2014; Vora, 2014).

Theme 3: Supported Resources

Participants in the teacher interviews noted the necessity for professional development to fully understand the meaning of glocalization in its entirety and how to apply it within the units. Adam stated that she would have benefited from professional development to support her planning. Sara commented on the lack of resources available to help support a glocalized unit. All teachers expressed the need for targeted resources on Qatari culture to support the lesson plans. Diana stated that if Qatari cultural resources were available, they could be adapted to the teaching context. For example, he noted that a gallery at the Qatar National Museum focuses on Qatar's formation, and this gallery applies explicitly to the unit on earth's processes. The museum's gallery displays geological forces that shaped Qatar's formation more than 700 million years ago. Additionally, the museum features heritage sites around Qatar that students can visit to learn more about Qatar's natural processes. If teachers had this knowledge beforehand, their lessons would be enhanced.

Results of the Research

This qualitative study was conducted to identify the level of students' engagement in lessons implemented using a glocalized focus on the curriculum and the grade four teachers' perceptions of the impact of a glocalized unit plan on student engagement. The study used student and teacher interviews and classroom observations. The results cannot be generalized to the broader population because the context at QAD only involved specific grade and subject-level teachers and a single institution.

The researcher developed codes to analyze the data. The codes utilized participants' language and terminologies, reflecting their actions and perspectives. As indicated in Table 4, the researcher derived code names from the literal words in the transcripts, such as "Enjoyable lessons," "Solidify knowledge," "Increased connections," and "Deeper understanding," among others. Codes from teachers, students, and observations were categorized into related groups to generate the study's major themes, as indicated in Table 4. Code categorization involved arranging the codes generated from all the interviews and observations into categorical phrases that generate major themes relating to all participants' replies. From the codes, major categorical phrases generated were "familiarity," "local culture inclusion," "use of available knowledge," "limited time," and "easy to understand," which leads to three major themes; understanding glocalization, increased engagement, and need for support resources.

The classroom observations showed that a glocalized unit design increased student engagement significantly through increased collaboration and group discussions. Student-teacher engagement also increased through discussions. The class was made engaging and enjoyable for the students by using their culture, bilingualism, and local knowledge. Whereas, in a non-glocalized unit, the same subject would have been a reflection of a global context that the students won't be able to understand in depth by making connections with their own local surroundings. Students could appreciate the world's complexities by using experiences from their local context. Students' engagement grew due to their sense of pride in the linkages made between local and global issues. Teachers acknowledged the significance of drawing on the student's prior knowledge for a more straightforward understanding of the course content while implementing international curricula in a local setting.

As the unit proceeded, during planning meetings, it was clear that the more the teachers interacted with glocalized lesson plans, the better their understanding of glocalization and its importance in primary education. According to most participating teachers, glocalization integrates local and global contexts into the curriculum. They emphasized the importance of teaching students from a local perspective before moving on to more global contexts.

Interestingly, one participant mentioned that glocalization entailed adapting global ideas to fit the requirements of that culture. For example, Sara said,

Glocalized or glocalization, to me, means that global concepts, such as something economic or political, are altered due to the cultures in which they are presented. For example, if we are talking about cars, a global car manufacturer might change the cars when produced for a specific region to meet the needs of that culture.

The grade 4 teachers' interviews, artifacts, and class discussions illuminated the necessity of PYP practice, calling for it to be continuously improved, expanded, and reflected upon, as well as the need to consolidate and sustain the usage of IB PYP components. As this was a science-heavy unit, teachers reflected on the importance of responding to students' emerging questions and inquiries by reflecting on what they know and designing science inquiries to push them further. Using examples from Qatar, the natural and human processes and what they meant to the landscape were appropriate and made the learning purposeful and authentic to the students.

All three teachers identified these times as when students were most engaged in class: during discussions on relevant topics, open inquiry into those concepts, and collaborative learning activities. Connecting with their local roots enabled students to understand global

concepts with a high level of student engagement. The students engaged more in experiments and confidently explained their thinking. The experiments promoted social connections and a sense of pride when looking at global issues through local culture's lenses. Students started taking action on their own, illustrating a level of growth and development through glocalization. Adam stated,

My experience in this unit was very great. Not only did the students learn, but I, as a teacher, also learned because of how scientific this unit was. The students created a brochure in my class, and their understanding of the concepts was phenomenal as they pieced local and global concepts together.

