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LOW-FEE PRIVATE SCHOOLS IN WEST AFRICA: CASE STUDIES FROM BURKINA FASO AND GHANA

by

Corinne Brion

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

May 2017

Dissertation Committee

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ABSTRACT

Every year billions of dollars are spent on development aid and training around the world. However, only 10% of this training results in the transfer of knowledge, skills, or behaviors learned in the training to the work place. Ideally, learning transfer produces effective and continued application by learners of the knowledge and skills they gained through their learning activities. Some studies suggest that technology usage can serve as an effective post-learning intervention to enhance the transfer of learning.

Currently, there is a limited body of research examining the factors that hinder and promote learning transfer in professional development, particularly the professional development of school leaders in developing countries. This qualitative exploratory study sought to address the gap in the literature by examining 6 schools, 3 in Burkina Faso and 3 in Ghana, West Africa. This investigation explored: (a) if and how learning transfer took place after the leadership training; (b) what promoted and hindered learning transfer in both countries; and (c) if the use of a text message intervention after the training enhanced learning transfer. The sample consisted of 13 West African school leaders (6 in Burkina Faso and 7 in Ghana) who attended a 3-day leadership training workshop. Data collection included in-depth interviews, document analysis, post-training site visits, and text messages to ascertain whether this mobile technology intervention enhanced learning transfer.

The findings demonstrate that learning transfer occurred in both countries in all six schools. Data indicate that most of the transfer of learning happened in areas not requiring mindset and behavioral changes. Data suggest that the facilities in which the trainings took place, the facilitators' dispositions and knowledge as well as the adequacy of the materials and the follow-up of the mobile text messaging intervention assisted the participants in transferring knowledge to their schools following the training. Participants also indicated some inhibitors to the transfer of learning such as financial, cultural, and human behavior constraints. This study helps increase our understanding of what promotes and inhibits learning transfer in educational settings in developing countries and provides suggestions for trainers and teachers who facilitate trainings.

DEDICATION

To Jean Pierre Brion, my dad, who has always been supportive of my dreams. Merci Papa.

To my deceased mother, Genevieve Brion, who ensured that I received early on a well-rounded education and a strong foundation.

To Daniel Okoe Anoi, my husband. I thank you for your unconditional love, unlimited patience, support, and understanding. I am blessed to have you.

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As a researcher, I am forever grateful to the study participants, who welcomed me into their schools, their lives, and trusted me enough to open up to me. I was fortunate to witness their successes and their challenges. I remain humbled by their willingness to learn. I am inspired by their strength and their desire to impact education in their nations. I am thankful for what they have taught me about their respective cultures and beliefs. Most importantly, I am grateful that thanks to these 13 school leaders in Burkina Faso and Ghana, we now have a better understanding of what helped and prevented them to transfer new knowledge to their schools. This study, I hope, contributes to the learning transfer literature in the developing world, and paves the way for many others.

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CHAPTER ONE

THE PROBLEM

Introduction

The year 2000 was pivotal for the developing nations of the world. During the Millennium Summit, 189 member nations of the United Nations and 23 international organizations came together to adopt the United Nations Millennium Declaration and to commit to help achieve eight Millennium Development Goals (MDGs). Those goals were to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria, and other diseases; ensure environmental sustainability; and develop a global partnership for development. These ambitious goals had specific targets to be achieved by 2015 (United Nations, 2016).

Although some progress between 2000 and 2015 was made, the second Millennium Development Goal—Achieving Universal Primary Education by 2015—was particularly challenging for most developing countries. Due to weak public school systems, lack of infrastructure, a dearth of student data, and a paucity of trained teachers, many countries have not been able to provide universal primary education for all. In order to build upon the Millennium Development Goals, 193 countries came together in 2012 and created the Sustainable Millennium Goals (SDGs) to be achieved by 2030. The SDGs are comprised of 17 goals with a total of 169 targets for achieving the goals. The SDGs seek to continue alleviating poverty and hunger, protecting the environment as well as promoting health and education. In terms of education the SDGs focus not only on access to primary education for all, but they also aim to help provide quality education in primary as well as secondary schools around the developing world (United Nations, 2016). Due to the fragility of many public educational systems, most developing nations have seen a rapid increase in the growth of Low-Fee Private Schools (LFPSs). In the literature LFPSs are also referred to as Affordable Private Schools (APSs), or Low Cost Private Schools (LCPSs). In this study the term Low-Fee Private Schools (LFPSs) will be used when talking about private schools (Cordeiro, 2012; Cordeiro, Brion, & Spencer, 2015; Tooley, 2009) since it is the most frequently used term.

Background of the Problem

Private Schools in Developing Nations

Low-Fee Private Schools (LFPSs) play critical roles in the educational systems of many emerging countries around the world (Day Ashley et al., 2014; Heyneman & Stern, 2014). Historically, numerous faith-based groups and to a lesser extent colonial governments founded private schools in these countries (Beadie & Tolley, 2002; Jones, 2008). Currently, there is a vast array of private schools in developing nations and their growth is exponential. Private schools are either independently owned and operated, or can be part of larger chains of private schools. According to Cordeiro (2012) and Kwan (2012) there are also numerous secular and faith-based international non-governmental organizations (NGOs) partnering with private schools in various ways (i.e., Edify, Opportunity International, Hope International).

Currently, it is estimated that there are more than one million private schools in developing nations today ("The \$1-a-Week School," 2015). Although some ministries of

education in these countries deny having large numbers of low-fee private schools, the literature confirms the expansion of these privately owned institutions whose goal is to serve the poorest children (Baird, 2009; Cordeiro, 2012; Kwan 2012). In the developing world, it is common for entrepreneurs to take microloans in order to open low-fee private schools.

Microlending in Low-Fee Private Education

Microfinance and microlending were founded in 1983 in Bangladesh by Muhammad Yunus's with Grameen Bank. Yunus "based his microfinance system on a vicious cycle of low income, low saving, low investment to a virtuous circle of low income, injection of credit, investment, more income, more savings, more investment, more income" (N. Ford, 2007, p. 73). Yunus' idea that small loans can help lift people out of poverty has blossomed into a global movement (Roodman, 2012). In recent years, microlending has, however, been at the center of controversy (Daley-Harris, 2002; Khandker, 2005; Khavul, 2010; Roodman, 2012). Some key scholars such as Quach (2005) and Robinson (2001) see microlending as a powerful way to escape poverty. For example, microlending fosters better nutrition and greater empowerment by providing capital to take care of the basic needs (Littlefield, Morduch, & Hashemi, 2003). On the other hand, critics of microlending question if it has actually made people poorer. Frequently, the poorest and least uneducated people participate in microlending programs. They often lack knowledge of how to repay their loans, leaving them feeling pressured, stressed, and poorer (Khandker, 2005; Khavul, 2010).

Several important organizations (e.g., Bangladesh Rural Advancement Committee [BRAC] and Foundation for International Community Assistance [FINCA]) have combined microfinance and training as a way to facilitate success and sustainability of poverty alleviation. This blended model, which includes an additional leadership component, has the potential to help alleviating poverty. Only a few microfinance institutions work in the area of education. These include: Gray Ghost Ventures; BRACC; Innovation. Development. Progress Rising (IDP Rising); Opportunity International; and Edify.

Edify, an international NGO, has been partnering with private schools in the developing world by providing capital to local microlenders who work with LFPSs. Edify's mission is "to improve and to expand sustainable Christ-centered education globally" (Edify, 2016, para. 1). Edify is a faith-based institution and works exclusively with Christian low-fee private schools. To that end, Edify has given 1,258 school loans in eight countries, has trained 477 school leaders, and 392,451 students were impacted by either the leadership or teacher training and/or the loans in Burkina Faso, Ghana, Liberia, the Dominican Republic, Peru, Ethiopia, Rwanda, and Guatemala (Edify, 2016).

In 2009, Edify approached the University of San Diego's (USD) Global Center to create leadership modules that could be delivered in Ghana. These modules were designed to serve as an extra tool for school proprietors and head teachers (also known as directors) of LFPSs who received a loan from Edify's local lending partners. The training modules were created to build school leadership capacity, specifically targeting proprietors and head teachers. The leadership literature and theories suggest that school

leaders play a crucial role in improving student learning outcomes. As a result, the Global Center's team decided not to focus on the training of teachers but instead to work with the leadership teams of these LFPSs (Heck & Hallinger, 1999; Leithwood & Jantzi, 2008; Marzano, Waters, & McNulty, 2005).

The leadership modules use an active pedagogy in which proprietors and head teachers build their own knowledge. The facilitator's role is to orchestrate conversations and provoke critical thinking. The modules are designed for adult learners and are based on learning transfer theory (Broad, 1997; J. K. Ford, 1994; Furman & Sibthorp, 2013; Macaulay & Cree, 1999; Merriam & Caffarella, 1991; M. C. Taylor, 2000; Thomas, 2007).

Learning transfer is defined as "the effective and continuing application, by trainees to their jobs, of the knowledge and skills gained in training-both on and off the job" (Broad & Newstrom, 1992, p. 6). This theory posits that adults learn most effectively by doing, and by learning what is relevant to their needs and contexts. Learning transfer was taken into consideration as the USD team designed the modules. For example, the Global Center team constantly asked themselves, "How can the training participants put into practice what they have learned after attending the school leadership training?"

This chapter introduces a study that examines the learning transfer among school proprietors and head teachers. The sample is school proprietors and head teachers of the LFPSs who received a microloan from Edify and its local partners and who attended the three-day School Leadership Training. Using a convenience sample, this study investigated low-fee private schools in two countries: Burkina Faso and Ghana. The two countries were chosen because the researcher was granted access to the schools and because of her fluency in French as well as her understanding of the two cultures. Moreover, there are large numbers of LFPSs that have microloans in Burkina Faso and Ghana. Before discussing details of the study, I first present an overview of the geographical, historical, and educational context of Burkina Faso and Ghana. Then, this chapter will investigate the need for further understanding of adult learning transfer by exploring the contribution of some empirical studies as well as the limitations to the knowledge we have regarding adult learning transfer. Finally, this section will explicate the purpose of this research, including an overview of my research questions and research design as well as this study's delimitations and limitations.

Burkina Faso's Background and Context

The term *burkina* in Mòoré, one of the main local languages, means "men of integrity," while *Faso* means "fatherland" in Dioula, another local language. Hence Burkina Faso is often referred to as "the Country of Honorable People." Burkina Faso is a landlocked country that is slightly larger than the state of Colorado. It shares borders with Mali on the north, Niger in the northeast, and Ghana as well as Cote d'Ivoire in the South. This Sub-Saharan country is home to almost 19 million people who live on 105,000 square miles of dry land. Yet 80% of the country relies heavily on its agriculture to survive (Central Intelligence Agency [CIA], 2016). Burkina Faso ranks 183rd out of 188 countries on the Human Development Index (HDI), which measures the average capabilities that people have to live long healthy lives, to be knowledgeable, and to have

a decent standard of living (HDI, 2016). Burkina Faso has experienced two coups d'états in Ouagadougou, its capital city, between 2014 and 2015. In early 2016, Burkina Faso was also the target of a terrorist attack.

Burkina Faso was called Upper Volta before the colony gained its independence from France in 1960 and was renamed Burkina Faso in 1984 (Ouédraogo, 2010). The national language is French and is the language of instruction despite the country's numerous dialects. Burkina Faso uses the French education model for all levels of education, which will be explained in chapter two.

Ghana's Background and Context

Ghana means "warrior king" in the Akan language and depending on the source Ghana also stands for God Has Appointed Nkrumah Already, the first president after the country's independence. Ghana is located along the Gulf of Guinea and the Atlantic Ocean. Ghana is slightly smaller than the state of Oregon. It shares borders with Cote d'Ivoire on the west, Burkina Faso in the Northwest, and Togo on the West. Ghana has approximately 27 million people on 92,099 square miles. Ghana experienced several coups before reaching stability in 1981 (CIA, 2016). Today Ghana holds the 140th position out of 188 on the HDI (2016).

Ghana was created when the British colony of the Gold Coast and Togoland Trust Territory merged (Mendonsa, 2002). The country claimed its independence from the British in 1957, becoming the first territory of Sub-Saharan colonial Africa to gain its independence. As far as economy is concerned, Ghana's agricultural sector counts for 25% of its GDP. The agricultural sector also employs half of the work force. The service sector accounts for half of the GDP (CIA, 2016). Ghana follows the British educational system and hence the language of instruction is English. In 1992, the Ghanaian constitution allowed the recognition of private schools. However, they do not receive any government support. Since then anyone can open a private school, in accordance with the law (Akyeampong, 2009).

The previous sections described the growth and role of LFPSs in developing countries, and the geo-political context in which this study took place. Next is a brief overview of adult learning transfer, focusing on empirical studies and the knowledge gaps in the literature about adult learning transfer.

Educational Leadership and Learning Transfer in Africa

Worldwide, principals of schools are often not prepared well for the tasks they have to accomplish (Donlevy, 2009; Mestry & Grobler, 2003). Yet school leaders play a crucial role in school improvement, teacher morale and retention, and student learning (Cordeiro & Cunningham, 2013; Grissom & Harrington, 2010; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Lumby, Crow, & Pashiardis, 2008; Marzano et al., 2005; Swaffield, Jull, & Ampah-Mensah, 2013). Leithwood and Jantzi (2008) suggest that leaders empower the more effective teachers and that it is through them that they influence student learning. Fullan and Hargreaves (1991) argue that leaders create cultures of learning and that those cultures positively affect student learning.

This lack of leadership preparation is even more evident in the developing world (Swaffield et al., 2013). Because the preparation of new or existing principals is limited in the developing world, there is little literature on the topic (Bush, Kiggundo, &

Moorosi, 2011). In Africa, in particular, there are many untrained principals who do not have the necessary skills, knowledge, or attitudes to manage their schools effectively and efficiently (Otunga, Serem, & Kindiki, 2008). According to Bush and Oduro (2006), schools in Ghana are often managed by leaders who have authority, seniority, and language and not always by those who may be competent for the challenging tasks at hand. Scholars such as Berkhout, Heystek, and Mncube (2010) identified several explanations for the lack of leadership training in Africa, one of which is financial. Another explanation is not knowing what to teach and how to teach it.

Darling-Hammond (2010) posits that the best approach for leadership training is to put theory into practice. Hence teaching techniques that promote the transfer of knowledge to the local schools are recommended. Learning transfer (also known as training transfer) is defined as the effective and continuing application, by trainees to their jobs, of the knowledge and skills gained during trainings. Learning transfer is also called Human Resource Development (HRD) in the human resource literature. Learning transfer is thus linked to adult learning (Calais, 2006) and is, in fact, paramount to a successful and total learning experience (Fleishman, 1987; Thomas, 2007). Transfer is the primary objective of teaching, yet it is the most challenging goal to reach (Foley & Kaiser, 2013; Furman & Sibthorp, 2013; Hung, 2013; McKeough, Lupart, & Marini, 1995).

To facilitate learning transfer, active learning teaching methods are used in all modules created by the Global Center. Participants work in pairs with other school proprietors and head teachers they have never met, discuss questions and issues with each other, create a mission statement for their schools, and have ample possibilities to network with each other during the three-day school leadership training. Among the active learning strategies that allow adults to learn and retain better are the use of case studies, role-play, and the production of school improvement plans (SIPs) followed by a gallery walk, where the participants view each other's ideas, and are asked to notice how they propose to put the ideas into practice after the training. According to the literature, these teaching techniques all contribute to making learning transfer more likely to occur (Billet, 2002; Boyd & Fales, 1983; Haas & Furman, 2008; Marienau & Reed, 2008).

Problem Statement

The United Nations and the international community have recognized a need to improve student learning outcomes in all developing countries. Research in educational leadership has established that school leaders play a key role in improving student achievement. Furthermore, researchers have demonstrated that training the school leadership team is fundamental to improving learning and transferring knowledge (Grissom & Harrington, 2010; Leithwood et al., 2004; Swaffield et al., 2013). However, to date little has been done to improve the school leadership teams in Africa, particularly in West Africa (Bush et al., 2011).

Every year billions of dollars are spent on training in the U.S. and only 10% results in transfer of knowledge, skills, or behaviors in the work place or at home (Baldwin & J. K. Ford, 1988; Broad & Newstrom, 1992). Studies from the private sector indicate that only 10-13% of learned skills are transferred, translating to a loss of 87-90

cents per dollar spent on training (Curry, Caplan, & Knuppel, 1994). These seminal Western authors address the lack of attention placed on training transfer.

In the education field in Africa and despite the 921 million dollars spent on aid— 31% of which was sent to Sub-Saharan Africa between 2010 and 2012—there is little evidence that the monies provided produce significant positive results in the quality of education received and student learning outcomes (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2015). This illustrates, in part, the lack of understanding and focus that governments, policy makers, educators, facilitators, and trainers have placed on training and learning transfer (Awoniyi, Griego, & Morgan, 2002; J. K. Ford, 1994). Educational results indicate that it may not be sufficient simply to offer training programs. Oftentimes programs are not adapted to the participants' needs and do not take into consideration the local context and culture (CIA, 2016). Rather, trainers must take into consideration learning transfer before, during, and after the trainings take place. Activities and pedagogies that are culturally responsive and adapted foster learning transfer. Follow-up and adequate conditions for learning also enhance learning transfer.

Purpose of the Study

Transfer is the primary objective of teaching, yet it is the most challenging goal to reach (Foley & Kaiser, 2013; Furman & Sibthorp, 2013; Hung, 2013; McKeough et al., 1995). Using the conceptual framework of learning transfer and the theory that underpins it, this study sought to examine how and if newly trained school leaders could effectively transfer knowledge to teachers and students and hence improve student-learning outcomes.

Currently there is a dearth of empirical studies that address educational leadership training in Africa, most of the research being evaluative and conducted by the sponsors of the training, which calls for biases (Bush et al., 2011). In addition, there is a paucity of recent research on the efficacy of adult learning transfer in the African context, particularly in West Africa, and little research on the use of technology as a possible way to enhance transfer. The goal of the three-day school leadership training was to offer learning opportunities to school leaders who might have then transferred the new knowledge to their schools, hence improving the learning and teaching conditions at their institutions. The purpose of this study was to consider the case of the use of learning transfer theory in low-fee private schools in two study sites: Burkina Faso and Ghana.

Research Questions

This study explores the following questions:

- What learning, if any, do training participants (proprietors and head teachers) in Burkina Faso and Ghana transfer to their Low-Fee Private Schools after completing the school leadership training modules?
- 2. What inhibits or supports the transfer of learning in these settings?
- 3. How, if at all, does the use of technology after the training enhance learning transfer?

Research Design

The purpose of this study was to better understand the role that learning transfer plays in the learning process. This study sought to examine if, and how, proprietors and head teachers of LFPSs were able to transfer newly acquired knowledge to their schools sites after having participated in a three-day leadership training in Burkina Faso and Ghana, West Africa. To consider this premise and as explained in chapter three, this qualitative exploratory study used a purposive criterion sample of school proprietors and head teachers. Six proprietors and seven head teachers were interviewed for a total of 13 participants. The study was comprised of two case studies: one in Burkina Faso and one in Ghana. I opted for a case study approach because it provides the ability to examine in detail a phenomenon as it manifests in everyday context (Yin, 2014). The approach allowed me to look for similarities and differences within the three schools in each country. I was then able to make recommendations for future research.

Delimitations

Due to time and funding restrictions, I purposefully narrowed the scope of this study. First, this study is geographically limited to schools in the Kumasi, Ghana, and Ouagadougou, Burkina Faso areas; thus rural schools were not included. Additionally, this study did not intend to build a new theory but rather the rationale for this study was to add to the existing knowledge on learning transfer. Finally, this study was delimited to only two countries in West Africa, which comprised 26 nations.

Limitations

Conducting research internationally presents a certain number of challenges. First, due to financial constraints and the cost of leading research internationally, the researcher stayed for seven days in each country to collect data. Second, this study sample was six low-fee private schools working in partnership with one NGO, hence there is limited transferability of the findings to other school contexts. Moreover, as a white graduate assistant working with a Western NGO, which provides capital and training to schools in Africa, there is certainly bias. The researcher mitigated this potential through a variety of strategies that included collecting rich data, member checking, and triangulating data from a number of sources. To be mindful of personal biases, the researcher wrote field notes after each site visit and kept a journal. The researcher encourages the reader to consider the potential for bias when reading the next few chapters.

At the same time, the perspective and positionality of the researcher is a valuable asset to the study (Lincoln & Guba, 1985), and in this case, the researcher's background in education and ability to speak the two languages fluently proved valuable in both data collection and analysis. Therefore, this study sets the stage for further studies on learning transfer in Africa and possible cross-cultural collaborations with African scholars.

Organization of the Study

Chapter one introduces the study and provides some background information. It also contains the statement of the problem, the purpose of the study, research questions,

delimitations and limitations of the study as well as the definitions of key terms and organization of the study.

Chapter two contains the literature review, which covers four main sections including Knowles's Andragogy, Mezirow's Transformative Learning theory, learning transfer, mobile technology as a possible tool to enhance learning transfer and leadership in schools. The chapter ends with a description of the educational systems in Burkina Faso and Ghana, a conclusion, and a summary.

Chapter three contains the methodology including an introduction, the methodological overview, research design, data collection, data analysis, trustworthiness and triangulation, background of the researcher and access, limitations and delimitations of the study, and a summary.

Chapter four reports the findings of the study while chapter five provides the researcher's interpretation of the findings and offers recommendations for practitioners, NGOs, policy makers and governments as well as the recommendations for future research.

Definitions of Key Terms

Throughout this paper I used a number of terms drawn from the literature and professional practice. Here I operationalized them by providing the definitions this study will use.

Developing country: A nation with a less developed industrial base than a developed country and a low Human Development Index (HDI).

E-education: The connection between learners and other learners, teachers to professional support services and provides platforms for learning (Phiri, Foko, & Mahwai, 2014).

E-learning: The delivery of a learning, training, or education program by electronic means (Stockley, 2003).

Head teacher: A synonym for school director or principal in Ghana.

Human Development Index (HDI): Index created by UNESCO to measure the average capabilities that people have to live long healthy lives, to be knowledgeable, and to have a decent standard of living.

Learning transfer: The effective and continuing application by trainees to their jobs, of the knowledge and skills gained during trainings (Broad & Newstrom, 1992).

Low-Fee Private Schools (LFPSs): Private schools that charge low tuition to accommodate the poorer populations in the world. Also called Affordable Private Schools (APSs), or Low Cost Private Schools (LCPSs). These terms are used interchangeably. In this study the term Low-Fee Private Schools will be used.

Mobile learning (mLearning): Learning facilitated by mobile devices (Valk, Rashid, & Elder, 2010).

Proprietor: A school owner who may be either an educator or a business person expecting to make a profit from the school(s).

Short Messaging Service (SMS): Text messages sent via mobile phones.

Transformative Learning Theory (TL): A theory by Jack Mezirow on how adults learn best. TL is based on deep reflection practices by the learners.

CHAPTER TWO

REVIEW OF THE LITERATURE

Where there are experts there will be no lack of learners. —Swahili Proverb

Introduction

The purpose of this chapter is to set the theoretical context for this study. This literature review first explores the literature on adult learning including Knowles's model of Andragogy and Mezirow's Transformative Learning theory before reviewing the literature on learning transfer. Next it offers a review on mobile technology as a possible tool to enhance professional development and learning transfer. This is followed by a summary of literature on leadership development in schools, specifically in Africa, and by a section describing the educational systems in both countries and the background of the development of the leadership training modules. The chapter ends with a conclusion and summary.

Introduction to the Review of Literature

Learning expands great souls.