Sara added,

They were able to actually relate it to other parts of the world and to their lives here in Qatar. They were also able to produce very innovative ideas on how to overcome these challenges that the earth processes present. For example, volcanos and earthquakes are not things we experience here, but from the knowledge they have gained, they were able to come up with ideas on structures that could potentially reduce the impact of these earth's processes, so overall they were able to understand what they meant. They were able to relate that concept to themselves and the world in general. They were able to use critical and creative thinking to come up with innovative ideas in order for them to provide some solutions to some of the problems that are created by Earth's processes.

Lastly, Diana explained;

The students were able to understand weathering, erosion, and deposition in connection with how different weather systems contribute to erosion. Students were also able to take action (theoretically) by creating safety plans in the event a natural disaster struck close

to home.

In this Record of Study, glocalized lesson plans resulted in high student engagement, inquiry into complex topics, and understanding of a second language. The indications were positive, and the learning output was apparent. I wanted to identify the challenges and streamline the process to integrate a glocalized lesson plan. The process of developing an implementation guideline using the participant's perspective on how to use a glocalized unit plan as a standard has also been made possible by this study.

The biggest challenge of this study was the limited time available to complete the glocalized lesson. This was inherent in the output as the students were more engaged and interested, leading the teacher to spend more time on a topic than initially planned. So, it is essential to extend the unit to accommodate the positive response from the students. It was apparent that the students were more likely to recall and retain the concepts taught in the lesson. As I analyzed the transition between the different topics of a lesson, the students made connections between the various topics in the unit. As such, another challenge would be to integrate more robust learning inquiries into the lesson plans.

Also, it is very challenging to relay the learning objectives in both English and Arabic for more specialized lessons. The limitation stemmed from the fact that there are not enough resources in Arabic to utilize as a reference point when blending the information being taught.

Last, it was apparent that a teacher who has lived in the local area would have an advantage in blending the material of the lesson plans per the concept of glocalization. In their first year, expat teachers might find it challenging to implement a glocalized curriculum.

Interaction Between the Research and the Context

The Qatar Foundation is calling for the glocalization of education to enable learners to use their local language, rules, and culture to understand global issues and help their country build a sustainable future. This call means there must changes in curricula. For easy adoption, grade 4 teachers must understand glocalization concepts, making them effective participants. My study indicates that teachers are willing to come on board. All the teachers were excited about participating in the study because they knew it equipped them with relevant and essential knowledge. They willingly joined all the activities for six weeks, making it easy to conclude the study within the set period.

After the study, I presented the results to all the participants. For teachers, I sent the results to their respective email addresses. For the participating students, I gathered them together in a group and explained to them the results and what they meant. They were all happy to have participated and agreed that the study reflected their thoughts and feelings. The teachers stated that the study opened them to new teaching perspectives, and all agreed that glocalization in education is essential because it increases student engagement. Perhaps a few quotes here???

How the Context Impacted the Findings

There were two specifically identifiable contexts in this study, Science and Arabic. In both contexts, the content is more technical and harder to understand for learners who are not proficient in the subject. Science is a technical topic that would be easier to comprehend if the students interact directly with lab materials and resources. Whereas Arabic is dependent on the student's level of knowledge, particularly when using Arabic to interact with others. In this case, student engagement tends to decrease as they get lost due to the complexity of the information being conveyed. However, during a glocalized lesson plan in both subjects, student engagement

was apparent and impactful as the participants showed a strong connection with the subject matter and could retain the information longer.

Chapter Summary

The study revealed that teachers and students who undertook the modified glocalized unit were highly engaged. The teachers believed that a high level of student engagement was present due to the activities' connection to the student's local environment. The activities allow students to experience firsthand natural processes within their country and make relevant comparisons to countries around the world. Based on teachers input, glocalization links with culture, heritage, local knowledge, local innovation, values, and language, but it can be challenging to do so without the appropriate resources.

CHAPTER V

SUMMARY AND CONCLUSION

Introduction

Although new in the context of education, the concept of glocalization can drastically impact the perception and understanding of information when it is conveyed, particularly when there is an emphasis on the context where cultural and language differences vary from the global perspectives, as is the case in Qatar. An aligned curriculum meeting local and global factors can be instrumental in increasing student engagement and, ultimately, student achievement. Through glocalization, students can gain information, skills, and awareness of Qatar's local resources, heritage, culture, and global citizenship, enabling them to apply local knowledge and action to a global context. As revealed by the study results, glocalization increased engagement, leading to new ideas or innovation, which aligns with social constructivism theory. The paradigm teaches that knowledge develops as a result of social interaction.