-Namibian Proverb

How adults learn has been a topic of interest to scholars and practitioners since the 1920s (Merriam, 2001). During the 1950s and 1960s American behaviorism and empiricism were the primary frameworks for thinking about learning. These schools of thought claimed that if learning was not observable, learning was insignificant and that everyone could be trained to perform a task with the right conditioning, regardless of their abilities, mental states, or interests (Pratt, 1993). These theories also assumed that learning was a purely objective construct.

In the last 40 years, two seminal theories have affected the way adult learning has been perceived and practiced. While these two theories have been scrutinized and often critiqued, they remain paramount to adult learning practitioners. The first is *andragogy*, defined as the art of learning for adults. Malcolm Knowles formulated this novel way to view adult learning in 1975 and the early 1980s (Knowles, 1980, 1989). Jack Mezirow (1997, 2000) followed with his *Transformative Learning Theory*. While these two seminal theories have advanced understanding and raised important questions in the field of adult learning, another important dimension not discussed as frequently is the transfer of learning or how acquired knowledge gets applied (Caffarella, 2002; Foley & Kaiser, 2013; Furman & Sibthorp, 2013; Hung, 2013; McKeough et al., 1995).

Knowles's Andragogy

The theoretical framework for andragogy has existed in Europe since the 1960s, challenging the conventional framework of pedagogy. Andragogy comes from the Greek word *aner*, which means adult. Although there have been several definitions of andragogy, Knowles's definition has gradually evolved and can be summarized as *the art and science of helping adults learn* (Knowles, 1975). According to Knowles, andragogy is the art of teaching adults, whereas pedagogy deals with the teaching of children. The concept is based on the belief that the learning needs of adults differ from those of children (Thompson & Sheckley, 1997). The core principles of andragogy are that adults have a psychological need to be self-directed, they need to base their learning on their

own wealth of experiences, and are ready to learn when they can put their learning into action directly and can see a connection between their lives and what they learn in the classroom (Knowles, 1975, 1980; Pratt, 1993). In that sense, learning is subjective and based on individual interpretation. Learning is a construction of meaning acquired through experiences (Pratt, 1993).

Following this philosophy, teachers become facilitators of learning and are tasked with giving the participants the skills necessary to become self-directed learners. In other words, facilitators guide the learning rather than managing it (Laird, Holton, & Naquin, 2003). In doing so, the facilitator must present himself/herself as a human being rather than an authority figure, because all participants have had experiences that can serve as resources for learning. The facilitator no longer holds all he knowledge but rather shares it with the participants and learning takes place as a result of the collaborative process (Knowles, 1975, 1980, 1989). A competent facilitator also has the following attributes: he/she is skilled and is enthusiastic, is friendly, has a sense of humor, is genuinely interested in people, is creative, flexible, and concerned with the growth of the individuals (Harper & Ross, 2011).

According to Harper and Ross (2011), experience is also valuable, but only to the extent that it complements the fundamental attributes listed above, and does not replace them. Knowles's andragogy also claims that the facilitator should be someone who is capable of establishing a climate of trust, openness and support, and is caring and accepting (Pratt, 1993). Knowles notes that pedagogy and andragogy are two separate models, holding two sets of different assumptions. Thus, the teacher should be able to

choose which one to use, depending on the situation. Knowles claims that andragogy is not an educational remedy, but rather a system of ideas or a conceptual framework with the potential to improve the quality of learning (Brookfield, 1986; Knowles, 1980). Knowles also states that at times, using a pedagogical approach can be beneficial, particularly if the content is totally new to the learner (Knowles, 1989).

Opponents of Knowles's model of andragogy, such as Hartree (1984) and Merriam and Caffarella (1991), postulate that andragogy is not a theory of learning but rather that it offers some guidelines for learning. Pratt (1993) asserts that Knowles's work has helped with the understanding of how adults learn, but argues that it has done little to elucidate the process of learning. Other authors contend that Knowles's model of andragogy tends to serve the needs of particular learning styles (Kolb, Boyatzis, & Mainemelis, 2001; Pratt, 1988; Thompson & Sheckley, 1997). Further arguments are that not all adults can work in collaboration because they are often at different development stages or have diverse levels of self-efficacy, confidence, or prior knowledge (Bandura, 1981). Some scholars insist that Knowles fails to take into consideration the social impediments of adult learning. Because we are social individuals, context matters (Diggins, 1995; Freire, 1985; Grace, 1996; Hearn, 1985; Jarvis, 1995; Pratt, 1993). According to these scholars, Knowles decontextualizes the self and leaves the social structures that influence one's identity and the way one interprets the world out of his framework. Brookfield (2003) shares this perspective and refers to andragogy as *culture blind*, because some cultures see the teacher as the source of knowledge and hence the learners would have a hard time adapting to this new way of

teaching. Additionally, Quilty (2003) postulates that some experiences are not worth tapping into to build learning and also questions whether young adults have accumulated enough experience to participate in an andragogical model. Finally, some scholars argue that motivation for learning can be altered by social pressure and can in turn affect the self esteem of the participants (McGrath, 2009).

Scholars claim that andragogy is a complex construct to research and that there are several different degrees of "andragogy-ness," depending on the situation (Cross, 1981). There is a need for more empirical research to develop a more robust model of andragogy. In addition, Knowles viewed adult education through a male American lens only, limiting the trustworthiness of this model (Davenport & Davenport, 1985; Jarvis, 1995; Rachal, 2002).

Andragogy and the issue of human agency versus structures has often been debated between psychological and sociological scholars and practitioners (Pratt, 1993) leading some to conclude that adult education is still in need of a theory (Hartree, 1984). One possibility is Mezirow's Transformative Learning Theory.

Mezirow's Transformative Learning Theory

It is not "I think therefore I am" [but rather] I am human because I belong, I participate, I share. —Archbishop Desmond Tutu

Mezirow's theory came after Knowles's concept of andragogy. In 1997, Mezirow built another theory of adult learning based on Knowles's key principles. Transformative Learning theory (TL) is a rational process that aims to develop autonomous thinking. He defines transformative learning as "the social process of constructing and appropriating a new or revised interpretation of the meaning of one's experience as a guide to action" (Mezirow, 1994, pp. 222-223). Transformative Learning theory is unique because it links adult development and adult learning (Clark & Wilson, 1991). In transformative learning, learners reflect and discuss their assumptions about the world by engaging in reflective discourse in order to change their frames of reference and consciously discover new ways of defining their worlds. Mezirow maintains that for learners to change their meaning schemes, which are their beliefs, attitudes, and emotional reactions, they must engage in critical reflection, which eventually leads to a transformation in perspective (Mezirow, 2000). This kind of reflection promotes double-loop learning, which is the ability to change underlying values or assumptions in order to tackle complex issues (Argyris & Schön, 1978). Reflection also helps to avoid the creation of shared mental models in organizations (Senge, 1990). Senge (1990) posits that mental models are made of our assumptions and views of the world, which oftentimes prevent us from critically looking at issues. Mezirow also suggests that using problem solving, case studies, and role-playing are effective methodologies for teaching adults.

Mezirow further posits that transformative learning does not happen often and that when it does, it involves two phases. The first phase is the occurrence of a disorienting dilemma, often triggered by a life crisis or major transition. After this first phase, the person employs diverse learning strategies that include critical reflection and the exploration of roles and options. Mezirow's premise is that it is possible for teachers to promote transformation using these same learning strategies. Critics view Mezirow's theory as limiting in that it removes the context, which is the element that brings meaning to experiences (Bernstein, 1983; Clark & Wilson, 1991; Hawkesworth, 1989; Kuhn, 2012; Mishler, 1979; Weedon, 1996; Welton, 1991). In particular, Mishler (1979) argues that humans are context dependent and that meaning separated from context alters reality. Other scholars such as Welton (1991) and Weedon (1996) affirm that the historical context is particularly salient when it comes to meaning making and that the sociocultural context informs the self, the language we use and the culture we live in. To sum up, human agency is influenced by sociocultural forces. To ignore these forces is to ignore the reality that we view the world through particular lenses, our acculturation and the context of socialization (Hawkesworth, 1989).

Mezirow has also been criticized for placing too much emphasis on single agency, ignoring the role of other people in meaning-making. In contrast, some researchers believe that learning is a community process and not an individual one (Clark & Wilson, 1991). Other scholars question why some disorienting dilemmas lead to transformation and some do not. They maintain that predisposition or readiness for change affects the ability to learn and transform beliefs and frames of reference (Coffman, 1991; Elias, 1993).

To date, there are few current articles that address Mezirow's theory, although there seems to be a body of work that remains at the dissertation stage. This paucity of current research could be due to the fact that it has become difficult to measure learning or to agree on what learning entails. According to E. W. Taylor (1997), there is a need for more research in this area as Mezirow's theory provides a possible base for a larger theory. Because Mezirow developed his theory from a North American, liberal perspective (Collard & Law, 1989; Merriam, 2001), insights from scholars from diverse ethnicities and backgrounds would be valuable to advance the study of this topic.

Sheckley and Bell (2006) use the term "velcro strips," to suggest that adults learn by doing, by reflecting, and by using their experiences as metaphorical "velcro strips" onto which new concepts and ideas can stick. Experiences are the foundation of consciousness and they enable learners to extend their consciousness to new and diverse situations beyond their previous experiences (Sheckley & Bell, 2006). Transformative learning has shaped how scholars and practitioners think about how adults learn. This theory, despite its limitations, has also illuminated some of the attributes teachers should have to be effective when teaching adult learners. However, a significant component of adult learning that has received less attention is the concept of learning transfer. This next section discusses this construct.

Learning Transfer

Wealth, if you use it, comes to an end; learning, if you use it, increases. —Swahili Proverb

"Learning in adulthood is an intensively personal activity" (Merriam & Caffarella, 1991, p. xi). Learning transfer is also known as training transfer (Fleishman, 1987). In this study the term learning transfer was used. Learning transfer is defined as "the effective and continuing application by learners—to their performance of jobs or other individual, organizational, or community responsibilities—of knowledge and skills gained in the learning activities" (Broad, 1997, p. 2). The concept has been studied in various fields: psychology, schooling, adult education, vocational education, social work,

nursing, engineering and law (Macaulay & Cree, 1999). Learning transfer is thus linked to adult learning (Calais, 2006) and is, in fact, paramount to a successful and total learning experience (Fleishman, 1987; Thomas, 2007). Helping learners to make personal connections with the materials improves both the learning and the transfer (Sousa, 2011).

Transfer is the primary objective of teaching, yet it is the most challenging goal to reach (Foley & Kaiser, 2013; Furman & Sibthorp, 2013; Hung, 2013; McKeough et al., 1995). "Transfer has proven to be hard to define, difficult to investigate and perplexingly controversial" (Packer, 2001, p. 493). Seminal authors stipulate that most of the time, the application of what is learned is "left to chance" (Caffarella, 2002, p. 209; J. K. Ford, 1994; Furman & Sibthorp, 2013). The fact that billions are spent each year in the U.S on training, yet only 10% results in transfer of knowledge, skills, or behaviors in the work place or at home, illustrates the lack of focus that educators, facilitators, and trainers place on learning transfer (Awoniyi et al., 2002; J. K. Ford, 1994). Despite the organizations' increased desire to become learning organizations, or "corporate universities" and being more proactive in approaching education and learning (Holton & Baldwin, 2003), studies from the private sector indicate that only 10-13% of learned skills are transferred, translating to a loss of 87-90 cents per dollar spent on training (Curry et al., 1994). In 1997 American organizations of 100 people or more, it was estimated that the organizations have spent \$58.6 billion on direct costs on formal training. If informal trainings costs are also taken into account, such as on the job trainings and other small costs, the total would reach \$200 billion or more every year

(Holton, Bates, Seyler, & Carvalho, 1997). Being able to transfer the knowledge learned in trainings is critical for adults to remain competitive as operating environments and technologies change (Hung, 2013).

Models of Learning Transfer

There are several models of transfer. One model suggests that learning transfer can be described as either near transfer or far transfer. Near transfer refers to when a novel situation is closely similar to the learning situation of origin (Foley & Kaiser, 2013; Schunk, 2004). Foley and Kaiser give the example of learning to drive a car as the original learning, with learning how to drive a truck thereafter being considered near transfer. In far transfer the original and the new situations are not similar, so the learner may not see the connections between the two situations (Detterman, 1993). One example of far transfer would be someone studying mathematics and later working on an electrical circuit.

Salomon and Perkins (1989) argue that far transfer is not easy to teach, hence not readily accessible to students. They maintain that transfer happens in two other ways, which they label low road transfer and high road transfer. In low road transfer, the skills are practiced and repeated so that the learner can replicate them in comparable situations. In that sense, low road transfer happens automatically. High road transfer, however, necessitates that the facilitator help the learners to reflect on what he or she has learned and to connect the old knowledge to the new situation. High road transfer is based on an understanding of deeper analogies. The authors claim that assistance could take the form of encouragement, analysis, or simply mindfulness. Another model refers to *positive transfer*, when the learning from a previous context complements a current context, and *negative transfer*, when the previous experiences prevent new learning and transfer to take place in a new context (Leberman, McDonald, & Doyle, 2006). Additionally, for different levels of transfer, there are different kinds of transfer (Calais, 2006). Haskell's taxonomies identify 14 kinds of transfer and six levels of transfer. This plethora of definitions within the concept of transfer (i.e., levels and kinds) has led to a lack of consensus on the terminology used, and hence a lack of empirical research on the topic (McKeough et al., 1995; Rachal, 2002; M. C. Taylor, 2000; Thomas, 2007).

Barriers to Learning Transfer

Although it has been challenging for scholars to measure learning transfer and its impact to date, seminal authors such as Caffarella (2002), J. K. Ford (1994), Hung (2006), Illeris (2009), Knowles (1980), Lightner, Benander, and Kramer (2008), M. C. Taylor (2000), and Thomas (2007) have written extensively about what inhibits the transfer of learning. As Knowles (1975, 1980) recommended early on in the development of his andragogical model of adult learning, adults need to understand when, where, and how they will be able to apply the knowledge they learn to their unique situations.

Many contemporary scholars concur with Knowles and argue that often the knowledge is not situated enough, and that adults are not able to make connections to their real life situations (Hung, 2006). Broad and Newstrom (1992) identified six key factors that can either hinder or promote learning transfer: (a) program participants, their

motivation and dispositions and previous knowledge; (b) program design and execution including the strategies for learning transfer; (c) program content which is adapted to the needs of the learners; (d) changes required to apply learning, within the organization, complexity of change; (e) organizational context such as people, structure, and cultural milieu that can support or prevent transfer of learning (values, Continuing Professional Development [CPD]); (f) societal, community forces. Other scholars such as Holton et al. (1997) created, piloted, and validated in 24 countries a 16-factor Learning Transfer System Inventory (LTSI) based on the 16 constructs. As with Board and Newstrom (1992), each of these constructs can hinder or promote learning transfer as shown in Table 1.

Table 1

Capability	Motivation	Work Environment
Content validity	Transfer effort:	Supervisor support
	Performance expectations	
Transfer design	Transfer performance:	Supervisor sanctions
-	Outcome expectations	-
Opportunity to use	Learner readiness	Peer support
Personal capacity	Motivation to transfer	Performance coaching
r ensonar eupaenty		r errormanee coaciming
	Performance, self-efficacy	Personal outcomes: Positive
		Personal outcomes: Negative
		Resistance to change

Sixteen Key Factors in Learning Transfer

Holton et al. (1997) affirm that the important question is why training works, not whether it works, and that organizations should work at understanding the learning system and eliminate what prevents it. The LTSI can be a tool used as a pulse-taking diagnostic tool. Thomas (2007) suggests that barriers to transfer can happen before, during, or after training. He classifies the barriers to learning transfer into three categories: the barriers related to the learner, the ones related to the situation, and those dealing with the facilitator.

Barriers related to the learner. Scholars have identified several barriers to learning that occur at the level of the learner. The learner may lack foundational knowledge or lack motivation (Caffarella, 2002; Frazis; Gittleman; & Joyce, 2000; Knowles, 1980). Without foundational knowledge, the learner has insufficient experience or context to connect the new knowledge to past experiences and understand its potential relevance to future situations. Without motivation, the learner will likely not focus and retain what is important to his or her situation. Another learner-based barrier is that the learner may not be ready or capable of being self-directed. In most developing countries, for example, the teaching culture relies on a *stand and deliver* style, in which the facilitator talks and the learner listens. Yet research has shown that adults need to play an integral part in their own learning in order to transfer the knowledge to their settings (Knowles, 1975, 1980; Mezirow, 2000; Pratt, 1993).

Situational or organizational barriers. The physical qualities of the environment where the learning is to take place make a difference. The room in which the training takes place might be inappropriate or uncomfortable. It may lack resources

or equipment (J. K. Ford & Weissbein, 1997; Merriam & Leahy, 2005; M. C. Taylor, 2000). Another hindrance to learning transfer could be the lack of follow-up after the training by the facilitator or other stakeholders (Caffarella, 2002) or a climate that does not foster trust (Knowles, 1980; M. C. Taylor, 2000). Caffarella (2002) also argues that unfavorable political climates will not permit learning transfer to take place.

Barriers related to the facilitators. Since learning is a process, not an event, learners ought to be included in the design of their learning experience (Knowles, 1975, 1980). Learners also need to be assessed, and the facilitators need to formulate goals and evaluate the process by being reflective (Knowles, 1980). Lightner et al. (2008) state that instructors' modeling, rewarding, and encouraging are also essential elements of learning transfer and that without these transfer is prevented. Similarly, the shortage of opportunities for students to directly apply the new knowledge to context also prevents transfer. Illeris (2009) proposed that it is important to design learning activities for all types of learning and that some learners are visual learners while others are kinesthetic learners. Similarly, some learning takes place best through field activities, while others can be done in a classroom environment. Another problem with transfer is the issue of maintenance: how long can we expect the acquired knowledge to be maintained and what role can the facilitator play in making sure that the knowledge is maintained (J. K. Ford, 1994).

In a qualitative exploratory study of 11 workplace literacy instructors, students, and supervisors, M. C. Taylor (2000) examined the factors influencing learning transfer. The purpose of his study was to explore whether trainees were able to effectively apply new knowledge and skills gained from the literacy program to their jobs, and if so, how. M. C. Taylor believes that the transfer is dependent upon three people: the trainee, the facilitator, and the supervisor. This study showed that the trainees were not able to transfer, first because there was a lack of reinforcement to support the trainees in applying their new knowledge to their jobs. In addition, the environment was not favorable to transfer. Trainees reported a lack of equipment, they were too busy after the training to transfer the new knowledge, and they were not supported adequately with the transfer of learning.

M. C. Taylor (2000) proposed that programmatic elements such as the length of the training, the size of the class, and the time of day or night that the training is offered can promote or inhibit learning transfer. The author also mentioned that the level of motivation and confidence of the trainee and the facilitator also influences transfer. Furthermore, M. C. Taylor noted that negative attitudes of colleagues affect transfer. For example, if an employee makes fun of a colleague for learning something new or attending a training, the trainee will most likely not transfer his or her learning to the job setting. Finally, M. C. Taylor suggested that trainers must have a plan to refresh the knowledge or else it fades over time. He proposed using a transfer of learning plan and implementing a buddy system in which the trainees plan to review the new information with their colleagues and hold each other accountable for the transfer. From a Human Resource perspective, Broad and Newstrom (1992) further stipulate that trainers hold perceptions on what the barriers to learning transfer may be. They refer to the lack of reinforcement in the workplace, possible interferences from work, non-supportive organizational cultures, impractical trainings, irrelevant content, trainees' discomfort to change, and pressure from peers. Hall and Hord (2006) speak of similar concerns using seven Stages of Concerns (SOCs). These seven categories deal with possible concerns individuals may have adapting to a change.

In brief, the facilitator, the trainee, and the supervisor all play a key role in transfer, and must work collaboratively to enhance transfer. In that sense, transfer can be seen as a return on investment (M. C. Taylor, 2000). Although this study contributed to the learning transfer literature, it was written from a North American lens, using a North American sample. More research is needed to determine whether these findings hold true in other nations and to better understand the role that trainees, facilitators, and contexts play in transfer.

Learning does not necessarily equate with being taught and learning does not guarantee transfer (Knowles, 1980; Thomas, 2007). Hager and Hodkinson (2009) proposed that the expression learning transfer is inadequate and that one should think of learning as a transition process instead, a crossing of boundaries between school and work or different life situations. This study examines the learning transition process between the leadership training school proprietors and head teachers (also known as directors) attend and their schools. To date, there is little research on this transition process in other nations. Additionally there is a paucity of research on learning transfer and the process that occurs with the transition from a workshop setting to a school campus.

What Promotes Learning Transfer

All of these scholars, along with the theories of Knowles and Mezirow, which were articulated earlier, have enabled educators to gain a better understanding of how adults learn best, and to comprehend what are the best learning conditions for adults. Knowles's and Mezirow's models include descriptions of what promotes learning transfer, but do not specifically label them as such. This next section examines this further and is divided into three sub-sections: what the learner's responsibilities are in fostering learning transfer, what the organization can do to promote learning transfer, and what role the facilitators play in facilitating transfer.

Learner responsibilities. Knowles's (1980) model of andragogy outlines a few fundamental elements required for learning transfer. First, the learners need to be self-motivated. The learners also need to be willing to reflect, collaborate, and engage in conversations and disagreements. Mezirow (2000) further suggests that learners need to engage in transformative discourse in order to question their assumptions and gain new knowledge. To do that, learners need to be willing to learn differently and participate in learner centered pedagogies, including problem solving, case studies, and role-plays. In addition, there are five personality traits important for transfer: "consciousness, openness to experience, extraversion, emotional stability, and agreeableness" (Baldwin & J. K. Ford, 1988, p. 63). Learners ought to be open to collaborating, ready to reflect and interested, and ready to listen to and discuss other points of view.

Organizational responsibilities. The location, time, and conditions of the training ought to be convenient and conducive to transfer. Organizing the logistics in

advance is beneficial (J. K. Ford & Weissbein, 1997; Merriam & Leahy, 2005; M. C. Taylor, 2000). In particular, organizers or people in charge of the training should think about the ideal class size, the length of the training, the time of the day or night of the training, the date at which the training is offered, and whether the location is convenient to access (Curry et al., 1994). Moreover, the room where the training is held needs to be inviting and have sufficient equipment, light, and comfort to enhance transfer (M. C. Taylor, 2000). In addition, the tables inside the room need to be arranged according to the type of activity the facilitator chooses. For example, tables could be arranged like a "double doughnut" for group work, creating a large circle for everyone to participate (McGinty, Radin, & Kaminski, 2013).

The organizers should also build in post-training actions, finding additional time and resources soon after the training to allow facilitators to conduct follow-up trainings, host discussions, or create opportunities to re-connect with the learners to check on their progress. Lastly, organizers and facilitators need to assess the satisfaction of the trainees and use their feedback to inform future programming and facilitation improvements (Rachal, 2002).

Facilitator and curricula designer responsibilities. A good facilitator is skilled, passionate, eager, and enthusiastic, is approachable and welcoming, has a sense of humor, is interested in his or her students' lives and goals and helps them reach them. A skilled facilitator observes what is spoken as well as what is unspoken (McGinty et al., 2013).

Open communication and teaching methods also play a role in learning transfer. An effective facilitator is aware of participants' stressors that are due to the larger context, whether they are political, economic, health, or personal (Daloz, 1999; Harper & Ross, 2011; McGinty et al., 2013). J. K. Ford and Weissbein (1997) make the distinction between a professor (derived from the Latin as someone who professes/teaches) and a facilitator (someone who creates a safe and energized environment in which a learner can co-create his or her knowledge). An effective facilitator understands this distinction and reflects personally to continually improve and renew his or her materials to match the needs of the learner.

Another facilitator skill that promotes learning transfer is scaffolding, which refers to instructional methods that support students in their learning process (J. K. Ford & Weissbein, 1997). One example is that scaffolding helps the learners acquire new knowledge based on previous knowledge and experiences. It is the facilitator's responsibility to use scaffolding when designing the teaching material, linking older knowledge with new to show the trainees the connection between the two. Scaffolding also takes place through a safe learning environment, the set up of the room, lighting, and ventilation (McGinty et al., 2013). Scaffolding also includes establishing an environment in which learners are emotionally safe. Such an environment includes speaking a common language, being inclusive, and being aware of socio-cultural differences in the room (Closson, 2013). In this study, the notion of language and cultural differences was important as the training was delivered by Ghanaian facilitators in Ghana who could speak the local language, Twi, and it was delivered in French by the researcher in Burkina Faso, which is the official language but Mooré is spoken most widely.

Beyond an awareness of who is represented in the room socially and ethnically, Caffarella (2002) suggests that the content of the material should reflect the cultural differences in order to enable transfer. The author asserts that learning transfer is discussed within contexts, and hence context matters and affects the way we teach, what we teach, and how we teach (Rachal, 2002). Facilitators ought to utilize culturally responsive materials, be humble, and act with tact when working with minority populations in developing countries (Closson & Kaye, 2012). In these poor nations, the outsiders (i.e., those not from there) ought to the use stories and songs of the nationals in order to be culturally respectful and responsive and to build trust and strengthen the bond between facilitators and learners over time (Silver, 2000). For example, case studies have been shown to be an effective technique for teaching adults (Macaulay & Cree, 1999) because they include context as an authentic part of the teaching and learning. Cafferalla (2002) further posits that the content of the material must be balanced and learning transfer strategies used such as individual learning plans, mentoring, follow-up sessions, support groups, networking, reflective practices, chat rooms, listserves, portfolios.

Facilitators in developing countries can learn much from the ways in which knowledge is passed on naturally. For example, in an ethnographic study that explored what, how, why, when, and from whom Senegalese adults learn, Diouf, Sheckley, and Kehrhahn (2000) spent six months in which they interviewed a village chief, six key informants, and 36 residents of rural villages in Senegal. The study concluded that sociocultural norms and contexts influence adult learning. The findings suggested that learning outcome expectations were deeply embedded in the communities' cultures and that the adults learned their skills from childhood. Specifically, farming is learned early for boys, while girls learn about house chores. Both men and women reported that they primarily learned from the elders, family, and neighbors by observing and doing the task repeatedly over time. In this sense transfer happened automatically. Adults learned from the elders who held the knowledge and wisdom. They learned by observing, doing, and listening.

Although this qualitative study used six open-ended interviews, focus groups, and observations, the chief of the village chose the sample, which may mean that he chose the most knowledgeable people in his village for the research. This study is significant, however, for westerners who design programs or work in the developing world. Without understanding the norms, traditions, and culture, time and money might be wasted as transfer of learning will most likely not happen (Caffarella, 2002). The authors suggest that more studies on adult learning in developing countries are needed.

Similarly to Knowles and Mezirow, J. K. Ford and Weissbein (1997) state that facilitators need to lead the trainees in purposeful reflection. This purposeful reflection is a key element in learning transfer, and is augmented when supplemented by diverse viewpoints and concept mapping to organize the knowledge. Other scholars have found that providing positive feedback increases transfer, particularly when combined with oneon-one coaching after the training (Lintern, Roscoe, Koonce, & Segal, 1990). Broad and Newstrom (1992) examined how a positive climate in which there is support and reinforcement fosters transfer. Additional scholars have identified this idea of reinforcing and practicing the new learning as crucial for transfer (Quinones, J. K. Ford, Sego, & Smith, 1995; Seyler, Holton, Bates, Burnett, & Carvalho, 1998).

Linked to the idea of revisiting new knowledge is the notion of feedback (Morgan, Ponticell, & Gordon, 1998). The authors argue that feedback from facilitators to trainees, and from trainees to trainees, is paramount to effective transfer and to successful group work, which is also believed to enhance transfer. In developing countries, feedback should be given to the learners at an early stage and authentic encouragement should be part of the pedagogy to enhance learning transfer (Closson & Kaye, 2012). The collaboration can take several forms, one of which is that of learning communities (McGinty et al., 2013). The importance of collaboration and participation between the facilitator and the learners is emphasized in Lave and Wenger's (1991) theory of situated cognition, which focuses on what they call *legitimate peripheral* participation (LLP). In LLP apprentices learn from experienced practitioners by first learning and practicing basic tasks. Through these activities, and with further collaboration with the experts, apprentices become familiar with their duties and better understand the community and its needs. LPP illustrates how collaboration is instrumental to learning and learning transfer and why facilitators need to employ this critical strategy.

Materials that are relevant to the trainees' needs are critical to transfer as well. Besides materials, the room, cooperation and collaboration and robust relationships between trainees and facilitators, the way of delivering materials also affects the transfer of learning. Several techniques have been found to optimize learning transfer. These techniques are based on experiential education from the philosophies of Dewey, Vygotsky, and the development theories of Piaget (Roberts, 2012) and include problem based learning, project based learning, cooperative learning, service learning, and reflective learning.

All these techniques have similar goals and are aligned to Knowles's and Mezirow's theories of adult learning. Facilitators ought to utilize these kinds of techniques because they are learner-centered, adapted to the needs of the students, and link new knowledge to practice. They also include more reflective writing. Further, they integrate multiple intelligences through inquiry, case studies, and problem solving. These techniques also foster collaboration to encourage self-directed learning and feedback to deepen critical thinking. To sum up, when designing curricula and deciding how to deliver materials, choosing the appropriate techniques is crucial because oftentimes learning depends on how the material is delivered and its relevance to the context in which learners find themselves. McGinty et al. (2013) offer that adrenaline improves the memory of the experience, and thus activities that include positive experiences will create memories and augment the propensity for learning transfer to happen.

To promote successful transfer Curry et al. (1994) make reference to the three Rs as being key: the Right training, the Right support, and the Right time. The organizers and facilitators have the responsibility to put the learners in the best conditions possible and to prepare adequate materials that are culturally responsive. Organizers and facilitators also ought to have a follow-up plan. Despite the quality of the training, the commitment of the trainees, or the skills and insights of the facilitators and the organizers, what happens after the training and how trainees transfer their knowledge often remains unaddressed. In the learning transfer literature there is little mention about what J. K. Ford and Weissbein (1997) call post-training relapse prevention; that is, how can the acquired knowledge be maintained? Transfer does not happen on its own; follow-up and ongoing support, time and distance and external factors will hinder the learning transfer. Also with time, the motivation of the learners may fade (J. K. Ford, 1994). In order to avoid this, J. K. Ford proposes that the facilitators establish transfer action plans that list objectives, actions to be taken, potential obstacles, names of those required to participate in the actions, and criteria for evaluating success. Another idea would be the use of a coaching plan that provides guidance, a safety net, and encouragement to the learners (J. K. Ford, 1994). Lewin (1951) talks about relapse prevention as well as relapse anticipating. He suggests instituting buddy programs, support groups, and involving the participants in the relapse prevention, allowing them to discuss the potential barriers to transfer and offer solutions to overcome them. The author also suggests organizing refresher sessions, trainee reunions, and providing role models for them.

In an experimental quantitative study conducted with MBA American students whose learning included a post-training component, students who had the follow-up training had better transfer two weeks later than the students who did not receive the follow-up training. The authors called the post-training "interim maintenance activities" (Gist, Stevens, & Bavetta, 1991, p. 955). Although the study was informative and paved the way for further studies on learning transfer and the role of post-training in achieving transfer, the survey used was self reported and hence may have been biased. Also there was no information provided on the instrument used and its validity. Further longitudinal studies would be beneficial to better understand the effectiveness of the post-training component. One way post-training might be effectively done is by using technology to keep learners motivated, to encourage them, and to provide follow-up.

Technology as a Tool to Enhance Professional Development and Transfer

Umuntu ngmuntu nga Bantu: you are who you are because of others. —African Proverb

"Africa is the fastest growing cellular market in the world. It represents around 10 percent of the total cellular connections worldwide" (OECD & African Development Bank, 2009, p. 94). Many innovative applications appeared in Africa in the last few years. Such innovations include e-banking, e-commerce, and e-education. E- and mobile-banking, for instance, allow Africans to make financial transactions by transmitting units on their cellular phones (Kanwischer & Quennet, 2012). Within the education sector, e-education is defined as the connection between learners and other learners, teachers to professional support services and provides platforms for learning (Phiri et al., 2014). E-education includes e-learning and mobile learning (mLearning). E-learning is described as the delivery of a learning, training, or education program by electronic means (Stockley, 2003) and it has gained considerable attention over the last 20 years.

Proponents of e-learning claim that it allows all students with access to a mobile phone, tablet, or computer to participate in a learning experience, hence promoting equity in education (Cordeiro & Cunningham, 2013). Additionally, e-learning enables learning to be personalized as students learn at their own pace and are able to learn anywhere, anytime (Montiwalla, 2007). Furthermore, it provides the capacity to receive immediate feedback, promotes communities of learners, and supports situated learning (Cordeiro & Cunningham, 2013; Oguzor, 2011). Situated learning is based on the theory that learning is a social process (Holton & Baldwin, 2003). As such, learners participate in community of practitioners within a certain context (Lave & Wenger, 1991). An example of situated learning is health care programs on AIDS and HIV in Africa, where heath care providers are able to locate, order, and purchase medicines, using their mobile phones, knowing when to expect the delivery of the items (Walsh et al., 2013). Oguzor (2011) and Phiri et al. (2014) claim that e-learning promotes access to education in conflict zones and assists learners with disabilities while also reducing traveling costs to a school or training site. The authors also posit that e-learning enables flexibility of schedule to allow children and adults to learn around their work obligations. For teachers, e-learning offers the opportunity to directly apply what they learn in the classroom (Walsh et al., 2013) and to be learner centered (Liu & Hsueh, 2016).

Some challenges related to e-learning stem from technological and infrastructural constraints, lack of training of teachers or trainers using the technology, costs of the implementation and initial investments, and other logistical challenges such as the lack of electricity in certain developing nations (Omer et al., 2015; Phiri et al., 2014; Walsh et al., 2013). Furthermore Phiri et al. (2014) suggest that e-learning is sometimes challenged by cultural attitudes and ineffective leadership. Despite these challenges, e-

learning has been used in primary and secondary schools to improve reading learning outcomes, among other topics. Worldreader, for example, provides e-readers on Kindle devices or mobile phones in 245 libraries and schools in Africa (Worldreader, 2016). Elearning is used at the university level as well. In Kenya, at the African Virtual University (AVU) 35 students sit in a class and watch broadcasts by lecturers from all the over the world. They also regularly use emails and phone lines to have real time conversations with the professors (Simmons et al., 2011). This is critical, as most countries in Africa currently have a weak tertiary educational system and an increasing demand for higher education (Mallinson & Krull, 2013; Omer et al., 2015). Finally elearning is used for the professional development of teachers (Kidd & Murray, 2013). Currently, however, there are few empirical studies that concern the relevance of elearning in supportive workforce training and development in Africa (Kasumuni, 2011). Yet e-learning has the potential to increase student and adult learning and provide effective professional development opportunities (Pantazis, 2002; Unwin et al., 2010). Elearning can facilitate the learning skills that are transferrable to the workplace. "Especially for workforce training and development, e-learning modules that simulate real life work experience are beneficial to learning skills that are easily transferrable to the workplace" (Arthur-Mensah & Shuck, 2014, p. 43).

According to the e-Learning Africa Report of 2013, which collected data from 42 African countries and 413 e-learning practitioners, the favorite tools to support education were laptops, mobile phones, and social networking. "Mobile learning (mLearning) is learning facilitated by mobile devices" (Valk et al., 2010, p. 118). Mobile phones allow voice communication as well as the transfer of data. In education, text messages have been used in American schools and higher education institutions to remind students of exams and deadlines (Quinn, 2015). In a pilot mixed-method study of 50 learners registered in Human-Computer Interaction and Management Information Systems courses at the Open University of Malaysia, Safie (2004) used text messages to send multiple choice questions, feedback pre- and post-test, quizzes, assignment notifications, reminders, test marks, facts of the week, reading materials, schedule, and calendar. Findings shows that overall 76-80% of the students enjoyed the text messages and preferred that mode of communication to emails. In Nigeria, initiatives such as Efiko or Gedimo also use text messages to send review questions for tests. Text messages have also been used for collaborative projects or for communication during field trips (Montiwalla, 2007).

The usage of text messages has also been used within courses and has been part of the pedagogy (Bull & McCormick, 2011). In their mix-method study, Bull and McCormick used text messages in a pre-algebra course in central North Carolina, USA, among 33 students and one teacher at a community college in spring 2010. The text messages were used as reminders, to send quizzes, to communicate with instructors and peers, to network, and to check the dining menu or register for classes. Four text messages were sent out by the researchers during the week; some weeks students received a text message every day. Overall, students enjoyed and appreciated receiving reminders, review questions or formulas for their tests. Some challenges were reported, such as student overload or fatigue to receive so many text messages or the tendency for the students to rely on the text messages and not listen to the teacher when in class because they had already seen the content of the class or became used to mobile interaction. Although this study is informative and paves the way for others to come, the sample of 33 students was small and the study was conducted over four weeks only. Other studies could look at the use of text messages over a longer period of time and with a larger sample. Cavus and Ibrahim (2009) examined how SMS can be used to teach new English words to 45 undergraduate students in Cyprus. Findings of this experimental quantitative study showed that students who took part in the intervention learned more new words than their peers who did not participate in the text message intervention. Students reported that they would like to receive more text messages related to their schedule, tests, and other content-related materials for their classes. They particularly recommended including images in the text messages.

In the area of health, text messages have been used to inform arrival of supplies, spread of diseases, provide more effective prevention and support (Cole-Lewis & Kershaw, 2010) or remind people of their immunizations, for example (Stockwell et al., 2012). Mobile phones and SMS have also been used to capture rich data and to send pictures or videos of evidence (Schuck, Aubusson, Kearney, & Burden, 2013).

In a seminal meta-analysis study, Valk et al. (2010) examined the roles of mobile phones in developing countries in Asia by exploring six pilot projects in the Philippines, Mongolia, Thailand, India, and Bangladesh. Specifically, the authors sought to understand if and how mobile phones (a) helped improve access to education, and (b) enhanced new learning, which comprises the different learning processes and instructional methods. In Thailand, the pilot study used mobile phones to administer tests in an Institute of Technology. In Mongolia, Short Messaging Service (SMS) technologies were used to teach English and emergency care to bank tellers and gynecologists. In the Philippines, SMS was used to teach math and English to people who did not have access to formal education. Bangladesh used mobile phones as a longdistance learning tool whereas in rural India the cellular phones were used for games in an after-school program. Lastly, a second pilot study in Bangladesh used the mobile phone in an in-service teacher training.

The findings from the pilot studies are significant with participants reporting having gained motivation from the SMS received. They also claimed that the mobile phones allowed them to quickly ask questions of the trainers and to their peers. The authors conclude that mobile technology improved access. However, there was less evidence that mobile phones impacted new learning. In these six pilot studies, mobile phones were used for audio, games, videos, test-taking, and talking with peers and trainers (Valk et al., 2010). Despite its important contribution, this study has some limitations. First, there was little methodological information on each pilot study. It would have been important to include some information on the samples used and how participants were selected and why. Second, it would have been helpful to gather some demographic information and know the educational level of each participant in order to better understand which age groups benefited most from the mobile phone intervention in terms of access and new learning. To date, mobile phones used for teachers' professional

development in developing economies are largely absent from the literature (Kidd & Murray, 2013).

In 2015 in Africa, there were 685 million mobile cellular subscriptions, which means that there were 73.5 mobile cellular subscriptions per 100 inhabitants. In Ghana, the number of mobile cellular telephone subscriptions was over 30 million in 2014, rising from over 25 million in 2012. In Burkina Faso, the number of mobile cellular telephone subscriptions was over 12 million in 2014, whereas it was close to 10 million in 2012. Because of the ubiquitous use of mobile phones in Africa and their affordability, researchers such as Swaffield et al. (2013) and M. Ford and Batchelor (2007) explored if mobile phones could be used as a tool to support student learning and adult professional development. In a descriptive study in Ghana, Swaffield et al. (2013) piloted the use of text messages/SMS on 175 participants of a professional development program designed to build the leadership capacity of public school head teachers. In the course of one year, the researchers sent 43 text messages using the Skype application. The text messages were never longer than 30 words and were sent on Monday mornings, at first on a weekly basis, and later just monthly. The findings indicated that texting could be a way to support the leadership capacity of school leaders as it is the preferred method of communicating. Some participants reported that receiving text messages motivated them and refreshed the knowledge acquired during the training, while others commented on the inspirational aspect of the messages and that they brought them closer to their coordinator. Three participants commented on the technical difficulties, such as unclear or incomplete messages, while 31 respondents responded positively when asked if they

would like to have the opportunity to text other school head teachers through another text message platform. This study is significant because to date there are few empirical studies on the use of SMS as a way to follow-up post-training (Kidd & Murray, 2013; Valk et al., 2010).

Oftentimes, non-governmental organizations are the ones attempting to integrate SMS in education to support learning and professional development and enhance learning transfer (Walsh et al., 2013). There is a lack of studies that qualitatively examine the perceptions of the participants receiving SMS messages and that explore if and how SMS might help the participants put into practice the new knowledge after a professional development program. Such research could be conducted in private schools in both Ghana and other neighboring countries to understand how contexts affect the use of SMS. Other studies could also use different platforms to send SMS messages and allow networking opportunities among training participants and facilitators. Based on the findings from the Swaffield et al. (2013) study, additional research is necessary to understand the use of mobile technology in professional development. This study examined how a Whatsapp intervention may have assisted school leaders to transfer new knowledge to their schools after a professional development event. This concept could have a significant impact on schools as school leaders play a pivotal role in the overall success of the schools and students' learning outcomes. The Millennium Development Goals (MDGs) and the Sustainable Development Goals (SGGs) both call for the education for all. Mobile learning and particularly the adequate use of text messages in

developing countries may allow school leaders and teachers to pursue their learning, network with others, and engage in professional development anywhere, anytime.

Leadership Development in Schools

Neighborhoods are like white sheets, school leaders are expected to nourish a sense of responsibility in their communities just as a host provides clean linens to a guest. —Haitian Proverb

Zame, Hope, and Repress (2008) maintain that "the on-going professional development of teachers is a priority in many countries around the world" (p. 115). In the United States, teachers often have numerous professional development opportunities throughout their careers whereas school leaders rarely benefit from such development (Marzano et al., 2005); however, Donlevy (2009) comments that, "Professional development for school leaders is often an afterthought or something marginal involving occasional conferences, workshops or sporadic exposure to thought provoking speakers" (p. 239). Numerous scholars recognize that principals of schools are not prepared well enough for the tasks they have to accomplish (Donlevy, 2009; Mestry & Grobler, 2003). This lack of leadership preparation is even more flagrant in the developing world (Swaffield et al., 2013). Yet many scholars argue that principals play a crucial role in school improvement, teacher morale and retention, and student learning (Grissom & Harrington, 2010; Ingersoll, 2001; Leithwood et al., 2004; Marzano et al., 2005; Rosenholtz & Simpson, 1990). Leithwood and Jantzi (2008) suggest that leaders empower the more effective teachers and that it is through them that they influence student learning. Fullan and Hargreaves (1991) argue that leaders create cultures of learning and that those cultures positively affect student learning.

There are different approaches to principal training; i.e., university coursework, mentoring and coaching, putting theory into practice, or a combination of the above (Books, 2008; Grissom & Harrington, 2010). Darling-Hammond (2010) argues that one of the best approaches for principal leadership training is to put the theory into practice. In a quantitative study of 7,410 public schools in the US, Grissom and Harrington (2010) found that university coursework was not as effective as mentoring and coaching. Unfortunately, research in the area of principal training has been primarily conducted in Western countries. Further studies need to focus on this phenomenon across several countries and over time in both public and private school settings.

According to Pansiri (2011), developing countries have adopted Western models of school leadership that are not adapted to their context. Leadership is influenced by contextual, social, and cultural factors (Gaetane & Sider, 2014). In the West, leadership is typically practiced and learned in groups. Leadership is a process that aims to create a change to achieve goals (Northouse, 2004). But in the developing world the top down approach is still very much valued, hindering change processes. Thus, there is an increased need to develop the leadership capacity of principals (Bush & Oduro, 2006). Leadership moves beyond an individual's traits and character. Rather, it is a relationship between personal agency—the leader's habits—and context, which includes the organizational structure and the location and culture (Berkhout et al., 2010; Lingard & Christe, 2003). Currently, there is a lack of preparation for school leadership in the developing world (Lumby et al., 2008), particularly leadership programs that look at training through the lens of agency, culture, and structure.

In Africa, there are many untrained principals who do not have the necessary skills, knowledge, or attitudes to manage their schools efficiently and effectively (Otunga et al., 2008; Zame et al., 2008). Heck and Hallinger (1999) identified two concepts of missing knowledge: the blank spots, which are the areas where one needs to expand what one already knows, and the blind spots, which are gaps in one's knowledge and understanding. In the developing world, principals often lack both (Heck & Hallinger, 1999). In a mixed-method study, Moorosi and Bush (2011) surveyed 25 countries in Africa, the Pacific, Asia, and the Caribbean to explore the nature of leadership training for schools, its content, and the lessons that can be drawn from such programs. The findings suggest that only 10 of the countries surveyed provided mandatory training, which has a different meaning across cultures and takes many forms. Although the questionnaire was piloted, it was piloted in only one of the countries surveyed, which could weaken the study since context matters (Crow, 2006). Another weakness of the study may lie in the fact that only 40% of the sample responded to the questionnaire and it was not indicated who they were.

Walker and Dimmock (2006) identified several aspects of leadership training that can support the effectiveness of leaders. They state that learning needs to be linked to contexts, participants must have mentors, and training must be flexible to meet diverse needs. Leaders also need ample time to reflect on their practice and to network with others. Merriam (2001) and Knowles, Holton, and Swanson (2005) further argued that principals must engage in continual learning and grow in contexts that promote problem solving. The next section discusses educational leadership in Africa and examines how the combination of training and microlending might be one way to alleviate poverty over time.

Educational Leadership in Africa

Africa is a complex continent because of its geography and socio-political situation. School leadership preparation and educational reform is often caught between the donors' wishes (who finance new educational initiatives) and the colonial legacy, which is one of the reasons why leadership preparation is practically nonexistent on the continent (Eacott & Nyanchama Asuga, 2014). Africa is also a unique continent because almost every country is a developing country. Oplatka (2004) defines developing countries as the following:

These countries were ruled by Europeans for a long time, their economy is more agricultural based and they are usually characterized by high mortality rates, high birth rates, high levels of poverty and a large gap between rich and poor. (p. 428)

Oduro, Dachi, and Fertig (2008) talk about how in Ghana the dearth of leadership trainings and subsequent professional development are fundamental issues. Oftentimes schools in Ghana are ruled by authority, seniority, and language—not by who is competent for the challenging tasks at hand (Bush & Oduro, 2006; Moroosi & Bush, 2011). In a seminal quantitative study, Zame et al. (2008) surveyed 350 public schools' head teachers in the Greater Accra region of Ghana, to assess the level of leadership preparation the principals received, what they consider important leadership skills principals ought to have, and what their duties were as principals of primary schools. A significant finding from this study suggested that 29% of the principals received some kind of training before taking the role of principal. This study is important because school principals enact the policies of the government. Without appropriate professional development for school principals, the authors argue that the existing gap between public and private schools will remain and hence Ghana will not be able to achieve quality education for all and meet the Sustainable Development Goals (SDGs) by 2030. Zame et al. (2008) state:

It is important for the Ghanaian Education Service (GES) to ensure that those who are promoted in the position of head teacher have the knowledge, skills and disposition via professional development to enable them to create an effective schools and craft educational programs that will enhance student academic performance. (p. 126)

To date there is little research conducted in private schools that examines if and how private school principals have access to leadership professional development. Additional research in Sub-Saharan Africa has found that women have historically been excluded from leadership positions due to the duties they have at home (Bush & Heystek, 2006; Wakahiu & Keller, 2011).