Summary of the Findings

The findings indicate that Qatar Academy must develop glocalization resources that impact learning, student engagement, and social interaction. These resources will enable learners to gain knowledge while maintaining local cultural roots and, therefore, be able to apply that knowledge to impact their local communities. The students in Qatar are keen on being part of the global situation by being able to identify solutions to the world's critical challenges through enhanced local knowledge and innovation. From the results, it is evident that, through glocalization, PYP students can understand global issues by utilizing familiar knowledge, which is local knowledge. PYP students must learn how to practically apply sustainable development concepts, such as flood and soil erosion patterns observed in their local communities, to solve

similar problems across the globe. Here, glocalization utilizes the practical instead of the theoretical.

Globalization has failed in educational contexts because it relies on theories, which means students learn about unfamiliar topics through dictation, lacking in-depth learning and negatively influencing interaction and engagement. Glocalization, on the other hand, calls for practical experiments, allowing students to gain firsthand information on tackling world problems (Niemczyk, 2019). Therefore, to help PYP students make a connection to global environmental problems, they need to start by learning about the effects of climate change on local weather patterns. Every effort in curriculum development aims to promote cohesive and coherent learning experiences that help with students' personal and professional development. It calls for the curriculum to consider learners' backgrounds, cultures, motivations, and experiences. The only way to do so is to ensure the glocalization of QAD's curriculum.

According to Williams and Graham (2014), the mere exchange of information is not education. Education calls for the promotion of critical thinking and self-awareness, which is similar to glocalized education. The findings of the study indicate that glocalization of PYP units of inquiry helped students become innovative by promoting critical and creative thinking. A glocalized curriculum helped students maintain global aspirations while at the same time staying local. In a past study, Patel et al. (2012) found that the most effective learning is contextualized within the local context. Their main argument was that local context brings in experience and lived reality. In other terms, glocalization helped students understand the unknown by starting to understand the known. Therefore, success, or increased student engagement resulting from a glocalized unit, reveals the essential and relevant connections between the local and global perspectives of learners.

The study suggests that combining local and international curricula while considering how local forces relate to global concepts is the proper pedagogical approach for today's students. It is a mistake to teach global citizenship without considering local concerns. This means that the creation of glocal curricula must begin on familiar ground, namely, the local level (Mannion, 2015). Glocal education helps students develop critical thinking, increasing their understanding and engagement.

The study results indicate that students found learning fun and enjoyable through glocalized instruction. They could engage with fellow students and teachers because they clearly understood global issues, which in the past seemed difficult due to the absence of local context. The student engagement and understanding of the topic was such that the students should be able to retain the knowledge long-term due to the constant connections inherent in their environment. The students were also proud of their culture, seeing that it plays a role in solving world problems. Glocalization made it easier for students to form educational groups and take personal actions toward improving the current state. However, to ensure that the fused curriculum is implemented, Qatar must equip teachers with adequate support resources, such as training and benchmarking, to help them become glocal teachers. The support will prepare the teachers with enough skills, appropriate attitudes, and universal values to make it easy for them to glocalize their units of inquiry.

Results in Relation to the Literature

As Yang and Li (2022) indicated, different countries, including Qatar, need to adopt curriculum hybridization because it increases students' interconnectivity to global and local contexts. The infusion positively impacts the execution and operation of curriculums, leading to high-quality education. The experts agree that a curriculum that meets local and global factors

helps increase student engagement because curricula directly influence student achievement (Alfauzan & Tarchouna, 2017). Additionally, for a curriculum to meet the needs of students, it has to consider their cultural and heritage backgrounds (Alfauzan & Tarchouna, 2017). Just like glocalization transforms business through improved quality to meet local needs, glocalized curriculum promotes quality in education by insisting on details and noting the differences in implementing global issues in different local contexts. According to Gleeson et al. (2020), glocalization in curriculum promotes critical thinking by encouraging students to inquire beyond modernization. As evident from the interviews, past studies, such as Lynch (2013), agree that glocal learning inspires creativity, innovation, and engagement. Students are more engaged when global issues are explained in terms of their everyday experiences and familiar surroundings because they are aware of the local context. Through glocalization, people gain pride in their culture, which fosters a sense of belonging and ownership and makes them feel like a part of the decisions made to protect and sustain the world.