The literature has identified financial and logistical problems responsible for the lack of educational leadership programs in Africa. First, leadership programs are costly if they integrate mentorship and reflection time, because that means the program extends over a period of time. There are also demanding logistical issues to contend with, including balancing fieldwork with follow-up coursework and providing ample time for reflection, a key component of training. Mentorship requirements involve additional challenges—training mentors, paring mentors with mentees, and scheduling mentorship visits (Berkhout et al., 2010). Another barrier to leadership training is identifying what and how to teach in specific contexts.

In a mixed-method study in South Africa, Bush and Heystek (2006) sent a survey to 522 principals of urban and rural schools of the Gauteng province to discover primary and secondary school principals' gaps of knowledge. The data showed that the main topics of importance were in the domains of finances and budgetary skills, human resources, and conflict resolution. Although the findings of the study were important for the betterment of this province in terms of educational leadership, the low response rate (27.5%) undermines the reliability of the study. This study was, however, followed by another longitudinal mixed-method study by Bush et al. (2011) in six provinces of South Africa, the purpose of which was to evaluate a pilot leadership program and make recommendations to the Minister of Basic Education. The findings showed that the modules used were valuable because they were practice based. This follow-up confirmed some of the findings from the previous study and also confirmed that mentorship and assessments are valuable components of a leadership program. The authors suggested that mentoring facilitates the transfer of learning, when combined with adequate reflection time and networking.

Because the preparation for new or existing principals is limited in the developing world, there is little literature on the topic. Bush et al. (2011) suggest that many principals will retire in the coming years, making the need for quality leadership programs even more urgent. To facilitate the spread of leadership programs, Bush et al. (2011) advised using a "train the trainer" program to prepare qualified manpower to answer the leadership needs in education in the challenging context of Africa. They further suggested that the use of technology could cut down some training costs and boost networking. Scott and Rarieya (2011) support the latter technological argument and particularly would like to see technology used in the isolated areas, further arguing that the role of principals is complex, crucial, and changing.

While research exists in the area of African microfinance, and limited research exists in the area of school leadership, there is a major gap in research connecting the two—specifically microfinance in African school leadership contexts. Because leadership development plays a key role in the quality of the education delivered and in student learning, and microfinance plays a crucial role in alleviating poverty when combined with professional development (i.e., training), there is a specific need for further studies that examine microlending in the education domain that is accompanied by leadership training and enhanced by mobile technology in LFPSs in Ghana and Burkina Faso in West Africa. These studies are of importance because not one country in Sub-Saharan Africa achieved the MDGs by 2015 (Migiro, 2007), which was to achieve universal primary education (Migiro, 2007). Because the literature is clear about the significance of school leaders in the improvement of educational outcomes, there is a need to better understand how adults learn and how the knowledge gained in training can be transferred to school settings, in this case low-fee private schools.

Edify

Edify is an international NGO that has been partnering with private schools in the developing world by providing capital to local microlenders who work with LFPSs. Edify currently works in Burkina Faso, Ghana, Liberia, the Dominican Republic, Peru, Ethiopia, Rwanda, India, and Guatemala. This organization's uniqueness lies in the fact that it offers various types of trainings to school leaders, teachers, and business managers. This study examines school proprietors and head teachers who participated in the school leadership training in Burkina Faso and Ghana.

Educational Background of Burkina Faso and Ghana, West Africa

To better understand the educational needs of the two countries, it is important to take into consideration the following data. As Table 2 depicts, Burkina Faso's literacy rate—defined as people over 15 years old who can read and write—is 36% (CIA, 2016) and 3.4% of the Gross Domestic Product (GDP) is spent on education. One of the world's poorest countries, Burkina Faso has struggled to catch up with the rest of the continent, as can be seen by the fact that the first university in the capital city, Ouagadougou, was not established until 1974 (Ouédraogo, 2010). The colonial experience was traumatic in many ways (Albaugh, 2009; Johnson, 2008; Kasuya, 2001; Ki-Zerbo, 1990; Trudell, 2005). The French imposed their language as the exclusive means of instruction, despite the country's 59 native dialects. Burkina Faso uses the French education models for all levels of education, unless the school is part of an international system. There are six levels of the elementary system exclusive of kindergarten (la maternelle). Kindergarten classes exist for children age three to six but they are mainly located in large cities and are under-developed.

- Six years of Primary School (called CP1, CP2, CE1, CE2, CM1, CM2),
- Four years of Junior High School (called sixtième, cinquième, qautrième, and troisième), and
- Three years of Senior High School (called seconde, première, and terminale).

From Grade 1 (called CP1 in Burkina Faso), which students attend from age 6 until the end of high school, a student would have gone to school 13 years. The national exams are the Certificat d'Etude Primaire (CEP) that students take at the end of sixth grade. After four years of junior high dchool students take the Brevet d'Etudes du Premier Cycle (BEPC) and when students finish high school they take the Baccalaureat. Vocational school is available for those who wish at the high school level.

Table 2

	Burkina Faso: French system		Ghana: British system	
Language of Instruction	French	French Engl		lish
Educational System	National		National	
Kindergarten	Rarely found		2 levels (1 & 2)	
Primary School	6 years of Pri (CP1,CP2, CE1 CM1, CM1	, CE2,	6 years of Primary (P1, P2, P3, P4, P5, P6)	
Secondary School	4 years of Junior High School (sixième, cinquième, qautrième and troisième) 3 years of Senior High School (Seconde, Premiere, Terminale)		3 years of Junior High School (JHS1, JHS2, JHS3)	
			3 years of Senior High School (SHS1, SHS2, SHS3)	
Literacy Rate in % (15-24 years old).	Male 1 43 Total: 36	Female 29.3	Male 82 Total: 76.6	Female 71.4
GDP Allocated to Education	3.4		8.1	

Education Systems in Burkina Faso and Ghana (CIA, 2016)

Ghana has a literacy rate—defined as people over 15 years old who can read and write—of 76.6% (CIA, 2016). The school life expectancy is 12 years and 8.1% of the Gross Domestic Product (GDP) is dedicated to education. Ghana's language of instruction is English. From Grade 1 (called P1 in Ghana), which students attend from age 6 until the end of high school, a student would have gone to school 14 years. The students would have gone through the following system:

- Two years of Kindergarten (1 and 2)
- Six years of Primary School (from grade 1 to 6)
- Three years of Junior High School (JHS 1 to 3) and
- Three years of Senior High School (SHS 1 to 3).

The national exams are the Basic Education Certificate Examination (BECE) for grade 9 students/Junior High School leavers and the West Africa Senior School Certificate Examination (WASSCE) for those completing Senior High School (grade 12). Vocational school is also available at the high school level for those who opt for more practical skills.

Edify has been offering a leadership training for the school proprietors and head teachers in Ghana since 2013 and in Burkina Faso since 2014. The training included four research-based modules.

Training Modules

A summary of the leadership training modules is provided in Table 3.

Table 3

The Four Modules of the School Leadership Training

Day 1: Module 1:	Topics include:		
Title: Building a Culture of Learning	• How to write mission statement.		
	• Invitational school culture.		
	• Parents and families as partners.		
Day 2 in the morning: Module 2:	Topics include:		
Title: Health and Wellness	• Nutrition.		
	• Clean water.		
	• Disease prevention.		
	• Working with the community.		
Day 2 in the afternoon: Module 3:	Topics include:		
Title: Facilities and Safety	• A sound school construction.		
	• Acoustics.		
	• Lighting.		
	• Kitchen.		
	• Toilets.		
Day 3: Module 4:	Topics include:		
Title: Teacher Recruitment, Induction and	 Values and dispositions of quality teachers. 		
Professional Development			
	• How to recognize and hire quality teachers.		
	• How to retain and develop teachers.		
	• How to work with teachers and staff.		

Conclusion

Although the recent literature on adult learning transfer is undeveloped, earlier theories on adult learning by Knowles and Mezirow provide a robust foundation for understanding how adults learn best and how transfer may be achieved. Adults learn by doing, by collaborating and by co-creating their new knowledge. Adults also learn by having strong relationships with facilitators. It becomes the facilitator's task to provide materials that meet the learners' needs and find creative and interactive ways to deliver the materials. In that sense the teacher becomes a facilitator who encourages deep critical thinking and creates a safe, inclusive, and culturally relevant environment where learning can effectively take place.

Some scholars raise the issue of training relapse, in which learners lose their motivation, and in some cases, the larger context prevents them from putting into practice what they learned during the training. The use of technology to enhance professional development may be a tool to bridge the gap between professional development/training and practice by providing a way to follow-up and interact with learners to encourage them to transfer their newly acquired knowledge.

Learning transfer is complex and under-researched, in part because it is challenging to define and hence research. Program planners have in fact little influence or control on key external factors such as the political environment that enhances or inhibits learning transfer. However, program planners are able to influence the content of the training, how it is delivered, and how and when the follow-up takes place. Qualitative investigations may provide new insights because of their rich descriptions of the lived experiences of trainees in regards to their transfer of learning. This may be especially valuable in developing countries as there have been few empirical studies on adult learning and learning transfer in these contexts. Understanding how adults learn best is crucial and even more important in the developing world, where many international organizations invest, and offer trainings, but organizations rarely stay long enough to assess the impact of their training and how, if at all, learners have used the new knowledge.

Summary

Chapter two covered key topics relevant to adult learning, adult learning transfer, mobile technology as a tool to enhance transfer, and leadership development in schools. It also described the educational context in Burkina Faso and Ghana before concluding. Chapter three will next describe the methodology used in this study.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter provides a detailed description of the research design and methodology that will be used for the proposed study. It begins with an overview of the methodology and the research questions. Next, the research design is described, which includes the unit of analysis, selection of research site, and selection of participants. The next section outlines data collection including data sources, confidentiality, and protection of subjects. This is followed by a section on data analysis before attending to trustworthiness and triangulation. Next the researcher's background is discussed. The chapter concludes with the limitations and delimitations of the study, and a summary.

Methodological Overview

Purpose of the Study

The purpose of this study was to better understand the role that learning transfer plays in the learning process. This study seeks to examine if, and how, proprietors and head teachers (also known as directors) of LFPSs are able to transfer newly acquired knowledge to their schools' sites after having participated in a three-day leadership training in Burkina Faso and Ghana. To consider this premise, the study used a purposive criterion sample of schools' proprietors and head teachers receiving microloans from Edify's local partners. The following research questions were explored:

Research Questions

- What learning, if any, do training participants (proprietors and head teachers) in Burkina Faso and Ghana transfer to their Low-Fee Private Schools after completing the school leadership training modules?
- 2. What inhibits or supports the transfer of learning in these settings?
- 3. For Ghanaian participants, how, if at all, does the use of mobile technology after the training enhance learning transfer?

Theoretical Framework

This study used *learning transfer theory* as a conceptual framework. This theory has advanced understanding and raised important questions in the field of learning. To date, there is a lack of recent empirical research on the transfer of learning in adult professional development and how new acquired knowledge gets applied (Caffarella, 2002; Foley & Kaiser, 2013; Furman & Sibthorp, 2013; Hung, 2013; McKeough et al., 1995).

Rationale for a Multiple Case Study Methodology

The researcher opted for a case study approach because it provides the ability to examine in detail a phenomenon as it manifests in everyday context (Yin, 2014). A case study is "an empirical inquiry that investigates an empirical phenomenon (the 'case') indepth and within its real-world context, especially when the boundaries between the phenomenon and context may not be clearly evident" (Yin, 2014, p. 16). This study presented two case studies: one in Burkina Faso and one in Ghana.

In order to present a robust study, this research used six schools, three in each country. Having more than six schools would produce a large volume of data, which would increase the complexity given the time frame allowed for this research (Yin, 2014). Once this researcher explored each school separately, commonalities and differences were drawn within the three schools from each country. The use of a case study design was appropriate in the proposed study because the purpose of a case study approach is to gather in-depth data about each case. Multiple case studies aim at increasing the transferability and "develop more sophisticated descriptions and more powerful explanations" (Miles & Huberman, 1994, p. 1972; Yin, 2014). Multiple case studies allowed us to look beyond initial impressions and see the evidence through multiple lenses while accounting for contextual conditions (Yin, 2014).

Although it would have been easier to access just one country to do one in-depth case study, this researcher has a rare opportunity to study two countries. With two countries in the same region and six schools, some of the findings may be informative to other developing countries in the region that have similar circumstances and challenges. The researcher attempted to reach transferability by using thick descriptions (Lincoln & Guba, 1985) and the researcher aimed to provide sufficient details so that if another researcher wished to adapt the study findings to another context, it would be possible. Additionally, two different school systems were represented: one from a former French colony, Burkina Faso, and the other from a former British colony, Ghana.

Research Design

Research design can be seen as "a logical plan of getting here to there" (Yin, 2014, p. 28). This exploratory study uses a qualitative approach examining to what extent a three-day school leadership training influenced school leaders to apply their learning to the school contexts. This study was piloted in Burkina Faso in June 2015. However, during the pilot a convenience sample was chosen. The goal of the pilot study was to test the interview protocol and to better understand the cultural context for this later study.

Units of Analysis

The unit of analysis is the proprietors and head teachers, who received the threeday school leadership training. A total of 13 participants, six from Burkina Faso and seven from Ghana, were selected. Usually teams of school leaders attend the trainings; therefore, from the total number of participants, three pairs of school leaders from each nation were selected. One school in Ghana had three leaders represented at the training; hence seven school leaders from Ghana were interviewed.

Selection of Research Sites

The research sites were drawn from three-day long school leadership trainings that took place in July 2016. In Burkina Faso, the training and participants were located in Ouagadougou, the capital city. In Ghana, the participants were from Kumasi, a city from the Ashanti region, northwest of Accra, the capital. The training in Burkina was in French whereas the one in Ghana was delivered in English.

Selection of Participants

This research design relied on a purposive criterion and a convenience sampling of proprietors and head teachers of LFPSs that received a loan from a microlender and participated in the three-day school leadership training. Purposive sampling allows the researcher to select rich cases, from whom one can learn the most and establish productive relationships that best enable answering the research questions of a study (Creswell, 2013; Patton, 2002). Criterion sampling was also used, as participants were chosen according to their access to technology, their ability to attend the three-day school leadership training and their ability to speak and understand the national language. Other criteria included the school's size and number of years the school was in operation. Selected schools met at least three of the five criteria below; however, the first three listed criteria were required. Proprietors and head teachers of the schools met the following criteria:

- In Ghana, school leaders had to have access to text messaging and hence had to have a smartphone.
- 2. Completion by the proprietors and head teachers of the schools of the threeday school leadership training offered in July 2016.
- Understanding, speaking, and writing the national language (French or English),
- 4. Schools that have been in existence a minimum of three years.
- 5. Schools with at least 150 students.

In both countries, convenience sampling was chosen because this study required the school proprietor and head teacher to attend the leadership training. In Burkina Faso, the original sample had to be altered because out of the three schools originally chosen, one proprietor came to the training with his secretary and not the head teacher. As a result, another school was added that met the four criteria listed above.

In Ghana, one school that was originally chosen also had to be replaced because the school proprietor did not come with the school head teacher but with the English teacher instead. Additionally, the proprietor did not attend the whole first day of the training. The replacement school met all criteria.

A preliminary identification of the participants took place before and during the leadership training according to the criteria listed above with the first three being nonnegotiable. The researcher had conversations with the local staff about the possible study participants. Initial visits of the schools in the sample were conducted either prior to the training or after. In Ghana, the researcher visited the schools one day prior to the leadership training. Two leaders from the sample left in the afternoon of the first day of the training and were hence replaced. The replacement school was visited in the evening of the last day of the training. In Burkina Faso, the sample was chosen prior to the training. The three selected schools were visited the day after the training.

Data Collection

Data collection included an initial informal meeting and in-depth interviews with proprietors and head teachers of LFPSs in two countries. Other data collection included site visits, document review, and follow-up text messages using the Whatsapp application.

Data Sources

Initial informal meeting. Kvale and Brinkmann (2009) affirm that "In a foreign culture, an interviewer needs time to establish familiarity with the new culture and learn some of the many verbal and non-verbal factors that may cause the interviewers in a foreign culture to go amiss" (p. 144). Spradley (1979) speaks about rapport as being "a harmonious relationship between ethnographer and informant" (p. 78). He refers to rapport as building trust with study participants in order to allow the information to flow freely. Building strong relationships based on trust is even more important in an international context when dealing with distinctive cultures and languages. Hence the initial meetings served to build trust and rapport between the researcher and the participants. Both the school proprietors and the head teachers attended the initial meetings. These preliminary meetings happened in July in the two countries studied.

During the initial meeting, the researcher also asked for a tour of the school. The participants were then invited to sign the Informed Consent Form (Appendix A). The researcher also assisted the participants in filling out three matrices that served as baseline data. The matrices included: a facility matrix, a healthcare matrix, and a wellness matrix (Appendix B). These matrices helped the researcher determine the state of the school facility and practices that were already in place before the training. Also, during this initial meeting, a Basic Information Sheet was jointly completed (Appendix C). This information sheet included details on enrollment at each grade, and a

few personal items such as age and education background of the persons the researcher met. This Basic Information Sheet helped to understand the context in which the schools stood. In Burkina Faso, for example, one of the schools in the sample was located within an impoverished community and the school had limited infrastructures. At the time of the initial visit, the school did not have toilets for the children or for the adults. This kind of school may find it difficult to transfer the new knowledge due to the lack of community resources and a very low tuition. In Ghana, there was a school in the sample affiliated with a church located outside a large university. As a result, the school benefited from a higher enrollment and from the university's facilities such as the health center.

Interviews. "Interviewing as an art involves intuition, creativity, improvisation and breaking the rules" (Kvale & Brinkmann, 2009, p.86). The in-depth interviews were the primary source of data for this study. Interviews included three proprietors and three head teachers for a total of six interviews in Burkina Faso and seven in Ghana. Interviews were semi-structured and open-ended and lasted 60-90 minutes. An interview guide was developed and modified after the pilot study (Appendix D). The researcher asked open-ended questions such as "Tell me about any changes that have happened in your school since the last training" or "You have told me about some changes that you have made in your school. Why did you make those changes? Can you give me an example of how it was helpful and what was helpful to make the changes?" Interviews were audio taped and transcribed verbatim in French and English. The French transcriptions were not translated into English but rather coded in French, the native language of the researcher. These interviews occurred approximately three months after the proprietors and head teachers received the three-day school leadership training. Ford and Weissbein (1997) posit that follow-up after a training should happen as soon as possible to avoid relapse, hence the researcher conducted the in-depth interviews three months after the end of the training. These 13 in-depth interviews examined if learning transfer takes place, and in the event that transfer occurred, what changes in the school were made.

The school leadership trainings were offered in July in Burkina Faso and Ghana. As a result, the interviews took place in October 2016. Because language serves as a tool to build reality (Spradley, 1979), the interviews were conducted and coded in French in Burkina Faso and in English in Ghana. Since this researcher is originally from France and had visited and worked in Burkina Faso five times, she was aware of the subtle but meaningful language differences and subtleties between the French spoken in France and the French of Burkina Faso. Given these language differences, the interview guide and the language used orally both during the interview and during the training were altered since the pilot study.

Site visits. The purpose of the site visits was to corroborate the interview data. Post-training school visits took place at the same time as the in-depth interviews, three months after the school proprietors and head teachers had attended the three-day school leadership training and lasted from one hour to two hours. Data collection included taking photographs as well as completion of the matrices (Appendix B). This allowed comparison of matrices, which collected baseline data prior to the training and then posttraining comparisons. The goal of utilizing these matrices was to discover if proprietors were able to implement aspects of their School Improvement Plans, which they completed during the training. For example, Module 2 of the school leadership training dealt with health and wellness and emphasized the importance of having separate toilets for girls and boys. During the initial preliminary meeting and tour of the school, the researcher took photographs and took notes, to see if separate toilets existed. After the participants had the training, the researcher reviewed the School's Improvement Plan and looked for changes, if any, regarding toilet facilities. During these school visits, the researcher wrote field notes as well, which were later coded.

Document review. Document analysis consisted of the goals in the School Improvement Plans and mission statement completed by the study participants during their trainings, as well as other artifacts such as photographs and matrices. These documents were key to understanding if learning transfer occurred. In addition to providing a rich source of information to address the research questions, the document analysis functioned as a source for data triangulation. This process seeks to collect data via multiple methods and from multiple sources so as to increase the validity of the findings (Mathison, 1988).

Follow-up interventions via mobile phones text messages. Because Ghana is more technologically advanced than Burkina Faso, this researcher sent text messages to the Ghanaian respondents only, via an application called WhatsApp. According to Quinn (2015), and in terms of communication, choosing the most effective technology is key as it may also increase student success and retention. For this research study, WhatsApp was chosen to follow-up after the three-day leadership training for several reasons: (a) the school leaders engaged on WhatsApp prior to the training for administrative purposes with the Edify Ghananian staff; (b) school leaders are busy and have limited time to meet face to face to follow-up and increase their learning; (c) even those who were absent during the training were invited to join the WhatsApp group if they were present on the last day; (d) following up by email would be harder to do in a country where few people own a computer and there is a large shortage of electricity, causing people and schools to be without electricity on a regular basis; and (e) cellular data is affordable in Ghana and most school leaders were already using WhatsApp for their personal use, limiting the learning curve. Hence WhatsApp was the chosen mode of communication to follow-up post-training, continue the professional development, and create a community of learners as well as a Professional Learning Community (PLC).

The purpose of the WhatsApp group was to examine to what extent mobile technology played a role in enhancing learning transfer. The WhatsApp platform was used as a Professional Learning Community (PLC) for everyone who participated in the three-day leadership training in July 2016, provided that they were present on the last day of the training and had a smartphone and the WhatsApp application. Everyone received the same message at the same time and was able to respond to the researcher and to each other if they wished. WhatsApp allows anyone with access to a smartphone and Wi-Fi to send individual and group messages anywhere in the world. It also allows sending and receiving photos, videos, recordings, and Word documents. Text messages were sent via group texting. Three days after the training in Kumasi, Ghana, the researcher created and hence became the group administrator of "Kumasi WhatsApp Cohort July 2016." To set up the group, everyone's name and contact information had to be entered as a contact in the researcher's phone first. Then, the contact data were exported to the contacts into the WhatsApp application. To obtain accurate data and for better tracking, the group was intentionally set up so that the name of the participants as well as their schools appeared when they responded to the text messages. This set-up allowed the researcher to track who participated and who did not and to follow-up if and when needed.