Implications

The current study is essential to Qatar and QAD primary schools because it outlines ways we can update the current school curriculum and make it more relevant to students' local context and values. Through the study guidelines, the school can teach its pupils ways to protect the global environment by teaching them ways of protecting their local environment. Qatar aims to develop a sustainable future through education, and the information provided by this study can function as a blueprint for developing a sustainable curriculum. The study illustrates how local issues can be connected to global problems through knowledge and innovation. The information illustrates ways of empowering primary school pupils to help them take actions that help their country and the world overcome its social, environmental, political, and economic problems. The

study also outlines the obstacles that prevent the implementation of a glocalized curriculum, such as limited resources, calling on schools to act on the obstacles to ensure the smooth adoption of a glocalized curriculum. The information also helps guide Qatar schools, on promoting authentic learning by combining local and global concepts.

Through this Record of Study I have attempted to illuminate the present gaps and future needs within the field of education and curriculum formulation and produces new information and problem-solving skills that can help tackle problems facing global education based on local realities. The study also illustrates how glocalized education changes students' lives, with findings that apply to the real world. For example, the study illuminates the importance of local culture in implementing a new curriculum, calling on teachers to understand students' backgrounds and lived experiences for effective teaching. Furthermore, the findings of this study illustrate the importance of interdisciplinary dependence in developing education policies. It builds an academic knowledge base by simplifying complex issues, allowing teachers in Qatar to implement a glocalized curriculum effectively.

Using this knowledge I have gained from my Record of Study, I created a 'Glocalization Guidebook' located in Appendix I, to support Qatar Foundation teachers when developing glocalized lesson plans. The guidebook includes the definition of glocalization, learning intentions, global context, available resources, and learning outcomes. During glocalization professional development workshops I will be leading at several Qatar Foundation schools, the guidebook will be distributed.

Personal Lessons Learned

The sustainable development goal aims to promote inclusive and equitable quality education. Looking through the SDG lenses, I saw global education as necessary for ensuring

inclusivity and equitable sharing. I understood that global education promotes respect for human rights and personal and world growth. However, after conducting the study, I have learned that promoting global education in the curriculum equals promoting popular ideologies, which is misleading and unfair to developing nations, which tend to adopt Western ideologies instead of their local ones. I have learned that global education creates standardization and universalism, which is different from equality or inclusivity. Universalism and standardization promote adopting other nations' ideas and abandoning local principles, which creates inequality.

The solution, therefore, is not universalism because it limits growth. The solution is the promotion of every local context's uniqueness and difference because that is the only way to create diverse and sufficient solutions for problems facing the world. Finally, glocalization promotes practice or experiments, which increase engagement and in-depth understanding of issues, and it promotes using the known to tackle the unknown. In other words, locals need to be taught global issues using local examples or what they are familiar with because it makes it easy to understand.

In conducting the research, I have learned the advantage of utilizing in-vivo coding and thematic analysis. I have also gained a deeper understanding of how local and global issues interact and relate. Additionally, I have learned how to connect with study participants, including the do and don'ts during research. I have learned that curriculum development is essential to student performance and that adequate resources are necessary to ensure teachers formulate and implement the school's program of study. It is also essential for educators to continue expanding their knowledge because the needs of children, the community, and the world keep on changing, requiring increased knowledge in both local and global settings. Finally, it is also clear that it is impossible to attain global solutions in the isolation of local contexts.

Limitations and Suggestions for Future Studies

This study has several limitations. First, the study was at one school; thus, the results are not generalizable. Second, the school selected may not have been representative of the Qatari school system. Third, the sample size was small, although appropriate for an exploratory qualitative study. This study offers preliminary ideas on how to connect global and local issues together in school curriculum. More research is required to explore, expand upon, and examine glocalization in all Qatar Foundation schools. Are other schools already experiencing this? Would a certain framework help teachers organize their lessons? How can we standardize it throughout all Qatar Foundation schools? Future studies can examine all of these issues. This supports the notion of preparing students as leaders of the future. Further, available studies on glocalization focused on local students, necessitating future studies to focus on the effects of glocalized education on non-Qatari students.

Educators in the country need to dialogue on how to glocalize their curricula. Moreover, schools, curriculum specialists, and teachers must develop strategies for combining innovation in education with culture and heritage through professional development. The following are some examples of ways to implement glocalization at QAD:

- Use existing examples of incorporating the local resources, heritage/culture, and SDG within the curriculum, and find links within the units across the subjects' areas
- During induction week at Qatar Foundation schools, develop workshops for onboarding staff that will help teachers understand Qatari culture and heritage and how to integrate it into the written and taught curriculum.
- Design educational resources inspired by the Qatari Heritage related to Math,

- English, Science, Arabic, and Islam
- Provide a list of experiential learning locations
- Provide a professional development program in English and Arabic to train
 teachers about glocalization and how it could impact students' learning progress
- Take staff to the local museums, heritage sites, and visiting communities around
 Oatar
- Create a one-district scope and sequence across all QF schools.