On the last day, the participants confirmed their contact information, provided the phone number they used for WhatsApp, and agreed to be part of the PLC. A total of 23 participants were invited to join the WhatsApp group. The local Edify staff member in charge of education as well as the two Ghanaian facilitators who conducted the leadership training and the researcher's dissertation Chair were also invited to the group as silent observers. The role of the silent observers was defined and explained to them before the intervention started. The observers' role was to read and observe what was shared on the WhatsApp platform without interfering. After the data analysis, the three professional colleagues who had participated in the training and were silent observers during the WhatsApp intervention served as member checkers.

As the moderator and administrator of the WhatsApp group, the researcher's role was to send the text messages twice a week, monitor the answers, provide some written or oral feedback and encouragement, and answer questions. The researcher also ensured that the norms were respected and that the purpose of the PLC remained intact. The WhatsApp text messaging intervention was introduced at the conclusion of the school leadership training on July 7, 2016. Norms for the group were discussed at this time. As shown in Appendix E, norms included: (a) the group was created to enhance and promote leadership conversations only as to help enhance networking among participants; (b) the group should not be used for personal or other purposes; and (c) everyone was encouraged to participate in the discussions/reflections. A first text message was sent to the cohort inviting the participants to join the WhatsApp group five days after the end of the training. A reminder was sent on July 22 to inform the participants that the intervention was starting on Monday, July 25. On that day, this researcher also sent an initial question asking the participants if they had started implementing their School Improvement Plans.

The researcher sent text messages to the proprietors and head teachers for nine weeks starting two weeks after the school leadership training. The two-week grace period allowed participants to return to their school sites, share with colleagues, and reflect on the knowledge they had gained during the training. On Mondays a yes/no question was sent, and an open-ended question followed on Fridays of the same week. Participants could answer one question and not the other if they wished. There were a total of seven yes/no questions and nine open-ended questions. The questions were all related to the content of the four modules taught during the three-day leadership training. This format was chosen to (a) understand what kind of question triggered more participation; and (b) provide the participant a structure in which they could expect a yes/no question on Monday that gave them time to reflect in order to answer the openended question on Friday or over the following days. The questions used for the followup text intervention are included in Appendix F. On the last day of the intervention, on September 19, 2016, the participants were informed, through a text message, that the intervention was ending and asked them if they wanted to keep the group. They all responded that they wanted to keep the group active and one person volunteered to become the administrator of the group, allowing the researcher to remain a group member without being the administrator/moderator.

There was no technology intervention in Burkina Faso. Thus, the researcher was able to determine if the addition of mobile technology increased the likelihood of learning transfer or if the participants made any reference to it during the follow-up interview.

Maintaining Confidentiality and Protection of Subjects

According to Stenhouse (1988), case studies have the potential to present ethical issues. In order to ensure the protection of people and institutions and according to the University of San Diego's Committee on Protection of Human Subjects, the researcher submitted a proposal to the University of San Diego's Institutional Review Board (IRB) in April 2015. The IRB was approved and the study was piloted in Burkina Faso in June 2015. For the purpose of this study, the researcher extended and modified the IRB in March 2016. The extension and modification of the IRB were approved in late March 2016. The purpose of this process is to ensure that the research design does not violate the ethical institutional and federal guidelines. The English version of the consent form used for this study can be found in Appendix A.

To preserve the confidentiality of the study, schools and participant pseudonyms were used during the transcription and coding process, as well as for the writing of the findings. Only the researcher was able to match the participant to the tape and transcript. The recorded interviews and transcripts were stored on the researcher's computer and were protected by a password.

Data Analysis

Data analysis began with a process of textualization (Van Maanen, 1988). This involves transforming the interviews into verbatim written texts. Analysis of the documents, the text messages, and the interview responses utilized the constant comparative method of qualitative analysis (Glaser, 1965). The goal of this inductive analysis is to discover patterns by looking at explicit examples to find commonalities as well as repeated themes, which may then point to larger transferability. The researcher looked at extracting convergences and recurring regularities within the three schools in each country. Content analysis included identifying, coding, categorizing, classifying, and labeling the primary patterns in the data. The researcher coded all the transcripts by hand. Because this study explored the extent to which school proprietors and head teachers may or may not have transferred the knowledge gained during the school leadership training, analysis of narratives seemed appropriate in order to reveal the experiences of the participants that relate to learning transfer after the program (Bruner, 1986). To respect the participants' ideas, they are cited verbatim throughout the study. For the data from Burkina Faso, the researcher translated the participants' comments from French to English.

Coding Cycles

Coding is the base of the analysis. "Coding is not a precise science; it is primarily an interpretative act" (Saldaña, 2009, p. 4). Saldaña (2009) refers to coding as "the transitional process between data collection and more extensive data analysis" (p. 5). Bryman (2012) urges researchers to code as soon as possible to look for similarities, differences, and repetitions. To that end and because of the large amount of data to code, the data were pre-coded by highlighting significant participants' quotes or passages that related to the research questions (Miles & Huberman, 1994). Coding began immediately after interviewing and after writing preliminary field notes, analytical memos, and journal notes.

Analysis of qualitative data took place over two cycles. In round one, open codes were developed for each key point emerging from the interviews, documents, analytical memos, field notes, and journal. In round two, codes were grouped into overlapping categories to create themes. Creswell (2013) advises having five to seven themes, while Wolcott (1994) speaks about having three themes as the right quantity for qualitative work; thus, a hybrid of these coding approaches was used.

First cycle coding. Descriptive coding was used for memos, field notes, journals, photographs, videos, and other documents to get a general sense of the data (Saldaña, 2009). For the in-depth interviews and the follow-up text messages intervention, the researcher used In Vivo coding. In Vivo coding relies on the participants' own words, looking for phrases that represent themes, and it is useful to understand different cultures and worldviews (Saldaña, 2009). It was used to categorize emerging themes and reveal

patterns that emerge from the data. Codes were developed for each key point identified in the interview transcripts and documents. The coding sought to inventory and define key phrases, terms, and practices that the people interviewed used to make sense of their world. Examples of codes that emerged from the data during this coding phase included guide, topics, pictures, exercises, questions, activities and content of guide, content knowledge, skilled facilitator, gentle, caring, hotel room, meals.

Second cycle coding. The purpose of this second cycle was to "develop a sense of categorical, thematic, conceptual, and/or theoretical organization" (Saldaña, 2009, p. 149), based on the first cycle coding. Thus, the researcher began by grouping all categories found in the first cycle under broad themes, exploring their relationships, patterns, and "structures of observability" (Nespor, 2006, p. 301). Axial coding was used in the second cycle coding. Axial coding aims at determining which codes in the research are dominant and the ones that are less important. During this cycle the "code is sharpened to achieve the best fit" (Glaser, 1978, p. 62). During this coding cycle, the codes that surfaced from the fist cycle of coding became themes such as adequate material and content, facilitators, facilities.

Trustworthiness and Triangulation

Trustworthiness. Trustworthiness is the ultimate goal in qualitative research (Wolcott, 1994). The aim for the researcher is to be "balanced, fair, and conscientious in taking account of multiple perspectives, multiple interests, and multiple realities" (Patton, 1990, p. 575). There were, however, several threats to trustworthiness in this study. Some limitations included the way the criteria were chosen for the study, the limited

sample, and the researcher's short observation time at each school. Other threats came from the researcher's personal subjectivity and biases as well as the inherent Western bias of NGOs in Africa. Since the researcher was obligated to forthrightness in relating to the participants (Wolcott, 1994), the researcher engaged in daily reflective practices, such as journaling throughout the process to manage her own subjectivity (Peshkin, 1988). The journal also allowed the researcher to understand the influence she had on the participants as well as the influence the participants had on her. In one of her journal entries, the researcher wrote:

Wendkuuni school: I was reminded today of what it means to be white in Burkina Faso. It means being perceived as knowing it all. I was struck when the proprietress of the school inferred that the training was good and worthwhile going because it was a white person leading it, me. I felt ashamed. In my view, these proprietors are the heroes and they are the experts in their fields. If only they could realize that and take ownership of what they know. I simply had to listen to her share the story of her school and her experience at the training.

Additionally, the study was piloted in June 2015 in Burkina Faso allowing changes to both the interview guide and the follow-up text intervention questions. Piloting the study has also enabled the researcher to expand her cultural understanding and develop her cultural intelligence, as well as her organizational skills. Additionally, to minimize her biases, the researcher paid attention (through journaling) to her prior attitudes, assumptions, blind spots, and preferences towards key issues and processes. A rigor in data collection and analysis was employed (Maxwell, 2012; Saldaña, 2009).

Triangulation. In conducting this study, the researcher took a series of precautions to preserve the integrity of the study and to avoid validity threats or what Huck and Sandler (1979) refer to as "rival hypotheses." Triangulation was used with

several different sources of data such as the in-depth interviews, the two site visits, the pre- and post-matrices, the photographs, as well as the analysis of documents such as teacher contracts, School Improvement Plans, and mission statements (Creswell, 2013; Denzin & Lincoln, 2003). In addition, the researcher went back to the program officers in each country, as well as the facilitators of the training in Ghana to ask them to check the accuracy of the findings, which can be referred to as a form of member checking (della Porta, 1992). Lastly, the findings of this study were presented at an Edify global meeting in January 2017.

Background of the Researcher

Merriam (1988) explained that "the researcher is the primary instrument" (p. 19) in the data collection and analysis process. This is a critical factor and the researcher approached this research with an utmost respect and humility. As a graduate assistant in the Global Center at the University of San Diego, I have worked with Edify in Africa. I have delivered several of the school leadership trainings in Ghana, Burkina Faso, Rwanda, and Liberia. Working on building the capacity of school leaders and improving the quality of education in developing countries is my passion and calling. At the same time, I was mindful that my positionality as a current graduate assistant working on Edify projects required vigilance against bias (Merriam et al., 2001). To help mitigate potential biases, I used a journal after each interview. The journal helped me stay aware of my influence and also assisted in triangulating the participants' responses. Additionally, I wrote field notes after each school visit. Finally, as explained in the data analysis section, the research design included mechanisms to triangulate data, thereby obtaining multiple perspectives as a way to verify the veracity of the data.

Limitations and Delimitations of the Study

This study has the potential to offer critical insights into how learning transfer occurs among proprietors and head teachers of low-fee private schools in Burkina Faso and Ghana, West Africa. However, there are several limitations.

Limitations

Patton (2002) speaks about outsider-insiders. The researcher sees herself as an outsider-insider because she was part of the team who designed and revised the school leadership training modules. She also facilitated the three-day school leadership training in Burkina Faso and observed the newly trained facilitators in Ghana. In that sense, participants saw her at the school leadership trainings whether she fully facilitated or not. She is aware that a power relationship existed, even a tacit one, between the participants and herself. The power relationship may take different forms depending on the lens the participants used to look at her. As a white woman working for a Western NGO, there might be a tendency for the participants to try to please the researcher and tell her what they thought she wanted to hear. Additionally, because the material used during the trainings was created based on Western research, it is possible that the best practices presented may not be implemented. As a result, to ensure that the materials met the participants' needs, the material was piloted several times, revised, and contextualized based on the participants' and the local trainers' feedback and suggestions.

The researcher is a white woman, and the participants might have seen her as the colonizer and be intimidated and/or resistant to trust and share because their colonial experience was traumatic in many ways (Albaugh, 2009; Johnson, 2008; Kasuya, 2001; Ki-Zerbo, 1990; Trudell, 2005). Also, she was a doctoral student; as a result participants may have seen her as having the answers for them and relied on her to give the answers to them, although they are the experts in their context and she has always learned from their interactions. The researcher's intent was to remedy these possible hurdles by building a strong relationship with each participant. The interactions during the training, the two sites visits, the initial meeting, and the interviews helped to create trust between the participants and the researcher. Additionally, the researcher listened to the participants and was mindful to respect their culture.

Conducting research internationally presents a certain number of challenges. First, due to financial constraints and the cost of leading research internationally, the researcher stayed for seven days in the two countries, preventing her from looking at the transfer of learning over an extended period of time. Additionally, she studied six lowfee private schools working in partnership with one NGO only, limiting the sample and not allowing transfer of the findings to other contexts.

J. K. Ford and Weissbein (1997) talk about relapse prevention, in which learners lose their motivation, and in some cases, the larger context prevents them from putting into practice what they learned during the training. As a result, the researcher chose to follow-up three months after the initial leadership training, which may have been too short for some school proprietors to transfer learning. On the other hand, exploring if transfer occurred three months after the training might prevent the participant from forgetting the newly acquired knowledge.

Despite these limitations, the researcher believes that this study contributed to the body of literature on learning transfer, particularly as it is a concept that has not been readily studied in Africa. This study is setting the stage for further studies and possible cross-cultural collaborations.

Delimitations

Due to time and funding restrictions, the researcher purposefully narrowed the scope of this study. First, this study was geographically limited to schools in the Kumasi and Ouagadougou areas; thus rural schools might be included. Additionally, this study does not intend to build a new theory but rather the rationale for this study is to add to the existing knowledge on learning transfer. Finally, this study is delimited to only two countries in West Africa, which comprised 26 nations.

Summary

Chapter three covered the research methodology, design—including the selection of the research site—and participants. This chapter also provided information about the researcher's background and positionality.

CHAPTER FOUR

FINDINGS

Introduction

The purpose of this exploratory study was to better understand the role that learning transfer plays in the learning process. This study sought to examine if, and how, proprietors and directors (head teachers) of LFPSs were able to transfer newly acquired knowledge to their school sites after having participated in a three-day leadership training in Burkina Faso and Ghana. This chapter presents the findings of this qualitative study. The findings address the following research questions:

- What learning, if any, do training participants (proprietors and head teachers) in Burkina Faso and Ghana transfer to their Low-Fee Private Schools after completing the school leadership training modules?
- 2. What inhibits or supports the transfer of learning in these settings?
- 3. How does the use of mobile technology after the training enhance learning transfer?

Chapter four is divided into two sections with each section organized as a case study. The first part examines the findings in Burkina Faso while the second part presents the findings from Ghana. Each section starts with a brief overview of the three schools and the study's participants chosen for the case studies. Following the introduction of the schools, the findings are presented using the three research questions as a framework. For both case studies, the answers to the research questions are organized as follows. The first research question sought to examine if and how learning transfer occurred after the leadership training. For this question, since the training undertaken by the participants involved four training modules, the findings are presented according to those four training modules. Chapter two provides details on the training modules. The second question dealt with what inhibits or enhances learning transfer. These findings are addressed using themes that emerged during the data analysis. For the Ghanaian case study the third research question sought to understand if and how the use of technology enhanced the transfer of learning. Once again this information is presented using the themes that surfaced during the coding phase of the analysis. As mentioned in chapter three, the third research question pertains to Ghanaian leaders only because school leaders in Burkina Faso do not yet have smartphones to support the WhatsApp application used in this study. The chapter ends with a summary of the findings from all six schools.

Burkina Faso

Schools and Participants

Three schools were selected using a purposive criterion sampling. As outlined in Table 1, two schools were located in the capital city, Ouagadougou, while one was 20 minutes north of the capital. A total of six participants were interviewed and two site visits were performed at each school. The first visit was conducted directly after the three-day school leadership training in July, while the second one was conducted in the later part of October 2016. As mentioned in chapter two, Burkina Faso's educational system is derived from the French system. Students attend six years of primary school, four years of junior high school, and three years of senior high school.

The Schools

La Gloire School. La Gloire School was founded in 2011 and has 234 middleschoolers in Grade 6 through Grade 9. The school is located 20 minutes from Ouagadougou in a community of farmers. The area is economically dependent on agriculture. The proprietor of the school works as a head teacher in a private school in the capital city and teaches English at his middle school two days a week. He holds a bachelor's degree in English and a master's degree in marketing. The head teacher is the proprietor's friend and lives in the community where the school is located. The head teacher holds a bachelor's degree in sociology. The school was started after the proprietor of the school, who grew up in the community, saw the need for a quality middle school in the area. His uncle gave him the land to start the school. The school's tuition ranges from \$91 to \$108 per year.

Wendkuuni School. Wendkuuni School was founded in 2007 and has 527 students. The school runs from first to seventh grade. The school is located in Ouagadougou in a part of the city that is mainly Muslim. The proprietress of the school holds a diploma in accounting and works full time at the school. The head teacher has a teacher training certificate and works as a class teacher in addition to the responsibilities of head teacher. Prior to opening the school the proprietress worked in a company as an accountant. As a child, she wanted to be a teacher and open a school. She decided to follow her dream and opened the school with her husband's support. The tuition ranges from \$60 for the lower grades to \$109 per year for seventh grade.

La Grace School. La Grace School was founded in 2010 and has 102 students, from kindergarten to fifth grade. The school is located in Ouagadougou in a low-income community where there are many children and many well-established schools. Within one kilometer of the school, there were at least four private primary schools. The proprietress of the school holds a bachelor's degree in education and is a public school teacher. The head teacher is the proprietress' friend and holds a certificate in education. The proprietress started a school because in 2008 she saw children wandering in the community and wanted them to get an education. Her husband, a carpenter by profession, was supportive. The tuition ranges from \$33 for kindergarten to \$50 per year for fifth grade per year.

A summary of the schools in Burkina Faso is shown in Table 4.

Table 4

School Name	Date of Opening	Location	Grade Level	Number of Students	Tuition Per Year
La Gloire	2011	20 minutes north of Ouagadougou	Grade 6 to Grade 9	234	\$91-\$108
Wendkuuni	2007	Ouagadougou	Grade 1 to Grade 7	527	\$60-\$109
La Grace	2010	Ouagadougou	Kindergarten to Grade 5	210	\$33-\$50

Schools in Burkina Faso

In the next section, the findings are presented in order of the research questions.

Research Question 1

The first research question explored what learning, if any, participants transferred to their schools. For all three schools visited, the proprietors and head teachers interviewed provided numerous examples showing that learning transfer had occurred. As discussed in chapter two, the July training attended by the schools' proprietors and head teachers was comprised of four modules. Next, each module is used to categorize the findings. This is followed by examples from each module using the participants' comments verbatim and translated into English, as well as evidence from the review of documents such as photographs, pre- and post-training matrices, school improvements plans, mission statements, menus, and teachers' contracts.

The first module addressed how to Build a Culture of Learning. Topics such as creating a mission statement, having a school motto, creating an inviting school culture and including parents and communities in the school's life were discussed. Photographs showed that new banners with the school motto on them were made to increase the visibility of the school in two of the three schools. One leader stated: "Come and look at our new sign board, now the whole neighborhood knows where we are and who we are." Schools' proprietors and head teachers also reported improving the communication between the schools and the parents by organizing meetings to educate them on the school's mission and other activities of the school stating that it made the school "more intentionally inviting" and it helped to build "the trust between the school and the parents." Another participant exclaimed: "Now parents are happy, when we ask them to come for a meeting they see that we are progressing."

The second module on Health and Wellness dealt with topics such as nutrition, the importance of drinking clean water, and healthy hand washing practices. Photographs and post-training matrices indicated that there were changes made in the area of hand washing. School owners bought new buckets dedicated to hand washing. In two schools, proprietors shared that they gathered parents on Saturdays to talk about a healthy lifestyle and a balanced diet. One proprietor said: "Using our Participant Guide as evidence and visual, we talked about providing a balanced diet to our children. The parents were impressed and the meeting lasted for two hours, longer than I had anticipated." Another proprietor mentioned: "I talked to the outside food vendors and asked them to provide healthy foods such as boiled eggs, fish sandwiches, fruits and nuts instead of candies and biscuits." Photographs of these new food offerings were taken and field notes reflected this change. When asked why the proprietors and head teachers made all these changes, one leader expressed: "We learned that hungry children could not learn and that being hungry would affect both their health and academic performances."

The third module on Facilities and Safety was the one yielding most of the transfer of learning. School leaders reported changes in toilet facilities (Figures 1 and 2), colorful decorations in the classroom, painting of the classrooms, concrete coating of the walls, purchase of trash cans or designated trash areas in the school (Figures 3 and 4), improved windows, and overall cleanliness of the school grounds. One school also purchased new blackboards (Figures 5 and 6), new playground equipment (Figures 7 and 8), and built an additional classroom. When asked why they had made all these changes a proprietress shared: "We learned that students learn better in a beautiful environment with colors, light and all that so we painted and plastered the walls, made some decorations, made some of the windows larger and changed our black boards."

The last module was on Teacher Recruitment, Induction, and Professional Development. Schools related that they had changed their hiring practices. Before, they would hire based on the person's background and appearance. After the training they put in place processes, like using a selection committee, setting up interviews, giving the candidates tests in mathematics and French, the official language of Burkina Faso, and



Figure 1. Evidence from Burkina Faso: Toilet before training.



Figure 2. Evidence from Burkina Faso: Toilet after training.



Figure 3. Evidence from Burkina Faso: Trash before training.



Figure 4. Evidence from Burkina Faso: Trash after training.



Figure 5. Evidence from Burkina Faso: Blackboard before training.



Figure 6. Evidence from Burkina Faso: Blackboard after training.



Figure 7. Evidence from Burkina Faso: Playground before training.



Figure 8. Evidence from Burkina Faso: Playground after training.

checking the candidates' references. One proprietress said she was inspired by the case study activity in the module and now favors young teachers, "I need new blood in the school. In Africa, we tend to respect the old brother, the elder, but we cannot ask him to do what you want him to do." She felt that being a young proprietress, it is easier culturally to work with young people. Another participant confided that she used the interview questions in her Participant Guide to interview new teachers, "We now have a selection committee and used your interview questions to make our selection."

The first research question was: What learning, if any, do training participants (proprietors and head teachers) in Burkina Faso transfer to their Low-Fee Private Schools after completing the school leadership training modules? All three schools visited during this study exhibited evidence of having improved their schools after the training. There was, however, wide variation as to the level and depth of implementation. La Grace and Wendkuuni Schools were able to transfer far more than La Gloire School. It appeared that most of the transfer of learning that took place was linked to Module 3 on Facilities and Safety. Leaders, for example, ensured that their schools were painted, decorated, cleaned, and that there was sufficient light. The next section describes what factors inhibited and promoted learning transfer in the schools.

Research Question 2

The second research question sought to understand what inhibited or supported the transfer of learning in Burkina Faso.

Inhibitors to learning transfer. Interviews with participants conveyed that there were several factors that inhibited the transfer of learning. First, all participants spoke

about the financial challenge. All schools had received a loan and found it difficult to pay it back and improve their schools at the same time. One head teacher explained, "With the loan we must repay, it is hard to find additional money to make some changes in the school." Related to finances, enrollment was an issue in one case. La Gloire School had an incoming sixth grade class of nine students, which prevented the leaders of the school from building the new toilets they intended to construct. One of the leaders confided: "How can we make improvements with such a small sixth grade class which will feed the other grades next year?" In other cases, the lack of financial means prevented the school leaders from expanding, building additional classrooms, or buying land. La Grace School owner said: "Once we have more funds, I am ready to expand and buy the land next door." In one case, the lack of money made it impossible for the school to get electricity, which was "impeding getting quality teachers because they would want electricity to use the projector, make photocopies and so forth."

Another inhibitor to transfer revealed in all six interviews was a human behavior challenge, referring to the challenges pertaining to changing the mindsets and habits of teachers and parents. Several school leaders mentioned that it was difficult to gain the trust of parents and to make them "realize that we are trying to do a good job." One interviewee shared that "most of the parents are of Muslim faith and since I am running a Christian based institution, it caused frictions preventing the parents from trusting the team at school." This leader went on by saying: "The parents that are Muslim are not trusting us easily." Another leader stated that most of the parents at his school were illiterate, making it difficult to share with them what they had learned in the training:

"They would not see or understand the value of what we are sharing with them and it would be difficult for them to make adjustments." A third leader added: "It was hard to bring the teachers to share the same vision as us."

A third inhibitor for all schools was the competition of nearby private or public schools. In all schools, there were competitors nearby that charged less than the schools studied. As a participant explained: "Sometimes the competition is illegal competition because those private schools are not registered with the government and the government asked them to close in some instances but they would not listen and to date they are still operating." In one case, these competitors were believed to have practiced *juju* on the school. *Juju* is a West-African practice similar to witchcraft whereby animals or objects are used to hurt someone. Africans often fear the unseen spiritual world of juju, which includes curses, demons, and upsetting ancestors. In this study one school reported having been the victim of juju. The proprietress of Wendkuuni School shared:

One morning we arrived at school and there was a large pile of trash in the middle of the school yard. The guard wanted to move it away so our yard was clean to receive the students. Next thing we know the guard's foot was infected and all bloody. We went to the hospital but they told us that was not something medical doctors could fix. They said it came from somewhere else, you know, and they could not do anything for it. The guard almost lost the use of his foot. We care for him so I visit him every day and I help him with feeding and medical care. But because of this event, we also lost some students, you see, they went somewhere else.

Finally, one interviewee reported that he tried to recruit quality teachers, and this goal was in his School Improvement Plan, but he could not do it in his community. He had to hire people from the city, 20 minutes away, and he admitted that this brought issues of tardiness and safety. He shared: "The teachers are late, leaving the class

unsupervised and traveling by motorcycles on the Burkinabe roads for over one hour with traffic, is dangerous."

To summarize, in Burkina Faso inhibitors to the transfer of learning were financial, related to the need to change human behavior, and associated with competing school(s), which (a) took students from the schools involved in this study, and (b) in one case practiced juju on one of the employee of Wendkuuni school. Another inhibitor linked to the lack of finances concerned the recruitment of quality teachers because the proprietors/head teachers reported that trained teachers asked for costly materials, such as overhead projectors. All participants mentioned having financial and human difficulties as well as too many lawful or unlawful competitors. The next section addresses what enhanced the learning transfer to the school sites.

Enhancers of learning transfer. All six participants in Burkina Faso mentioned that the Participant Guide that was given to the participants during the training was "helpful" and "made it easy for us." They stated that the content was appropriate for their context and that it was "clear and well done." One leader said, "You people hit all the points we need in the Guide." All interviewees are still using the guide to either train others on it, or hold meetings with parents. All interviewees also commented on the pedagogy used during the training and in the Participant Guide. In Burkina Faso the pedagogy used is mostly one of *stand and deliver* where the facilitator speaks the entire time and the participants write and listen. For the leadership training the pedagogy was an active pedagogy whereby trainees would create their own knowledge by working in

pairs, in tables, having time carved out to reflect, engage in a case study, and write their School Improvement Plan (SIP) at the end of each day. One school leader stated:

The case study helped me to build my confidence and to identify with it. I came back to my school and started to hire younger people because in the case study I chose to hire a younger teacher despite the fact that everyone else in the group chose the old man who used the cane!

Others shared that they appreciated the "give and receive approach." And all commented, "We learned a great deal from each other and continue to do so by keeping in touch with each other by phone, or when time permits visiting each other school." One head teacher put it in these terms: "I liked the atmosphere and liked engaging with others in a relaxed way."

Related to the Participant Guide, all interviewees commented on the qualities and dispositions of the facilitator. They shared that she "was willing," "attentive," "she touched us and made us comfortable." One other person affirmed that she knew her content and was passionate. One proprietress added: "I memorized her words." A head teacher affirmed: "She made us feel like family, so we could share." Two study participants also added that the fact that the facilitator was white was beneficial. They believed that she had "something good to share" and hence they should learn from her.

All leaders also commented on the hotel facility as being comfortable and conducive to learning. All mentioned the meals they were served each day. "When we left in the morning to come, we did not eat but we arrived at the hotel and we were fed allowing us to focus on learning." One proprietor added: "I passed by this hotel but I always thought it was reserved for the big people, I liked it and we ate well." Moreover, one participant indicated that having a head teacher present at the training was facilitating transfer since "he is the person that is in charge of making things happen at school." Three other persons affirmed that having someone from previous cohorts come and give testimonials was helpful; "it allowed us to concretely see how to put into practice the theory we learned." All participants made reference of the certificate of completion that they received at the end of the training. They claimed the certificate gave them the confidence to improve their schools; one person affirmed, "You see now I have the certificate, that means I know something and need to show the others how to do it." Similarly one school had posted in their school office the group picture taken during the training and the leaders said: "We refer to it to give us courage and also to show teachers and parents."

In one instance only a school leader spoke about two other kinds of transfer enhancers. She spoke of her husband helping her to build an additional classroom and of the microlender who lent her additional funds despite the fact that she already had one loan. She said: "Since you first came, my husband built a new classroom for me and I went to the microlender to ask for more money because I wanted to make some changes that cost."

Burkinabe participants offered that what helped them transfer the learning to their schools was the Participant Guide, the pedagogy used to facilitate the training, the quality of the facilitation, the facilities in which the training was held, the certificate, and the group picture given at the outset of the training, as well as the testimonials from previous cohort members. One trainee also mentioned that having the leadership of the school attend the training was helpful to transferring knowledge. Other transfer of learning enhancers included support from family and from the microlender.

The data (interviews, site visits, photographs, and document analysis) pointed out that the three schools in Burkina Faso transferred some learning to their institutions since the July training. Two schools, Wendkuuni and La Grace, were able to put into action far more than the La Gloire School, which experienced enrollment issues among other challenges. All schools faced financial and challenges related to human behaviors. Additionally all three schools also dealt with substantial competition not only from the public schools but also from other private establishments. One school had issues with declining enrollment while others had an increased number of students since the July training. All school leaders spoke highly of the training and stated that the training, learning conditions, and the facilitator encouraged them to make changes at their schools. For example, all participants enjoyed the Participant Guide they received during the training. They declared that its content was relevant to their contexts and needs. They all appreciated the active pedagogy used, the hotel facility and its meals, the facilitator's content knowledge and her dispositions as well as the colleagues they met during the workshop. All leaders talked about the certificate of completion and explained that it gave them the confidence to improve their schools. Three mentioned that the testimonials of previous cohort members were encouraging them to transfer knowledge. Only one participant spoke about other kinds of transfer enhancers. The leader spoke of two key people who provided additional help: the proprietress' husband, a carpenter who

built another classroom for the school; and the local microlender who provided more capital, allowing her to make more changes at her school.

This section presented the findings from the case study in Burkina Faso. The next section addresses the findings from the second case study that took place in Ghana.

Ghana

Schools and Participants

A purposive criterion sampling was used to select three schools. As outlined in Table 5, all the schools were located in—or on the outskirts of—Kumasi, the capital of the Ashanti region in Ghana. A total of seven participants were interviewed and two site visits were performed, one before the three-day school leadership training in July and one in late October 2016. As mentioned in chapter two, Ghana's educational system derived from the British system. Students are in school six years for primary, three years for junior high, and three years for senior high. A summary of the schools in Ghana is shown in Table 5.

Table 5

School Name	Date of Opening	Location	Grade Level	Number of Students	Tuition Per Year
Nyame	2003	Kumasi	preschool- junior high	656	\$111-\$120
Akwaaba	2004	25 minutes outside Kumasi	kindergarten- junior high	774	\$18-\$20
Kwame International	2000	Kumasi	preschool- junior high	350	\$63-\$81

Three Ghanian Low-Fee Private Schools

The Schools

Nyame School. Nyame School was founded in 2003 and has 656 students from preschool, including crèche and nursery, to junior high. The school is located in Kumasi. Its proprietress, prior to serving as an early childhood teacher, was a businesswoman, as was her mother. They decided to open a school and gradually closed their business. The school started in the family's garage. The head teacher is the proprietress' son. He holds a bachelor's degree in psychology in education. The tuition at the school ranges from \$111 to \$120 per year.

Akwaaba School. Akwaaba School was founded in 2004 and has 774 students from kindergarten to junior high. The school is located in a modest farming community, 25 minutes outside of the city of Kumasi. The school has two proprietors who grew up in the same community. One of the proprietors holds a bachelor's degree in economics and sociology, a teaching certificate, and a Masters in Public Administration. He does not work at the school. He is also one of the decision makers in several organizations in the community. The other proprietor works at the school as the head teacher, holds a diploma in business, and is a sub-chief in the community. The director of academics is younger and holds a high school diploma. The school started from the desire to provide the community with a quality low-fee private school. The tuition at the school is \$18-\$20 per year.

Kwame International School. Kwame International School was founded in 2000 and has 350 students from preschool to junior high. The school is located in Kumasi, near a large university. The proprietor of the school is a reverend and holds a

Ph.D. in Rural Development. The head teacher is the reverend's wife and holds a certificate in education. Kwame International is a church-affiliated school that was started by the church to educate the children of the congregation. The tuition ranges from \$1.50 a day all inclusive (food and bus) for preschool to \$63-\$81 per year for kindergarten to junior high.

Next the findings are presented by research question. This case study has an additional research question. The third research question sought to understand to what extent the use of technology after the training enhanced learning transfer.

Research Question 1

The first research question explored what learning, if any, participants transferred to their schools. For all three schools visited, the proprietors and head teachers interviewed provided considerable examples that learning transfer had occurred; however, similar to Burkina Faso, there was also a disparity as to the level and depth of implementation. Below are examples of transfer from each training module using the participants' comments verbatim as well documents as sources of data.

The first training module on Building a Culture of Learning dealt with topics such as creating a mission statement, having a school motto, creating an inviting school culture, and including parents and communities in the school's life. Photographs showed that improved mission statements were displayed around the schools using banners or, in one case, the mission was typed on a sheet of paper. One proprietor also shared that "the Girl Scouts Cadets Club now goes to the community to perform so that everybody can enjoy the performance and the community knows about our school." Another leader mentioned that they reinstated the Parent Teacher Association (PTA) after having stopped it for three years "because parents were arguing." The proprietress added: "Now PTA meetings at the school serve as an informative platform and a way to engage parents in the education of their children." Additionally, in order to foster the parent engagement at the school, the leaders of Nyame School created a new homework diary so that "the parents are aware of what is expected of the child each day." Based on the school improvement plan that the schools developed during the training, the school also improved upon their school creat and their school uniforms. The proprietor indicated "We made our school creat and uniform better so that we are distinctive in the community and recognizable." During the post-training site visit, photographs and observations indicated that the school creat and the uniforms both had the motto of the school on them.

The second training module focused on Health and Wellness and addressed issues of hygiene and nutrition. One participant reported that his school improved their school menu by adding vegetables in the stews they had prepared and by educating the parent community on best practices around nutrition during a Parent Teacher Association meeting. He also started to talk to the kitchen staff about their roles at schools and educated them and the teachers on nutrition.

After the training the first thing we did is organize a PTA meeting to introduce parents on the best way to feed their children and we were able to have a health professional identify the local resources that are available, so instead of buying an apple from Kumasi, parents know what they can get locally as a substitute.

Another leader said that they had enhanced the menu by reducing the number of times *banku* was served. She shared while pointing at the menu: "You see now we have

a better menu, we add things to it other than *banku*." *Banku* is a traditional carbohydrate made of fermented corn and cassava. *Banku* is served with soup. Instead of serving *banku* every day, the food is now varied with yams or other local options depending on what is available in the markets. This leader also made her kitchen staff "wear a uniform with the ladies wearing a cap to avoid food contamination" as shown in Figures 9 and 10. All participants made mention of the new or improved hand washing stations (Figures 11 and 12). One person expressed, "Now we are using hand washing stations where water flows, so the water does not stay contaminated." Photographs verified that leaders of two schools had purchased new containers for the water to flow, as opposed to using basins in which the water stagnated. Other schools improved on the frequency the children washed their hands: "We make sure they wash their hands before eating, bathroom and after they play. We have someone that checks on that as best as she can."

The third training module focused on Facilities and Safety. Participants and photographs revealed improvements in the areas of water storage, signage for visitors to know where to go, fencing the perimeter around the school for safety, and purchasing age-appropriate desks and chairs as well as buses to allow student to arrive at a school safely and on time. One leader shared:

Since the training, we have been able to fence part of the school to improve the security. Sometimes you see a farmer passing through the school or a cow . . . we do not want to wait until something happens to take security measures.

Others made new signs outside their institutions or made signs for the different classrooms in the school, "You see now you know where to go in the school we have labeled every classroom." All schools enhanced their classrooms by either purchasing more Teaching and Learning Materials (TLM), adding video players, or buying new ageappropriate tables and chairs for the children as displayed in in Figures 13 and 14. One proprietor commented, "You see, now we bought televisions so children can watch TV at the end of the day and we changed our desks so that they are now colorful and age appropriate. Before the children were not seating properly." One school leadership team also upgraded the cleaning of its toilet facilities.

We used to clean once in the morning and once in the evening but now the janitor cleans every 30 minutes. We are also now thinking of bio-gas, using the excrements to fuel our kitchen to reduce our gas costs.

The fourth module addressed topics of teacher quality, recruitment, induction, and

professional development. Leaders reported changing their practice by having the new

teachers sign a contract and by improving the interview questions used during the

recruitment process. Additionally, they provided teachers with a written job description.

The analysis of teacher contracts corroborated this finding. Another proprietor added:

We also learned about appointment, [and] recruitment of teachers. We now give the teachers appointment letters for the period of one year where we indicate some responsibilities and activities the teachers are supposed to do. Before it was not documented.

One last leader stated:

We now focus on the recruitment of certificated teachers, before we hired based on a meeting, now we give them a test in math and English to test their skills and then we meet them to see if they have what it takes to be a teacher at our school, and I use the interview questions from the [training] guide to help me with the interview.

School leaders also implemented new practices such as creating a salary scale, or

regular teacher appraisal. Nyame school leaders stated: "We now go to the classrooms

every day to see how they teach."



Figure 9. Evidence from Ghana: Kitchen uniform before training.



Figure 10. Evidence from Ghana: Kitchen uniform after training.



Figure 11. Evidence from Ghana: Hand washing station before training.



Figure 12. Evidence from Ghana: Hand washing station after training.



Figure 13. Evidence from Ghana: Student desk before training.



Figure 14. Evidence from Ghana: Student desk after training.

The first research question was: What learning, if any, do training participants (proprietors and head teachers) in Ghana transfer to their Low-Fee Private Schools after completing the school leadership training modules? All Ghanaian schools visited demonstrated evidence of learning transfer. The amount of transfer varied among the schools. Nyame and Akwaaba Schools were able to transfer more than Kwame International School. Leaders, for example, bought new and healthy hand washing stations, furniture, and signage or banners of their schools. Most of the learning of transfer was from Modules 2 and 3 on nutrition and facilities and safety.

Research Question 2

The second research question sought to understand what inhibited or supported the transfer of learning in Ghana.

Inhibitors to learning transfer. Study participants cited several inhibitors preventing them from transferring the new knowledge to their schools. The first inhibitor was financial, having to repay a loan while charging low tuition. "The challenge is we have to pay every month the loan, but we are committed to do that to be able to get a second loan to do something significant." One participant even shared that having a more balanced diet at school for the children is costly for the school: "We often run the food part of the school at a loss and sometimes the proprietress has to put in her own money to cover it."

Furthermore, participants stipulated that they met complications pertaining to people's (or staff's) behavior. Specifically, leaders talked about teachers as being reluctant to adapt to higher expectations and lady cooks resisting wearing a cap. "It was

hard for the cooks at first to re-adjust to new rules, and wear their caps." One younger leader spoke of the human behavior problem in different terms saying that he "felt intimidated sometimes bringing up ideas to his superiors because they were far older" than he was and "culturally that was a challenge." This young leader referred to the power issues and dynamics inherent in Ghanaian culture. Related to both the financial and human challenges, all participants spoke indirectly about the competition they were facing, stating that "if we raise our tuitions, parents will leave the school and go next door."

Another inhibitor to learning transfer had to do with what a participant called "not knowing what you do not know." One proprietor explained that fencing his school had a significant impact on the parents.

They were happy and congratulated the school for taking such a safety measure. However, it was much harder to get recognized when we taught the parents about the food pyramid. You see the fence parents can see and measure its impact, the food they cannot see the results immediately and since they are not educated, they did not know what we taught them and if they had not come to the meeting, they would not have known what they were missing out.

The proprietor continued:

If a proprietor has the choice between making a change that is visible and informing on nutrition that people have no idea on, they would choose the visible change for marketing purposes . . . that in itself creates a challenge because they choose what to transfer according to the impact it will have most on the finances of the school.

This leader spoke about the choices other leaders make regarding what knowledge

to transfer to the schools and which ones would be most immediately visible and

financially beneficial on the short term.

The last challenge that was brought up was of a logistical nature. When the training took place in Ghana in early July, the schools were still in session, making it challenging for the leaders of the school to transfer later. One head teacher said: "It would be better during the vacation because our minds are more free."

Similar to Burkina Faso, all Ghanaian school leaders faced financial and human behavior issues. Unlike Burkina Faso, leaders in one school also mentioned the timing of the training as an issue. They felt that trainings should be offered during the holidays to allow for better transfer. Another finding was the fact that people tend to transfer new knowledge when it is visible to the customers and can immediately have an impact on income. The knowledge that people do not know may be less important since people do not know what they do not know; not realizing the value of the new knowledge at first, hence discouraging leaders to transfer some of the new knowledge. Besides the challenges, proprietors and head teachers also mentioned multiple factors that assisted them in transferring the learning to their institutions.

Enhancers of learning transfer. Participants praised the content of the training modules. According to them, the modules were adequate for their context. One participant described the modules in these words: "The materials were good papapapapa." In Twi, one of the local Ghanaian languages, *papa* means a lot, and this proprietress was speaking about the quality of the training modules. Another leader said: "The reality was there for us in the books" and "made us realize what we do not have." They appreciated the activities, the reflection questions that "forced us to think;" the homework and the School Improvement Plan (SIP). The SIP was "a gateway for us,

allowing us to see where we should go next." Another leader added: "The SIP helped us to stick to what we told you we would do." All enjoyed the pedagogy used and appreciated networking and working with every participant throughout the training. "We learned a lot from each other and heard what other[s] did or what problems they had." They all commented on the "good atmosphere" during the training. One participant also noted the discipline of the training referring to the punctuality. She shared, "I liked when the punctual people were rewarded at the end. I now use this method at my school for the teachers." Additionally, everyone noted that the Ghanaian facilitators were competent and "knew where to touch." Finally, everyone enjoyed the hotel facility and the service and the food. One leader described the training facilities in these terms: "The service, the food were good and all for free oooooo." In West Africa locals often add "oooooo" at the end of a sentence to accentuate what they mean. In this case the school leader was applauding the fact that the food and the training were good and free of charge.

All three schools in Ghana transferred some learning to their institutions from the July training. Two schools, Nyame and Akwaaba, were able to put into action far more than Kwame International School. All schools faced multiple challenges. All confronted financial inhibitors and human challenges. All schools appreciated the training materials, the facilitators, and the pedagogy used. They all enjoyed the facility and the daily meals. All leaders interviewed also believed that the WhatsApp intervention helped them to transfer their learning. The third research question addressed if and how the mobile

technology intervention used after the training in Ghana enhanced the transfer of learning.

Research Question 3

The third research question sought to examine the extent to which the use of mobile technology after the training enhances learning transfer. As explained in chapter three, data were collected twice weekly starting two weeks after the end of the training in July 2016. The intervention started on July 22, 2016, and ended on September 19, 2016, for a total of nine weeks. On Mondays participants answered a yes/no question while on Fridays they answered an open-ended question. There were a total of seven yes/no questions and nine open-ended questions. The questions were all related to the content of the four modules taught during the three-day leadership training. All six of the participants in the study participated in the WhatsApp group; however, all training participants who owned a smartphone were invited.

Participation in the WhatsApp group. A total of 23 participants agreed to be part of the WhatsApp group by signing a form and providing their phone numbers at the end of the July training. Out of a universe of 23 people, 13 overtly participated by answering at least one of the seven yes/ no questions or one of the nine open-ended questions. Seven yes/no questions yielded 42 answers and the nine open-ended questions generated 22 comments. While the yes/no answers yielded more participation, the open-ended questions such as "How have you made your school more inviting this week?" allowed participants to share rich answers, videos, and photographs. The seven open-questions are listed in Appendix G.

Out of seven study participants, four participated actively in the intervention. This number is explained by the fact that there were three leaders from Akwaaba School at the July leadership training and, prior to the start of the WhatsApp intervention, the leaders of this school decided that one person from their school would be communicating their collective answers on the platform. The other two leaders were reading and discussing the questions among each other but there was one spokesperson to report the school leaders' answers and contributions. The four participants commented 18 times on the seven yes/no answers and contributed 11 times to the nine open-ended questions. One person was particularly active answering all yes/no questions and missing only four of the open-ended questions. Appendix G provides additional details regarding the numbers of answers and outlines how many participants responded to each of the yes/no and open-ended questions.

The study participants unanimously stated that the WhatsApp intervention was helpful to transfer new knowledge after the training for several reasons. They commented that it allowed them to learn from each other, and it reminded them of the training, its content, and the School Improvement Plans. The intervention also encouraged and motivated the participants to put into action what they had learned during the training. Even those who did not know how to type stated that it was "brilliant and very helpful."

Network and peer learning. WhatsApp allowed the workshop participants to share information and "encouraged those who were not responding to questions to sit up." A woman leader added: "Comments from my colleagues always draw my attention

back to what was learned at the workshop. The answers given were helpful and made us conscious of what others were doing. We got ideas and copied some ideas." Most participants shared that they were happy to hear from colleagues after the training, keeping "the good atmosphere beyond the training." Finally, one leader shared: "Despite the fact that I never wrote anything on the platform I was reading all the messages and learned a lot from the others that way."

Reminders, peer pressure, motivation, and encouragement. All leaders suggested that WhatsApp was motivating because of the peer pressure. When leaders saw photographs on the phone of what colleagues improved in their schools, they would be inclined to do the same and share their progress on the platform. A proprietress stated:

When I see other schools making so many changes, I must make some too! I liked what some of my colleagues did and I must now try to do the same at my school. If they can do it, why can't I? I must at least try and show them.

Another participant affirmed, "I do not go to the others' schools but I see pictures they send and it helps me to change too." Two other participants made similar statements with one stating: "Usually after training, people feel reluctant to use what was learned but this gave us pressure and motivation and it always reminded us to do what we set to do." Participants also commented on the encouragement they would receive from other participants and from the group moderator when new learning was transferred: "We felt encouraged because you [the researcher] wrote to us and asked us more questions when you did not understand or wanted us to share more."

Norms and structure. All participants appreciated that the norms, listed in Appendix E, were clear and given before the intervention started. One of the norms

stated that the WhatsApp platform was to use as a professional group only and hence everyone was to use a professional tone. One leader referred to the norms as "nothing to waste." According to him the norms promoted learning by staying on task. Two leaders stated that people who did not respect the rules were "detractors" and they appreciated when the researcher intervened and restated the rules immediately. He stated it in this way: "Let us stick to the reason for what the group was created. Not everyone is fan on what others are posting."

All participants shared that they enjoyed the structure of the questioning and the quality of the questions. They enjoyed receiving a yes/no question on Mondays when it was busy and the open-ended questions on Fridays when they had the weekend to read, think, and respond.

I was always eager to see what message you [the researcher] sent even if I could not look at work. I would go home and look at what you sent because I knew to expect a message on certain days.

WhatsApp beyond the training. After this intervention, all participants stated that WhatsApp should be used for all trainings. Two participants indicated that they would like to use WhatsApp in their own work and with their teachers using the application to ask the teachers a few questions prior to their weekly teachers' meeting. "I thank you because now I will use this with my teachers and this will force them to prepare before a meeting."