Conclusion

The study clearly outlines that glocalization is an empowering standard because it allows teaching communities to take action by starting with the known before dealing with the unknown. It allows practice, unlike the use of theory evident in global citizenship education (Mannion, 2015). Glocalization promotes self-respect and pride in one's culture because it illustrates how the local culture relates to the world, unlike global education, which illustrates that Western ideologies are superior to local curriculums. Therefore, to promote equality and inclusivity in global education, policymakers must utilize local culture, environment, language, and laws to assess a global ideology's suitability. Glocalization is the only way youths can solve environmental or sustainability issues facing the world, as it inspires them to be socially responsible and think globally but act locally. Each unique solution from different local settings will create adequate solutions for the world to choose from, protecting the current and future generations. Furthermore, school initiatives need to embrace the local environment because doing so gives young generations a sense of pride in their culture or citizenship, creating a responsible, tolerant, and open-minded generation.

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APPENDIX A

LETTER OF DETERMINATION

NOT HUMAN RESEARCH DETERMINATION

February 22, 2021

Type of Review:	Initial Review Submission Form			
Title:	Glocalization: Connecting Local and Global Context within K-12			
	Education in Qatar			
Investigator:	Mary Margaret Capraro			
IRB ID:	IRB2021-0176			
Reference	121780			
Number:				
Funding:	N/A			
Documents	IRB Application (v1.0)			
Received:				

Dear Mary Margaret Capraro:

The Institution determined that the proposed activity is not research involving human subjects as defined by DHHS and FDA regulations.

Further IRB review and approval by this organization are not required because this is not human research. You have indicated that the results of the activities described in the application will not be generalized beyond a single school system and will not be published. This determination applies only to the activities described in this IRB submission and does not apply should any changes be made. If changes are made, you must immediately contact the IRB about whether these activities are research involving humans in which the organization is engaged. You will also be required to submit a new request to the IRB for a determination.

If any of these activities are occurring in Qatar, please verify that local Qatar IRB approval is not required before beginning the work.

Please be aware that receiving a 'Not Human Research Determination' is not the same as an IRB review and approval of the activity. IRB consent forms or templates for the activities described in the determination are not to be used, and references to TAMU IRB approval must be removed from study documents.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll-free at 1-855-795-8636.

Sincerely,

IRB Administration





PARENT CONSENT FORM

Dear Parents,
My name is Ikhlas Ahmad, and I am the Grade 5 Lead teacher. I am currently pursuing my
doctorate degree in Curriculum and Instruction at Texas A&M University. I am requesting your
permission to interview your child for my research study on 'Using Glocalization to improve
student engagement in Qatar.' The name of your child will be kept anonymous. The interview
will NOT be recorded. It will only be transcribed.
If you grant permission for your child to be interviewed, please sign the consent section below. Thank you for your consideration,
Ms. Ikhlas Ahmad
CONSENT
I have read and understand the preceding letter. By signing this consent form, I do hereby
consent to my child being interviewed for the purpose of Ms. Ikhlas' research.
Student's Name:

Parent/Caregiver Name:	
Parent/Caregiver Signature:	Date:
If you do not give your consent, please record your chi Consent" below:	lld's name above and write "Do Not

APPENDIX C

INTERVIEW QUESTIONS

Teachers:

What does the term glocalized mean to you?

How do you think this glocalized unit has influenced your teaching?

What challenges did you face implementing/teaching this unit in your class?

Tell me about your experience with this unit.

Did you notice a change in student engagement and understanding?

Were the learning outcomes met?

Students:

What was your favorite thing about this unit?

What was your least favorite thing about this unit?

What were some challenges you faced with this unit?

Tell me about your learning experience with this unit.

What connections have been made in the unit that relates to your local culture and heritage?

What connections have been made in the unit that relates to your local Arabic language?

What connections have been made in the unit that relates to your local values?

What connections have been made in the unit that relates to your local knowledge and

innovation?

APPENDIX D

OBSERVATION FORM

Teacher:	Observation Date:	-
Subject/Lesson:		
Observer:		
Observer	_	
Class attendance:	_	
Draw a diagram of the teacher's and stude	ents' positions in the class.	
Notes on the classroom environment.		

Description of instructional method/resources.