The data indicated that participants perceived WhatsApp as being a useful tool to enhance the transfer of learning because it enabled them to learn from each other, reminded them of the workshop, and of their school improvement plans and encouraged them in general. They shared that the photographs other leaders posted on the platform encouraged them to transfer learning to their schools, referring to it as peer pressure. According to the participants, WhatsApp appeared to be an efficient way to follow-up with workshop participants post-training. It helped participants remember the goals they had set for themselves and reminded them of the content of the training. When participants were prompted on whether or not WhatsApp had any disadvantages, nothing was mentioned. This could come from the fact that for many participants this was the first time they attended a leadership training and used WhatsApp as a tool to follow-up after the training; hence they did not have any basis for comparison or criticism.

Summary of Findings

The findings of this study indicate that learning transfer occurred in all three schools in Burkina Faso and all three schools in Ghana. Table 6 summarizes the factors that enhanced and inhibited the transfer of learning in Burkina Faso and Ghana.

As Table 6 shows, factors that supported the transfer of learning in both countries included the location and logistics of the training, the facilitator's content knowledge and disposition, the adequate content of the training, the active pedagogy used, as well as testimonials given by other cohort members. In Burkina Faso, the certificate of completion presented to all participants at the end of the three-day training as well as the testimonials given by an alumnus seemed to have supported the transfer of learning as well. When given a certificate of completion and hearing testimonials, participants perceived that they were more competent, felt confident, and were motivated to transfer the new learning to their schools. In Ghana, WhatsApp appeared to have played a similar

role as the testimonials in Burkina Faso and appeared to have facilitated the learning transfer to the schools.

The findings also revealed key challenges to learning transfer. The inhibitors in both countries were not only financial but also associated with (a) human behavior, (b) competition, and (c) culture. Leaders from one school in Ghana referred to the scheduling of the training as being an issue as the training took place while the school was still in session.

Conclusion

This chapter presented the findings in narrative form with accompanying tables. In the following chapter, these findings will be further discussed. Table 6

Summary of Findings

Findings	Reasons		
Transfer of Learning Occurred in			
All Six Schools			
Enhancers to learning transfer	1. Facilities in which training took place were		
	conducive to learning.		
	2. Content knowledge and dispositions of facilitators.		
	3. Appropriate training content and training guide.		
	4. Active pedagogy		
	Group discussions.		
	• School Improvement Plans (SIPs).		
	• Case study.		
	5. Others (Burkina Faso only):		
	• Testimonials.		
	Certificates of Completion.		
	6. WhatsApp intervention (Ghana only):		
	Motivator		
	• Reminder		
	Peer Learning		
	Peer Pressure		
	Vicarious learning		
Inhibitors to learning transfer	1. Financial:		
-	• Loan to repay.		
	• Decreased in enrollment.		
	• Lack of equipment results in difficulties to hire		
	and retain quality teachers (Burkina Faso only).		
	2. Human Behavior:		
	 Challenges associated with changing mindsets and habits. 		
	• People value what can be seen.		
	• People do not know what they do not know.		
	3. Competition:		
	• Competition from other schools.		
	Competition inside school.		
	 Practice of juju associated with competition 		
	(Burkina Faso only).		
	4. Cultural:		
	 Interacting and working with elders. 		
	 Juju (Burkina Faso only). 		
	5. Logistical: Timing of training (Ghana only).		

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This final chapter begins with a summary of the findings and a restatement of the problem statement, research questions, and procedures. This is followed by a discussion of the findings and conclusions. Finally, the chapter presents the recommendations for practitioners, Non-Governmental Organizations (NGOs), governments, policy makers, and further research. The chapter concludes with the significance of the study and the researcher's reflections.

Summary

The purpose of this study was to better understand the role that learning transfer plays in the learning process. This study sought to examine if, and how, proprietors and head teachers of LFPSs were able to transfer newly acquired knowledge to their school sites after having participated in a three-day leadership training in Burkina Faso and Ghana, West Africa.

Problem Statement

Every year billions of dollars are spent worldwide on training, yet there is little evidence of knowledge, skills, or behaviors in the work place or at home (Baldwin & Ford, 1988; Broad & Newstrom, 1992). In the education field in Africa and despite the 921 million dollars spent on aid—31% of which was sent to Sub-Saharan Africa between 2010 and 2012—there is no significant indication that the monies provided produce improved student-learning outcomes (UNESCO, 2015). This illustrates, in part, the lack of support and attention that governments, policy makers, educators, facilitators, and trainers have placed on training and learning transfer (Awoniyi, Griego, & Morgan, 2002; J. K. Ford, 1994).

Research Questions

This study was based on the following three research questions: (a) What learning, if any, do training participants (proprietors and head teachers) in Burkina Faso and Ghana transfer to their Low-Fee Private Schools after completing the school leadership training modules? (b) What inhibits or supports the transfer of learning in these settings? (c) For Ghanaian participants, how, if at all, does the use of mobile technology after the training enhance learning transfer?

Procedures

The study utilized a qualitative case study design whereby the qualitative data were collected and analyzed to better understand if learning transfer occurred among the school leaders who attended a three-day leadership training. Initial and in-depth interviews with school proprietors and head teachers were conducted and various documents were collected and analyzed. In addition, a follow-up mobile intervention was used in Ghana. This chapter begins with a discussion of the study's key findings and how these findings relate to the literature on learning transfer and the theories that underpin it.

Discussion of Findings

Chapter four provided the details of the findings from this study. This chapter presents the interpretation of the findings and how they relate to the literature on adult

learning transfer. The chapter is organized by two overarching themes that emerged from the data analysis.

Barriers to Learning Transfer

The literature on learning transfer outlines what inhibits and promotes the transfer of learning. Scholars have written extensively about what inhibits the transfer of learning (Broad & Newstrom, 1992; Caffarella, 2002; J. K. Ford, 1994; Hung, 2006; Illeris, 2009; Knowles, 1980; Lightner et al., 2008; M. C. Taylor, 2000; Thomas, 2007). According to Broad and Newstrom (1992), inhibiters to learning transfer may come from (a) the program participants themselves if they lack motivation and prior knowledge; (b) the training material and its content; (c) the follow-up; and (d) the external cultural and social contexts. The following section presents the findings that concur with the current literature on learning transfer as well as the findings that are complementing the existing body of literature.

Transfer that is visible to others is more valued. In this study, all 13 school leaders from both Burkina Faso and Ghana were able to transfer some learning after the three-day leadership training. Although there was evidence of transfer related to all aspects of the four modules studied, much of the visible transfer was related to improving the building facilities. Painting a building, buying new chairs and hand washing stations, or labeling classrooms only require knowledge, money, and time. Heifetz (1994) refers to these as solutions to technical problems, as they can be fixed with expertise and good management. The school leaders learned in the training that beauty was linked to improved student outcomes, they learned that signage increased the visibility of their

schools, so they made those changes in order to attract more parents and students. One of the leaders from Akwaaba School in Ghana understood and spoke about the urge to transfer first and foremost the knowledge that produces visible changes because customers understand and are attracted to changes that they can see immediately. He explained that other changes that require a behavior or mindset change, what Heifetz would refer to as adaptive work, are far more difficult to tackle because they involve changes that do not usually yield additional customers in the short term. School leaders in this study were mostly interested in making short-term changes, because they had loans to repay and often lived modestly themselves. In providing this example, this school proprietor was explaining the difference in mindsets and priorities in Ghana and the importance of understanding those variances when examining the learners' abilities to transfer new knowledge to their schools. This finding supports Broad and Newstrom (1992) who denote the cultural and social contexts as possible inhibiters to learning transfer. Related to the idea of transferring first what is visible, is the idea that people cannot transfer or teach to others what they do not know themselves.

"People do not know what they do not know." As the subheading statement made by a participant indicates, another barrier to the transfer of learning that all participants noted was related to human behaviors. All participants mentioned the difficulties they had to transfer new knowledge when it involved changing mindsets, changing habits, or setting higher expectations for their staff, teachers, and parents. This human behavior challenge also explains why transferring what is visible first was preferred. Broad and Newstrom (1992) and Knowles (2000) addressed the lack of prior knowledge as a barrier to the transfer of learning, and Caffarella, (2002) discussed the necessity for trainers and facilitators to be culturally sensitive and to understand the local norms, traditions, and cultures in order to facilitate the transfer of learning. This was found to be the case in both Burkina Faso and Ghana. Also, in both countries the idea of changing mindsets and habits was an additional challenge to transferring knowledge, particularly when it came to changing eating habits. This is explained by the fact that: (a) people are not aware of what a balanced meal is and why it is needed (lack of knowledge); (b) people cannot afford eating a balanced diet (financial issue); and (c) people eat what they grew up eating, what they perceive as being healthy foods and necessary to eat (mindset and habit). People eat food to feel full, preferably food that will fill their stomachs for long periods of time and foods to which they have a cultural and emotional connection. Many participants joked and said that if they ate a balanced meal but did not eat *fufu* at each meal, they felt like they "did not eat anything." *Fufu* is a staple food in West Africa and is made out of cassava and green plantain. One participant further explained:

You see, I understand what you are telling us about eating a balanced diet, but here in this region of Ghana, unless you eat *fufu*, it feels like you have not eaten. For me, I grew up eating fufu. In other regions, people eat rice or banku but for my tribe it was fufu.

This study showed that because of traditions, beliefs, cultures, and sub-cultures, mindsets are particularly difficult to change, hindering the development of the schools. Broad and Newstrom (1992) speak about the complexity of making changes within an organization. Changing mindsets is a complex task and requires leadership. Adaptive leadership is necessary in African schools to alter deeply rooted beliefs and transform mindsets. Adaptive work involves a disparity between values and circumstances and the role of the leaders is to close that gap. In order to close the gap between values and circumstances, leaders need to be trained and acquire the skills and knowledge necessary to undertake this difficult task. Additionally, to tackle adaptive challenges (i.e., the ill-defined problems) leaders need to know their competition (Heifetz, 1994).

Knowing the competition. Another barrier to transfer mentioned in all schools was competition from other schools. As mentioned in chapter four, some of the schools were registered with the government and others were operating unlawfully. Heifetz (1994) proposes that staying close to the competition prevents work avoidance and hence promotes progress. Work avoidance stops leaders from doing the harder tasks that adaptive work requires. An example of work avoidance would be to avoid conflicts, given that conflicts create stress and demand work to mediate them. In this study, all schools were surrounded by other public or private schools and found it challenging for several reasons. For example, competitors would attract away students from schools in this study creating a decrease in enrollment for La Gloire School in Burkina Faso. This decrease in enrollment meant a heavier financial burden for La Gloire and the inability to transfer much knowledge due to a lack of financial support.

As noted in chapter four, in one case in Burkina competitors sometimes would practice *juju* on the school. That school reported having been the victim of this witchcraft practice. By putting into danger the life of a school employee, the school leaders incurred added costs to temporarily replace the injured employee and to care for him. Additionally, the institution lost some students to the competing schools during this period because people learned about the *juju* spell that was cast against the school.

School leaders ought to know their competition in order to understand their school's value proposition. For example, leaders ought to seek to understand why they have empty seats in their schools. They also ought to comprehend who and where their competition is so as to set their school tuitions accordingly. Finally, leaders ought to manage the internal and external conflicts that are resulting from the competition in order to improve their schools. Leaders could prevent conflicts by finding ways to stay close to their competitors, by perhaps partnering on certain after-school offerings, sport tournaments, or other activities.

In another instance, the "competition" was not coming from other schools but from within the school. In Nyame school the competitors were the two senior school leaders who were older than the Director of Academics. In this case, the younger leader spoke about the challenge of sharing new ideas with his leaders because they were elderly. He shared that because of the top-down leadership, "It is culturally inappropriate when a younger person brings new ideas." Hence, he viewed his leaders as competing against him.

The last significant barrier to learning transfer that emerged from the findings was the lack of capital.

Finance matters. All participants noted that lack of funds prevented them from implementing more changes in their schools after the training. All school leaders interviewed had a loan to repay and found it challenging to transfer new knowledge to

their schools because many of the changes needed involved some level of investment. Finances as a barrier to learning transfer is largely absent from the literature because western scholars wrote the literature on adult learning transfer based on western organizations. In this study, leaders of low-fee private schools in these two developing countries shared their daily struggle to serve families with limited financial means while wanting to provide a quality education in an improved environment. During the first site visit in July, La Grace School in Burkina Faso was in a dying state. There were no toilets, black boards were falling apart, there was no playground area, and the students' desks were dilapidated. However, after convincing the local microlender, the proprietress was able to secure a second loan, and when the researcher visited three months after the training, the school was a different place and had a different feel to it. There were colors on the walls, toilets, new black boards, a new classroom, and a new playground with equipment in good working condition. The fact that the microlender gave the proprietress a second loan saved the school from closing. Today, the school is thriving, parents are complimenting the leadership team, and the school's enrollment has increased despite the fierce competition that surrounds the institution. The next section addresses what enhanced learning transfer in the two case studies.

Enhancers of Learning Transfer

Knowles (1980) outlined a few fundamental elements required for learning transfer to occur. First, the learners need to be self-motivated. The learners also need to be willing to reflect, collaborate, and engage in conversations and disagreements. Mezirow (2000) further suggests that learners need to engage in transformative discourse in order to question their assumptions and gain new knowledge. To do that, learners need to be willing to learn differently and participate in learner centered pedagogies, including problem solving, case studies, and role-plays. Learners ought to be open to collaborating, ready to reflect, and interested and ready to listen to and discuss other points of view. According to Broad and Newstrom (1992), there are other elements that enhance learning transfer such as the organization of the training including the length, time, and location. The authors further affirm that the facilitation (pedagogy and training activities), the quality of the facilitators, the adequacy of the training materials and the changes required to apply learning within the organization are also essential to enhance learning transfer.

Facilitators and facilitation. As far as what enhances learning transfer in Burkina Faso and Ghana, participants mentioned the quality and dispositions of the facilitators. The facilitators were knowledgeable, approachable, fostered a climate of trust, and used varied pedagogies that allowed for group work and reflection. These findings are in agreement with J. K. Ford and Weissbein (1997) and Mezirow (2000). Facilitators also understood the local context and were aware of the struggles that school leaders faced. These findings concur with the current literature on learning transfer (Broad & Newstrom, 1992; Closson, 2013; Daloz, 1999; Harper & Ross, 2011; McGinty et al., 2013). Participants also appreciated the positive feedback, the encouragement, and the collaboration among participants and between participants and facilitators, which supports Lave and Wenger's (1991) theory of situated cognition whereby learners progressively become experts as they collaborate with the professionals. Additionally, the interviewees spoke highly of the student-centered teaching strategies used, such as the case study in Module 4, and the School Improvement Plan at the end of each day. Those findings are supported by the literature and are applicable to the developing countries studied (J. K. Ford, 1994; McGinty et al., 2013). In particular, McGinty et al. claim that adrenaline improves the memory of the experience, and thus activities that include positive experiences, such as the student-centered activities used in the leadership training, create memories and augment the propensity for learning transfer to happen. In this study, the facilities in which the trainings took place played a role in the ability of the participants to transfer the new knowledge to their schools because it created positive memories.

Facilities. All participants appreciated the facilities in which the training was offered. They stated that it "was conducive for learning" and "the foods that was served during the morning snack and mid-day lunch were delicious and all for free." Authors such as J. K. Ford and Weissbein (1997) as well as Merriam and Leahy (2005) and M. C. Taylor (2000) speak about the importance of the conditions for learning. The findings of this study concur with the transfer of learning literature when it comes to the environment as being key to learning and to the transfer of knowledge. Two elements surfaced in this study that have not yet been addressed in the literature on adult learning transfer. Data demonstrated that the awarding of a certificate of completion and the testimonials given from alumni encouraged participants to transfer the new learning to their schools.

Certificate of completion and testimonials. Six participants made mention of the certificate of completion they received as being significant for them to transfer knowledge. The certificate gave the participants pride and confidence that they were able

to transfer the new knowledge. The certificates may be essential in emerging countries because many adults do not have access to a formal education or do not have the opportunity to attend trainings. Leadership trainings in Africa are rare for both public and private school leaders, but especially for low-fee private schools leaders. Hence, the certificate may not only have a symbolic value to the leaders but it may also provide them with a certain status. The leaders who did not overtly speak of the certificate had it posted in their office.

The other element that emerged from this study and that is absent in the literature on learning transfer is the use of testimonials. Half of the school leaders insisted that having school proprietors and head teachers who received the training prior to them come to share with them how they used the training in their schools was helpful. These testimonials allowed the trainees to ask questions and see concretely how to apply the knowledge and hear about the benefits the changes yielded for those from previous cohorts. Only half of the sample spoke about this because only the participants in Burkina Faso had an alumnus from the training come to have lunch with them. Thus far, it is not a practice that has been adopted by the facilitators in Ghana. Such findings suggest that testimonials are important in these contexts and the practice of inviting alumni to trainings could be adopted in other countries if appropriate. Few Burkinabe participants shared that they visited the alumni's school. The last element that seems to have enhanced learning transfer is the technology intervention in Ghana.

"WhatsApp was brilliant, it forced us to sit up." As the subheading statement made by a participant reveals, WhatsApp appeared to have enhanced learning transfer in the Ghanaian schools because it encouraged the participants to put into action what they had learned during the training. With the exception of Broad and Newstrom (1992) and Cafarella (2002), who points out that follow-up is needed and could be done, in the Western countries, with blogging, listservs, etc., the use of technology as a follow-up after a professional development event in order to improve learning transfer is absent from the current learning transfer literature. In this study, the researcher sent conversation triggers twice a week on a predetermined schedule and according to adult learning best practices, such as allowing time for reflection (Mezirow, 2000). All questions asked were related to the modules studied during the three-day leadership training. On Mondays participants received a yes/no question allowing them to view the topic of the week and respond quickly while on Fridays they received an open-ended question allowing them to reflect on the question over the weekend and respond on their own time.

The WhatsApp intervention in Ghana allowed trainees to remain in contact with each other and share with each other via text messages the changes they had made in their schools after the training. One school leader, for example, shared on the platform photographs of a parent meeting he had organized at his school. The meeting aimed at educating the parents on healthy eating habits. The leader posted photos and videos of the meeting on the platform. Some participants complimented him on the initiative via text messages, others asked him questions on the initiative, and a few participants did not say anything but copied his idea, as the researcher later discovered during the follow-up in-depth interviews. This example illustrates that the participants were engaging each other in transformative discourse, allowing them to question their assumptions and gain new knowledge. This finding concurs with Mezirow's Transformative Learning Theory, in which critical reflection eventually leads to a transformation in perspective and new learning. This finding also reveals that learners learned from their peers not just during the training but also during the follow-up mobile intervention, whether they overtly participated in the WhatsApp dialogues or not. In the 1960s, world-renowned psychologist Albert Bandura spoke of observational learning (Bandura, Grusec, & Menlove, 1966). Observational learning occurs when children and adults learn by observing others' actions and behaviors. In the adult learning transfer literature, authors such as Caffarella (2002) and Holton and Baldwin (2003) discuss learning as being a social process and hence learning communities, collaboration, and interactions among participants are crucial to learning and its transfer. Lave and Wenger (1991) recommend creating communities of practice, in which people from the same professions share ideas and learn from each other, with the novice observing the most experienced people. Thus, even without active participation in the WhatsApp group, there is evidence of vicarious learning.

The mobile intervention also reminded participants of what they had learned and supports the literature suggesting that mobile technology may be used as a way to remind students of content (Quinn, 2015). Participants also reported being motivated by the text messages they received and by the answers their colleagues would post. Motivation is crucial to learning transfer as indicated by authors such as Knowles (1980) who wrote about how adults learn best. This finding also corresponds to the meta-analysis study by

Valk et al. (2010), in which text messages were reportedly motivating the recipients to learn more and increase their access to informal education. Finally, this study also confirms Swaffield et al.'s (2013) findings in that texting could be a way to support the leadership capacity of school leaders as it is the preferred method of communication in many developing nations. The text messages refreshed the knowledge acquired during the training and inspired them to do more at their schools.

A concept that was not found in the mobile technology literature and may be unique to Ghana, is the notion of peer pressure. All interviewees mentioned "peer pressure." They stated that text messages and pictures shared on the platform allowed them to see what their colleagues were doing and forced them to do something as well. One possible explanation for this phenomenon is that all school leaders initially see each other as competitors and do not always want to share their ideas or best practices at the start of the training. It is only after the facilitators make them feel comfortable and when they start working in groups that they open up and share. Therefore, it is not surprising that seeing what others did on the WhatsApp platform motivated them to do more. In this case, the peer pressure motivated them.

Another concept absent from the literature is the importance of setting norms. Participants spoke of their appreciation for having had norms and rules at the beginning of the intervention. They valued that the rules were enforced and people were reminded of them when someone using the platform broke them. The interviewees also valued the structure of the questions, the timing, and the wording. Based on the findings of this study, even though some participants did not actively participate in the WhatsApp intervention (i.e., they did not overtly respond to the questions or did not post pictures and videos), their learning was vicarious. Learning happened through observations, reading, and/or listening to the materials posted on the platform. Whether learning happened vicariously or not, the WhatsApp intervention stimulated learners and fostered new learning to occur. This finding coincides with Valk et al. (2010), whose study outlines that mobile technology can promote new learning to occur. This concept of vicarious learning using text messages is important when trying to achieve the Sustainable Development Goals (SDGs) related to achieving education for all and equity among genders.

The WhatsApp post-training intervention appeared to be valued in Ghana and to have contributed to learning transfer after the training. WhatsApp motivated the participants, encouraged them, and reminded them of the knowledge acquired during the training. Because group texting was the medium chosen for the interactions to take place, a professional learning community and network was created enabling participants to learn vicariously from each other and make improvements due to the peer pressure. This study indicates that the use of mobile technology intervention post-training such as WhatsApp could prevent training relapse, in which trainees lose their motivation and/or the knowledge, hindering the transfer of learning.

Conclusions

This study sought to answer three questions posed in chapter one about learning transfer. Specifically, this study aimed to examine if, and how, proprietors and head

teachers of LFPSs were able to transfer newly acquired knowledge to their schools sites after having participated in a three-day leadership training in Burkina Faso and Ghana, West Africa. The narrative of school leaders helped increase our understanding of this phenomenon. The first major finding was that trainees were transferring more elements that were visible to their customers because those visible changes do not require a behavior change and hence are easier to implement. The second finding revealed was the resistance to change when it came to altering mindsets and deeply rooted traditions. Another challenge was the competition, coming from inside or outside the institution. Findings also suggested that what promoted learning transfer were quality facilitators, active learning and teaching strategies, adequate materials and facilities as well as the follow-up WhatsApp intervention.

Implications

This study demonstrated that transfer of learning did occur to some extent among head teachers and proprietors of low-fee private schools. This transfer, however, is sometimes limited due to financial, human behavior, competition and cultural challenges. To address those factors, approaching learning transfer as an adaptive leadership challenge may be useful. In particular there is a need for adaptive leadership work in Burkina Faso and Ghana. Adaptive work is key for the types of challenges that the two countries studied faced when transferring new learning. Adaptive work is more arduous than technical work because it always requires trust among all stakeholders, which is difficult to acquire when changing traditions and habits are involved. In leadership trainings in West Africa, it is essential to teach the leaders to think critically and to give them tools and strategies to tackle adaptive problems that require mindset and behavior changes. The leadership of the schools needs to be trained on how to ask critical questions as well as how to reflect on their own behavior and the power and authority inherent in their positions in order to identify the real issues at hand. The leaders in this study are used to an authoritarian, top-down approach to leadership whereby the person in charge decides for everyone. They are, however, ready and willing to learn other strategies to make lasting changes and improvements in their schools for the benefit of their nations. This confirms the Bush and Oduro (2006) research on African leadership, which states that school leaders in Africa are often not trained and frequently do not have the skills necessary to manage their schools . Next, the researcher offers recommendations aiming at improving both the transfer and the school leadership.

Recommendations

The researcher offers recommendations based on the findings and conclusions of this exploratory study. The recommendations that follow are for: (a) practitioners; (b) NGOs, governments, and policy makers; and (c) for future research.

Recommendations for Practitioners

Based on the findings, practitioners and consultants who prepare materials for developing countries ought to prepare those materials based on the local needs, not based on their Western ideas of what is needed. Being in the field, interviewing stakeholders, visiting sites, and having evidence-based materials are essential. Reflecting on the materials and modifying them based on the trainees' feedback is not just crucial but a sound practice based on adult learning and learning transfer theories (Cafarella, 2002; Mezirow, 2000). Development expert Josh Ruxin (2013) talks about the importance of working "in the mud." By this he means it is crucial to be with people on the ground to create materials that locals need, allowing them to transfer the new knowledge to their work place and hence have a sustainable influence. This practice avoids aid colonialism whereby Westerners have started development initiatives only to find out that when they left, the efforts stopped and—even worse—divided the communities, just like the colonizers did. Being in the mud also allows for better understanding of the local cultures, power dynamics, and belief systems. In this study, the material used during the training was piloted, modified, and contextualized based on hundreds of interviews with the local school leaders and with local trainers, scholars, and leadership experts.

Secondly, because of the lack of leadership training offerings in both Burkina Faso and Ghana, there is a need for additional culturally responsive leadership modules that address leadership principles, such as tackling adaptive challenges and building a trusting team. School leaders ought to also be trained on assessing their competition, doing market studies, and how to have productive healthy relationships with their competitors. Additionally, more training modules or workshops ought to be developed on topics such as how to set tuition fees and marketing.

Thirdly, the learning transfer literature clearly states that follow-up post-training is needed in order to prevent relapse. The follow-up can take several forms: whether it is through establishing a Special Interest Groups (SIG), a Professional Learning Community, or whether it is through virtual coaching using Skype, WhatsApp, or any other virtual platforms. The follow-up could contain several mediums depending on its purpose. The follow-up could include questions such as the ones used in the mobile technology intervention in this study or via virtual quizzes based on the training content.

Because of the affordable cost of data in West Africa and because it is the preferred way of communicating for people who own a smartphone, WhatsApp or any other platforms could be systematically used post-training to follow-up after a professional development activity. WhatsApp allows for everyone to have access to knowledge anytime, enabling men and women to learn equally at their convenience. To efficiently use WhatsApp or any other platforms with a group of trained people, the following steps are worth considering:

- In order for a technology to reach its intended goals, it must be designed for the context in which it is proposed to function and with the assistance of locals involved in the intervention.
- 2. Create a handbook for the moderators of a virtual platform such as WhatsApp. This handbook could include examples of group norms, questions, responses, conversation triggers, and feedback as well as examples of prior conversation that yielded learning and transfer. The handbook would also explain how long a group should be in existence based on its purpose and how to end it when needed.
- Choose and coach a group moderator. The coaching would include: understanding how to set up a WhatsApp group, outlining the purpose of the

group and its rules, as well as communicating with the group a list of prerequisites. For example, one has to have a smartphone with the WhatsApp application loaded on their phones. Other information would include details on how to use WhatsApp, how to type on the phone, and provide resources for those novice participants who are not technologically savvy. The moderator would then pose a series of questions on a determined schedule with a determined set of questions or conversation triggers. It may also be the case that the moderator just posts some articles, videos, or audio messages depending on the goal of the group. Ideally the messages are varied between text, audio, and video.

4. It may be beneficial for the moderator to ask that participants set up alerts on their phones because in Africa most people have several phones, which can lead to message overload or forgetting to check messages on a particular device. These alerts would notify the group members when a message arrives.

Based on the findings from chapter four, for trainings in emerging nations, trainers, consultants, and facilitators should consider having trainees from previous cohorts come to give testimonials to the newly trained cohort. This practice could serve as the beginning of a Professional Learning Community that could be followed-up upon using mobile technology. Successful alumni of the trainings could become group moderators for the mobile technology follow-up intervention.

Lastly, for anyone who works with adults anywhere in the world teaching or facilitating trainings and/or meetings, it would be beneficial to understand the key

concepts of learning transfer, as well as the adult learning theories used as conceptual framework in this study.

Recommendations for NGOs, Governments, and Policy Makers

Because of the Millennium Development Goals (MDGs) and now the Sustainable Development Goals (SDGs), \$2.3 trillion has been spent on foreign aid in the last 60 years (Myers, 2011). To ensure that investments made do not turn into dead investments, and that development initiatives are sustainable once the Westerners leave, the following recommendations are aimed at all funders and supporters of development initiatives.

To begin, and in the case of working with microlenders in developing countries, whenever possible, microlending institutions should establish creative ways to serve their clients so that the loan repayment matches their clients' activities and challenges. For many schools, repaying their loans is challenging, but it is even more difficult during the second semester when crops have been sold and parents do not have money anymore for the school's fees. Tiered pricing could be instituted. Perhaps the struggling schools could repay more of their loans when the parents are able to pay the school fees and repay less when there is less revenue. Or perhaps in the startup phase of a school's creation, there could be a grace period allowed under certain terms so that the school has the opportunity to focus on building sound infrastructures and attracting more students before repaying the loans. Another solution would be for school leaders who are successful to pay a higher interest once their schools are established, allowing beginning schools to pay less interest, a sort of "a la carte" model of financing based on the needs and capacity to repay of each school proprietor. Additionally, based on these findings,

school leaders need to be further educated on how to set their school's tuition, how to keep accurate and secure records, how to budget, and how to market their schools. Further trainings should also address effective leadership practices and sound business practices.

For NGOs that organize trainings, it is advisable that the trainings are offered at the best possible time for the intended participants. Additionally, it is essential that trainings be held in quality facilities with adequate learning conditions, as seen in the learning transfer literature. Furthermore, given the impact the certificates had on the trainees' confidence, status, self-worth, and on the transfer of learning, it would be important to give each participant a certificate. This could mean that the participants who attend the entire training receive a certificate of completion, while the others who attend one day out of three receive a certificate of attendance for the topic they attended. While this puts an additional burden on organizers, as they would have to customize the certificates in some cases, it is worth considering this practice.

Finally, for policymakers, governments, and anyone in charge of organizing trainings, workshops, or gatherings, getting familiar with the learning transfer and adult learning literature is recommended. Without understanding how adults learn and how best to enhance learning transfer, there will be little return on investment. For an effective use of time and money and to develop sustainable programs, it is essential that trainers and curriculum designers understand adult learners, their needs, their cultural context, and how to help them be successful in transferring the new knowledge. It is only possible to meet the Sustainable Development Goals of achieving quality education for all and achieving gender equality and empowering all women and girls if monies are invested properly and trainings are led effectively with learning transfer in mind.

Recommendations for Future Research

Other longitudinal studies should examine how to enhance learning transfer and avoid relapse over longer periods of time. Additionally, with a larger sample, crosscomparative studies should be conducted in both Burkina Faso and Ghana.

Further research could include creating WhatsApp or Viber groups to follow-up after professional development events in different countries where participants have smartphones. More research could investigate the online group differently. For example, using a predetermined time for everyone to answer a conversation trigger on a given day at a given time might be one strategy. Another strategy could have participants being asked to give their answers every Saturday for four weeks from 3 to 4 p.m. This gives the moderator a window of time whereby he/she is online, and it gives participants some incentive.

Further research could also investigate how a platform like WhatsApp could be utilized using different modes of communication, whether it be sending audio text messages, sending videos, links to articles for trainees to read, or even using the WhatsApp new feature: video calling. Other research could examine other ways these types of electronic platforms are used in different countries, the content of the intervention, length, and examine how long a group should last. Additional studies could also seek to understand how local school leaders could become WhatsApp group moderators by exercising distributive leadership and what it means to be leading their peers, given their culture. Finally, more studies could be conducted to investigate how other emerging countries might differ when it comes to the barriers or enhancers of learning transfer.

This final chapter summarized and discussed the study's findings and conclusions. These insights can be used to create and deliver trainings around the world that take into consideration learning transfer from the moment of curriculum development to the delivery and follow-up.

Significance of the Study

The findings from this study begin to fill the void in the literature regarding adult learning transfer among leaders in education in developing countries. The study is significant for any non-profit organization, government agency, or organization whose goal is to assist educational growth in developing countries. This work is most valuable for educators, trainers, curriculum designers, policy makers, and governmental agencies that provide funding or labor to developing countries around the world to provide quality education. This study explained that learning transfer concepts can be applied every time two people are interacting: Learning transfer concepts can be applied in meetings, teaching, coaching, mentoring, and supervising. Applying learning transfer concepts and following up on them would not only ensure that training funds are well spent but would also ensure that schools benefiting from microloans repay their loans, ultimately enabling the sustainability of the microlending institutions, the schools, and the NGO providing the funds. Since the new Sustainable Development Goals aim to provide quality education for all by 2030, it would be helpful to ensure training funds are well spent and learning transfer strategies followed.

This study demonstrated the value of examining learning transfer and the possible ways to enhance it around the world, particularly in Burkina Faso and Ghana. This study also formed a bridge between scholars and practitioners, as it shed some light on the importance of including learning transfer in the design of any curriculum in any field or area. Additionally, it informed practitioners on using a mobile technology platform to follow-up on professional development interventions.

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APPENDIX A

Research Participant Consent Form

University of San Diego Institutional Review Board

Research Participant Consent Form

For the research study entitled: Low-Fee Private Schools in West Africa: Case Studies form Burkina Faso and Ghana

I. Purpose of the research study

Corinne Brion is a PhD student and Graduate Assistant in the School of Leadership and Education Sciences at the University of San Diego in the United States. You are invited to participate in a research study she is conducting. In July 2016, during your training with Edify, you participated in the first part of our research study. I am now investigating what learning from the training modules has been applied to your school.

II. What you will be asked to do

If you decide to be in this study, you will be asked to:

- 1) Have an interview with the researcher.
- 2) Take the researcher on a tour of your school.

III. Foreseeable risks or discomforts

This study involves no more risk than the risks you encounter in daily life.

IV. Benefits

When we complete the research we will give your school a copy of the findings. An indirect benefit of participating in this study will be knowing that you helped researchers, and eventually others, better understand the needs and practices of schools in Burkina Faso / Ghana.

V. Confidentiality

Any information provided and/or identifying records will remain confidential and kept in a locked file and/or password-protected computer file in the researcher's office for a minimum of five years. All data collected from you will be coded with a number or pseudonym (fake name). Your real name will not be used. The results of this research project may be made public and information quoted in professional journals and meetings, but information from this study will only be reported as a group, and not individually.

VI. Compensation

You will receive no compensation for your participation in the study.

VII. Voluntary Nature of this Research

Participation in this study is entirely voluntary. You do not have to do this, and you can refuse to answer any question or quit at any time. Deciding not to participate or not answering any of the questions will have no effect on your relationship with Edify or with any organization that Edify works with. It will have no impact on the children or teachers in the school. **You can withdraw from this study at any time without penalty.**

VIII. Contact Information

If you have any questions about this research, you may contact:

Dr. Paula Cordeiro, Dissertation Advisor <u>Email</u>: cordeiro@sandiego.edu <u>Phone</u>: + 1 619-260-4282

Corinne Brion, PhD Candidate <u>Email</u>: corinnebrion@sandiego.edu <u>Phone</u>: +1 541-531-3770

I have read and understand this form, and consent to the research it describes to me. I have received a copy of this consent form for my records.

Signature of Participant

Date

Name of Participant (Printed)

Signature of Researcher

Date

Name of Researcher (Printed)

APPENDIX B

Matrices

Matrices

Module 2: Healthy Lifestyle Health Care Matrices

Directions: Tick the box that applies to your school.

1. At school, breakfast is available to purchase.

Yes	No	Comments

2. Snacks are available to purchase for students throughout the day.

Y	es	No	Comments

3. **Students have a vegetable option for food they purchase at school.**

Yes	No	Comments

4. Students have a fruit option for food they purchase at school.

Yes	No	Comments

5. Students have a protein option for food they purchase at school.

No	Comments
	No

6. Water is cleaned and/or purified for drinking.

Yes	No	Comments

7. Students and teachers have access to clean water throughout the day.

Yes	No	Comments
105	110	Commences

8. Students are encouraged to drink a sufficient amount of clean water throughout the day.

Yes	No	Comments

9. Students have time to exercise or play while at school.

Yes	No	Comments

10. Students come to school well rested (not tired or sleepy).

Yes	No	Comments

11. The school provides health checks for the students throughout the school year.

Yes	No	Comments

12. A trained health professional visits our school.

Comments

13. A trained health professional checks students' hearing.

	Yes	No	Comments
L			

14. A trained health professional checks students' vision.

3	Yes	No	Comments

15. The school has professionals who work with children with mental health issues.

 The behood h	us protession	
Yes	No	Comments

16. The school has a clean and safe space to treat students' and people's minor injuries, and for those who are sick.

Yes	No	Comments

17. The school has materials and/or medicine to treat students.

Yes	No	Comments

18. Students are required to be immunized and/or the school arranges for students to be given immunizations.

No	Comments
	No

19. The school keeps track of who is sick, what diseases people have, and who has been treated.

Yes	No	Comments

20. Students are taught how to take care of their teeth.

Yes	No	Comments

21. Students are taught how to take care of their bodies and keep them clean.

Yes	No	Comments

22. Students and staff have a place to wash their hands throughout the day.

Yes	No	Comments

Module 3: Facility and Safety Matrix

Directions: Tick the box that applies to your school.

School Construction

1. The buildings on my school campus made of durable and weather resistant materials.

Yes	No	Comments

Toilets

1. Toilets are cleaned daily.

••	I offets are er	canca dany.	
	Yes	No	Comments

2. Toilets are located away from eating and learning areas.

 I onets ure to	eatea away n	om cuting und rear ming ar cus.
Yes	No	Comments

3. Toilets have door that can lock from inside.

•	I onets have	uoor mat cun	
	Yes	No	Comments

KITCHEN

1. The kitchen staff is trained in nutrition, safety and hygiene.

Yes	No	Comments

2. The kitchen has good ventilation.

	No	Comments

3. The kitchen area is separate from sanitation facilities (toilets) and classrooms.

No	Comments

CLASSROOMS

1. The classrooms in my school have good ventilation (e.g., fans, natural breeze).

No	Comments

2. There are no food, trash, or other odors that are noticeable in the classrooms.

No	Comments

3. There is enough light in the classrooms, for pupils to be able to see and work well.

No	Comments

4. There are sufficient supplies and TLM for teachers and students (chalk, books, paper, textbooks).

No	Comments

5. There is enough room in the classroom to re-arrange desks and chairs so that students can work in different types of groups.

biut	students can work in anterent types of groups.		
		No	Comments

6. There are chalkboards/white boards in the classrooms.

No	Comments
	INO

7. Pupil desks and chairs are in good condition.

No	Comments

8. There are pictures, posters, or paintings on the classroom walls.

	No	Comments
L		

9. The noise from outside entering the classroom is minimal and/or managed.

No	Comments

OUTDOORS

1. There is a sign directing visitors to a place where someone working at the school can greet them.

No	Comments

2. There are signs around the school that direct people to different areas.

	No	Comments

3. The name of the school is displayed as you enter the school.

No	Comments

4. There are pictures, posters, or paintings on the outside walls.

p.	No	Comments

5. There is a designated place to discard of trash that is located far away from where food is prepared and served and from classrooms.

No	Comments

6. There is a fence/wall that surrounds the school property.

	No	Comments

7. There is shade outside for pupils and teachers.

No	Comments

Transportation and Emergency Procedures

1. We have transportation procedures for how students, cars and busses enter and exit the school campus.

No	Comments

2. We have an emergency procedure in case there is a fire.

ts

3. We have an emergency procedure in case there is an intruder or a medical emergency.

No	Comments
	No

APPENDIX C

Basic Information Sheet

Basic Information Sheet

Kumasi, Ghana

October, 2016

Date:_____

Training Location (circle one if applicable):

Name:

Current Position in School (circle one):

Proprietor Head Teacher

Other leadership position:

How many years have you been in your current position?

Name of School:

Location:

(city/town)			
Does the school have a Head Teacher? (Circle one)	Yes	No	
What year was the school founded?			
Were you the founder of the school? (Circle one)	Yes	No	
Number of Students:			

Grade Levels: Circle all that apply and estimate how many children at each level:

Crèche/nursery	Kindergarten		
P1	P2	P3	
P4	P5	P6	
JHS1	JHS2	JHS	53

Tell me about your educational background. Do you have a high school diploma? College/university diploma? Other training? If yes, in what subject area?

Please circle your age group: under 30 31-40 41-50 51-60 over 60

APPENDIX D

Interview Guide

Interview Guide

Use School Improvement Plan completed in training to probe:

There is no right or wrong answer; your honest answers help us to improve the training for future participants.

- A. What are some things you learned in the training?
 - Do you have a mission statement?
 - Do you have a copy of your SIP?
- B. Tell me about any changes that have happened in your school since the last training.
 - Probe related to the facility, hiring teachers. Who have you worked with on that? Have you created a committee related to that? Can you provide me with **examples?**
 - What challenges, if any, have you encountered?
- C. You have told me about some changes that you have made in your school. Why did you make these changes? Can you give me an example of how it was helpful? And what was helpful to make the changes?

Challenges?

- D. Do you currently use technology in your work as a proprietor / Director? How?
 - For Ghana participants: Did you use the Whatsapp group?
 - If yes, How?
 - How did it help you, if at all? Motivation? Reminder? Encouragement?
 - How did WhatsApp assist you being in contact with others?
 - Do you recommend we use WhatsApp again for future trainings?
 - If yes, why and how?
- E. You came to the training, you told me you learned.... Do you think that your school would be different today if you had not had the training?

APPENDIX E

WhatsApp Group Norms

Good afternoon,

As a reminder, I am a student in my last year at the University of San Diego, California. I am pursuing a doctoral degree in Leadership Studies. The purpose of my research is to examine what learning from the three-day leadership training, if any, you are able to transfer to your schools. To accomplish this, I need your help.

In the next 2 weeks, I will be sending you a text invitation to a WhatsApp group called *Kumasi 2016 Professional Learning Community*. Please be sure you have the WhatsApp application downloaded and working. The purpose of this Professional Learning Community is to network and continue to learn from each other as well as provide me with the data for my research purpose.

Each Monday for the next 8 weeks, I will send you one question relating to your learning in our leadership training.

On Friday of that same week, I will send you a reminder to answer the question using WhatsApp.

Please respond to the questions honestly. Your honest answers are key to the success of this research and the development of a successful Professional Learning Community (PLC). Please feel free to ask questions of me, or of each other, that might clarify how you might be transferring what you learned from your leadership training. Be sure to share with the group your successes and challenges. You are welcome to download pictures and/or videos of your accomplishments as well.

Our WhatsApp group norms:

1. The purpose of creating this PLC is to pursue our professional development ONLY so please don't use it to write about other topics such as politics, personal items, or social/ church events, etc.

2. Please be sure to use a professional tone.

3. If you send videos or pictures, please be sure they are focused on improvements you are making at your school(s).

4. Everyone is highly encouraged to participate and share. I would like to hear from each of you weekly and see some engaging conversations/pictures and videos when possible.

I thank you for your time and participation and I look forward to hearing from you on WhatsApp.

Corinne Brion

Corinnnebrion@sandiego.edu

APPENDIX F

Follow-Up With Mobile Phone Intervention Questions

Follow-Up With Mobile Phone Intervention Questions

Questions to be sent by text via WhatsApp in Ghana.

One question per week for 8 weeks:

Purpose: To examine if SMS enhances learning transfer.

1st week:

- **Friday before intervention starts:** Have you started implementing your SIP? Please respond YES or NO.
- If you have not been able to implement your SIP, please share why.
- **Monday of intervention:** Do you think your school is more inviting now as a result of the Edify leadership training you attended in July? Please respond YES or NO.
- Friday: How have you made your school more inviting this week? If you made any changes add any photos and/or videos of what you have changed.

2nd week:

- **Monday:** Do you think your school facility/ campus is better now as a result of the Edify leadership training you attended in July? Please respond YES or NO.
- **Friday:** What have you done since the training to improve your school facility/ campus?

3rd week:

- **Monday:** Do you think the recruitment/induction process at your school is better now as a result of the Edify leadership training you attended in July? Please respond YES or NO.
- **Friday:** What have you done since the training to improve the recruitment/ induction of quality teachers at your school?

4th week:

- Monday: Do you think your school is unique? Please respond YES or NO.
- **Friday:** What have you done since the training to make your school unique that would cause parents to want their child to attend?

5th week:

- **Monday:** At your school, have you seen more evidence of student learning now as a result of the Edify leadership training you attended in July? Please respond YES or NO.
- **Friday:** What have you done since the training to improve student-learning outcomes?

6th week:

- **Monday:** Do you think your quality teachers will remain at your school? Please respond YES or NO.
- **Friday:** What have you done since the training to keep quality teachers in your school?

7th week:

• What healthy food will your school serve/are you serving for this new year?

8th week:

• In what ways will you help your teachers and students make healthier choices in the new school year?

9th week: Monday 9/19/2016

Was the WhatsApp group helpful to you? Why and How?

APPENDIX G

Answers to WhatsApp Intervention

Number of participants answering the Yes/ No questions.

Week of Intervention	Yes/No Question	Out of 13 Active Participants
Introductory question	Have you started to implement your SIP?	2
First week	Do you think your school is more inviting as a result of the Edify leadership training you attended in July?	7
Second week	Do you think your school facility is better now as a result of the edify leadership training you attended in July?	8
Third week	Do you think the recruitment/ induction process at your school is better now as a result of the Edify leadership training?	6
Fourth week	Do you think your school is unique?	5
Fifth week	At your school, have you seen more evidence of student learning now as a result of the Edify leadership training?	5
Sixth week	Do you think your quality teachers will remain at your school?	9

Number of participants answering the open-ended questions

Week of	Open-Ended Question	Out of 13 Active
Intervention	1	Participants
First week	How have you made your	3 (some videos and pictures
	school more inviting this	by one participant).
	week?	
Second week	What have you done since	3
	the training to improve your	
	school facility?	
Third week	What have you done since	Nothing
	the training to improve the	
	recruitment/ induction of	
	quality teachers?	
Fourth week	What have you done since	2 (each of these participants
	the training to make your	sent pictures)
	school unique that would	
	cause parents to want their	
	child to attend?	
Fifth week	What have you done since	Nothing so I sent a
	the training to improve	voicemail on WhatsApp
	student-learning outcomes?	then 1 answer following the
		voicemail
Sixth week	What have you done since	2
	the training to keep quality	
	teachers in your school?	
Seventh week	What healthy food will you	4
	serve at your school?	2
Eighth week	In what ways will you help	3
	your teachers and students	
	make healthier choices in	
	the new school year?	
Ninth week	Was the WhatsApp group	5
	helpful to you? How?	





Institutional Review Board Project Action Summary

Modifications Required or Reasons for Non-Approval

None

The next deadline for submitting project proposals to the Provosit's Office for full review is NA. You may submit a project proposal for extercited review at any time.

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