Tick off the following points that have been observed.
Students are included in questioning and discussions.
Teacher monitors the level of attention and adjusts accordingly.
The lesson plan is attention span appropriate (review of prior knowledge, the introduction of
a new concept, guided and independent practice)
Teacher enthusiasm is evident
Positive relationships (teacher-students-peers)
Effective feedback is given
Student responses and discussions are appropriate and rich
Evidence/Comments:

Goal	Criteria	1	2	3
	Students take pride in their work.			
	Students are eager to learn.			
	Students understand the context of glocalization, which embraces meaningful action through student agency.			
The teacher effectively engages students in learning by using a variety of	Students describe and reflect upon global complexities and how this impacts their lives in a real-world situation.			
instructional strategies to meet individual learning needs.	Students work collaboratively with others in meaningful discussions.			
	Engages, empowers, and maintains students in active, agentic learning.			
	Uses multiple levels of questioning aligned with students' cognitive abilities with appropriate techniques.			
	The teacher builds cultural identities and respects students' diversity by being sensitive			

	to special needs, language, culture, race, and
	gender.
	The teacher acknowledges his or her
	perspective and is open to hearing their
	students' views.
	The teacher builds cultural identities and
	respects students' diversity by being sensitive
	to special needs, language, culture, race, and
	gender.
Evidence/Comments	<u> </u>
Engagement was highest during which pa	art of the lesson.

Additional notes/observations.

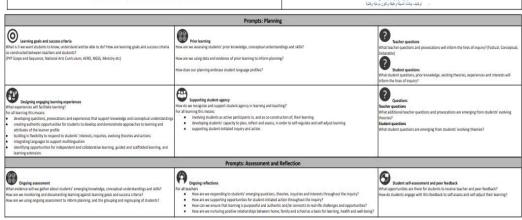
_ Teacher Signature:
_ Teacher Signature:
_Teacher Signature:

APPENDIX E

WWAPT UNIT PLAN





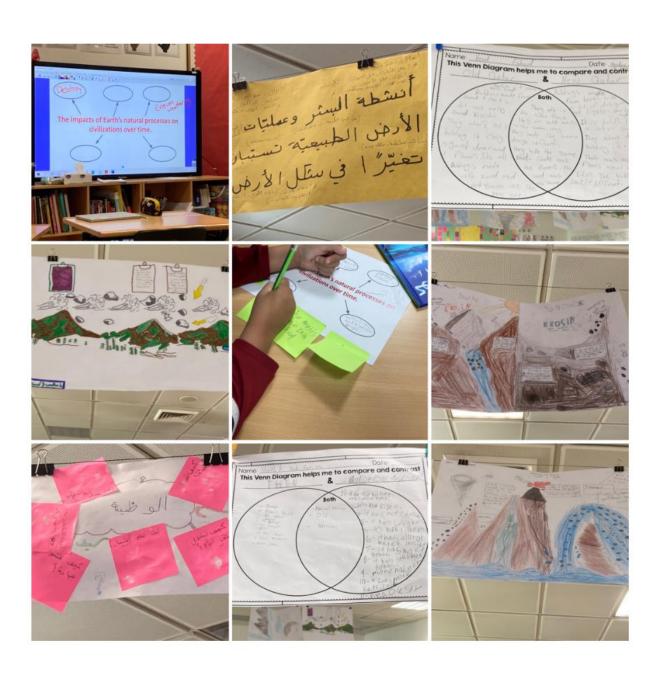


UNIT OVERVIEW Earth's Systems and Processed (WWAPT) (7 weeks) Theme: Where We Are in Place and Time uman activity and Earth's natural processes cause changes to the Earth's landscape There focus to the ME IN TRACE 400 TIME There focus to descriptions; Which parts of the transdisciplinary theme will the unit of inquiry focus on? The relationships between, and the interconnectedness of, individuals and civilizations, from local and global perspectives. Unes of Inquiry: Do the lines of Inquiry: • clarify and develop understanding of the central idea? • define the scope of the inquiry and help to focus learning and teaching? • define the scope of the inquiry and help to focus learning and teaching? Collaborative teaching team: Melissa Woods, Ryan Bishal, Glen Clafferty, Surrey Maraku, Deborah Ruth Kussan Earth's natural processes (Change: Rock Formation, Fossilization, Time, Weathering, Erosion) Solutions to reduce the impacts of natural Earth processes on humans. (Connection: Solutions, Reducing 3. The effects of weathering or the rate of erosion by water, ice, wind, or vegetation. (Function: We low can our initial reflections inform all learning and teaching in this unit of inquiry? Erosion, Observations, Evidence) This is a brand new unit for the NGSS. Focusing on the environmental impacts of Earth's natural processes, student will explore through science inquiries and connect to their own experiences and prior knowledge. Key Concepts: Do the key concepts focus the direction of the inquiry and provide opportunities to make connections across, between and beyond subjects? Change, Connection, Function Description (Your unit description can be shared with your class): Earth, the planet we live on, is always changing. These changes occur for two reasons: nature and human activity. How humans live and adapt to the changing environment can have an impact on the future of our planet. In this unit, we will explore Earth's processes, reflect on our own actions and impact, and determine our own view of how the world can function. Related Concepts: Do the related concepts: Do the related concepts provide a lens for conceptual understandings within a specific subject? Rock Formation, Fossilization, Time, Weathering, Erosion, Solutions, Reducing impact, Weathering, Erosion, Observations, Evidence Connections: Transdisciplinary and past Links to previous planners. Grade 4 WWAPT Unit Planner 2020-21 Q Learner Profile; What opportunities will there be to develop, demonstrate and reinforce the learner profile? Inquirer, Thinkers, Knowledgeable Link to COVID-19 POI 2020-2021 Connections to past and future learning, inside and outside the programme of inquiry. How can we ensure that learning is purposeful and connects to local and global challenges and opportunities? Making flexible use of resources How will resources add value and purpose to learning? formative-assessment-tools-levy-county add Tools Arrangements of the Next Generation Science Standards https://www.norshytuburs.com/fall_prade_science.belo/generate-ways-to-reduce-impacts-of-earth-processes https://betterlesson.com/prowse/common.com/standard/2155/fngs-d-ess3-2-generate-and-compare-multiple-solution-reduce-the-impacts-of-instrular-learth-processes-on-humans https://www.conknowledge.org/wp-content/uploads/2019/09/CRSci_G4EarthProcesses_TG.pdf ** Ast_Skills: What authentic opportunities are there for students to develop and demonstrate approaches to learning? Research, Thinking

	INQUIRY CYCLE PLANNING FOR UNIT (7 WEEKS)						
Subject	Tuning In (Provocation) Finding Out/Sorting Out LOI 1	Finding Out/Sorting Out LOI 1	LOI 2	LOI 2	LO1 3	LOI 3	
Dates	March 13-17	March 20-24	March 27-31	April 3-7	April 10-14	April 17-21	April 24-28
	(Pro	vocation, Questions: Factual Quest	tions, Conceptual Questions, Debat	table Questions, Learning Engagen	nents, Virtual Lessons)		
Science/Social Studies/I/I/I Topic Arrangements of the Next Generation Science Standards	Lesson 1 Provocation: Students will be observing and analyzing images from different time periods to compare and contrast the similarities and differences due to human impact. Students will be given this PDF document that provides instructions and images that they will compare and contrast they will compare and contrast limages are from 50 years prior of Doha and Qatar and what it looks like now. Using a Venn Diagram, students will create their own compare and contrast using two or more images from the document. Students will use their prior knowledge of their country and their environment to demonstrate their understanding. Lesson 2 Breaking down the Unit Lesson 3	vocation, Questions: Factual Quest	LOI 2 (Solutions to Reduce Impact) Questions (Description of the Control of the Control of Control	inquiry Cycle Step: Finding Out/Sorting Out Central Idea: Human activity and Earth's natural processes cause changes to the Earth's landscape. Transdisciplinary Theme: Where We Are in Place and Time Where We Are in Place and Time B Learner Profile Attributes: Inquires. Thinking Lines of Inquiry: 1. Earth's natural processes (Change: Rock Formation, Fossilization, Time, Weathering, Erosion) 2. Solutions to reduce the impacts of natural Earth processes on	LOI 3 (Effects of Weathering) Questions Factual Questions: How do rock formations change over time? Conceptual Questions: What causes different landforms to form? Debatable Questions: What causes different landforms for form? Debatable Questions: Are some landforms more important than others? Why? De humans have a responsibility to protect landforms? Why or why not? Learning Engagements: Experimentation: Students will be conducting an experiment on rock formation and what causes it. Students will be completing this task through a Seesaw Science Experiment. Rock Formation Experiment LOI 3 (Effects of Weathering): Learning Engagement: Students will learn about unusual rock formations and use note-taking to complete unusual rock formations and use note-taking to complete		Summative Assessment Task Students will choose one of the options below and complete a RAFT summative assessment. Meteorologist Summative Scenario: You are a meteorologist investigating a devastating process that is burning Catara. You must write a news report or create a news video addressing the following points: What is the process that is causing damage? Why is it a danger to Qatar? Is it natural or man-made? What is a danger to Quatar? What is an wed to protect ourselves from this process? Engineering Summative Scenario: Vou are an engineer hired to help with the effects of weathering along the coast of Qatar. Design 3 ways to stop the erosion and help humans live without conflict of earth's processes.
	LOI 1 (Earth's Natural Processes) Questions: Factual Questions: What is erosion?		Students will conduct an experiment on man-made islands and how coffer dams are more ecologically friendly than other ways of making man-made islands.	humans. (Connection: Solutions, Reducing impact) 3. The effects of weathering or the rate of erosion by water,	this learning engagement. Students will watch a video about different unique landforms and take notes about each. They will then complete a Seesaw learning engagement		Summative Assessment Task Share reports with others in the class. Share reports with the school
	What is weathering? Conceptual Questions: How does erosion change our earth?		Coffer Dams Other Labs that can be done about earth's processes and	ice, wind, or vegetation. (Function: Weathering, Erosion, Observations,	focusing on these landforms. <u>Unusual Landforms</u>		newspaper to publish. Assembly on what we can do to help these processes.

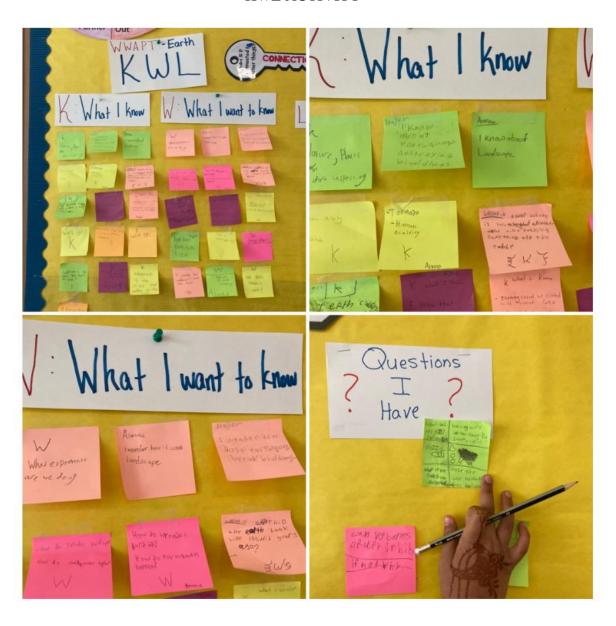
APPENDIX F

SAMPLES OF STUDENT WORK



APPENDIX G

KWL ACTIVITY



APPENDIX H

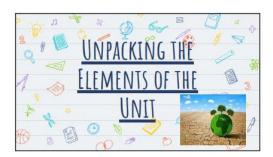
COPY OF POWERPOINT PRESENTATION

Monday 14th March 2022

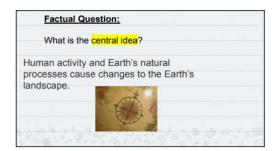
LEARNING OBJECTIVE:

To unpack the central idea, lines of inquiry, key concepts, and IBLP of the new unit.

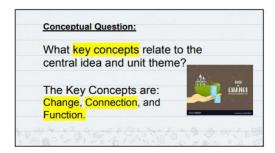


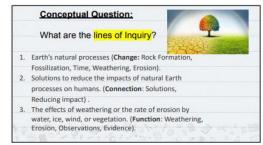


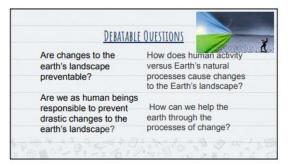




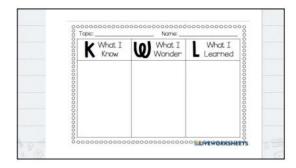




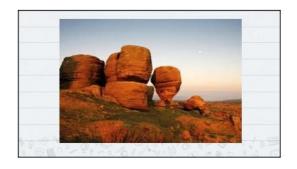














APPENDIX I

GLOCALIZATION GUIDEBOOK







Find educational resources on local

- values and ethics.
 Promoting ethics across the curriculum
 Akhlaquna, Qatar Academy Al Wakra

AVAILABLE RESOURCES IN QATAR































LEARNING OUTCOMES

Through glocalization, students can

- gain information, skills, and awareness of Qatar's local resources, heritage, culture, and global citizenship, enabling them to apply local knowledge and action to a global context.
- develop a sense of pride in their culture or citizenship, creating a responsible, tolerant, and open minded generation.
- develop international-mindedness through glocalized engagement, multilingualism and