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MODERN VERSUS TRADITIONAL TEACHING METHODOLOGIES: AN EXPERIMENTAL DESIGN

A Project

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Doctor of Educational Ministry

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by

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An undertaking of this magnitude impacts the entire family; therefore, I would be remiss if I did not dedicate this work to my lovely and loving family. Specifically, to our children, Mitchell, Emily, Harrison, Dianne, and LeeAnn, who have given up “Daddy time” on many occasions to allow me to work on this paper.

Finally, to my beloved wife, Stephanie, who despite suffering through the ravages of cancer, including many surgeries, chemotherapy, radiation treatments, and reconstruction, has lovingly stood by my side and continued to support my efforts.

TABLE OF CONTENTS

Page

LIST OF TABLES AND FIGURES vi

PREFACE vii

Chapter

1. INTRODUCTION 1

Context 1

Rationale 3

Purpose 6

Goals 6

Research Methodology 6

Definitions and Limitations/Delimitations 7

Conclusion 10

2. THE BIBLICAL FOUNDATION FOR TEACHING 12

The Old Testament 12

The New Testament 16

Varied Teaching Methods 22

Conclusion 34

3. EDUCATION AND TECHNOLOGY: A BRIEF HISTORY 36

Educational Technology 37

Education in Ancient Civilizations 38

Methodologies 46

Chapter Page

Hardware and Software 50

Conclusion 54

4. ELEMENTS OF THE MINISTRY RESEARCH PROJECT 55

Goal 1 55

Goal 2 58

Goal 3 60

Conclusion 65

5. EVALUATION OF THE PROJECT 66

Introduction 66

Evaluation of the Project's Purpose 66

Evaluation of the Project's Goals 67

Strengths of the Project 74

Weaknesses of the Project 78

What I Would Do Differently 79

Theological Observations 79

Personal Reflections 80

Conclusion 81

Appendix

1. AGREEMENT TO PARTICIPATE IN A STUDY 84

2. INSTRUCTIONAL PRINCIPLES OF COMENIUS 85

3. QUALITATIVE SURVEY 87

BIBLIOGRAPHY 92

LIST OF TABLES AND FIGURES

Table Page

1. Education technology timeline 52
2. Age distribution 56
3. Descriptive statistics 62
4. Levene's test of equality of error variances 62
5. Box's test of equality of covariance matrices 63
6. Multivariate tests 63
7. Difference 64
8. Rate of change 64
A1. Primary questions 87
A2. Attitude toward technology 89
A3. Methods 89
A4. Comfort level with technology 89
A5. Difference primary question 1 90
A6. Differences primary question 2 91
A7. Differences primary question 3 91

Figure

1. The stages of the development of writing 44
2. Results 64

PREFACE

I am thankful for the undying support of many people who provided me the opportunity of working toward a Doctor of Educational Ministry degree. I am thankful to my family, who have provided encouragement and prayers throughout this process. I am thankful for a mother who saw the need for education and encouraged me along the way from childhood until now. I am especially thankful to my wife, Stephanie, who in sickness and in health has been a great source of strength and encouragement.

I grateful to The Southern Baptist Theological Seminary, for accepting me into a doctoral program, even though I had no previous seminary training. During the process, Southern developed in me a solid theological and doctrinal foundation. I am thankful for the patience and guidance of my supervisor, Dr. Danny Bowen, as he oversaw this project, I truly would have been lost without him. One of the best decisions I made during this project was using Betsy Fredrick as the editor my project, I am very appreciative of her work.

I am thankful to the members of LWBCE, Kentucky, who supported me in many ways; without them, this project could not have been possible. It is my honor and privilege to be their pastor. I pray that this project will benefit our church and bring glory to God. Finally, I want to thank Dr. Jay Owens who was a great help to me during the completion of this project.

Harold Noble

Elizabethtown, Kentucky

May 2019

CHAPTER 1

INTRODUCTION

The Scriptures encourage education and the pursuit of wisdom. Clearly, God intends for His people to obtain wisdom so that they will not be fooled by false teachers (Eph 4:11-14). God created the human mind to continuously learn, grow, and mature in knowledge, wisdom, and skill. In the process of growing from childhood to adults, human thinking and reasoning processes change, developing with the increase in knowledge and, hopefully, discernment. An important part of the maturing process is formal education. A proper education, however, is not a given or an automatic process; rather, an education must be pursued and obtained through diligent hard work. With the thought of pursuing education in mind, this ministry project was designed to determine if teacher-training can be done as effectively using modern technology as with traditional in-person teaching methods.

Context

Living Word Baptist Church Elizabethtown (LWBCE) in Elizabethtown, Kentucky, was planted in July 2017. As with most new church plants, there were many needs, and one of the most pressing was the need for trained Sunday school teachers. A weak Sunday school program is a serious obstacle to church growth and the absence of trained teachers exacerbates the problem. LWBCE requires that teaching positions be filled by persons who are properly vetted and trained. The trained teacher shortage seen as a clear hindrance to church growth. Thom Rainer supports the idea that a strong Sunday school program is prevalent in a healthy church, he states, “The data is in, and it is difficult

to dispute the facts. Sunday school is alive and well in healthy churches across America."[1] Rainer's statement is not intended to be prescriptive, however, it is an observation of what exists in healthy churches.

The big question was, how does the church get trained Sunday school teachers? The simple response is to recruit members who want to be teachers and then train them. The recruiting part of the equation turned out to be a non-issue because several church members eagerly volunteered to serve as teachers, however, all were untrained. The more difficult part, and the reason for this study, was determining the best method to train current and future Sunday school teachers.

With the demographics of the church being mostly Generation X and Millennials, with the largest group being Millennials, it appeared prudent to tailor teacher training program to meet the needs of these groups. While training programs and books are available for teacher and leader training, they do not appear to be well suited for the members of LWBCE. Generation X and Millennials generally have a strong propensity toward the use of electronic technologies. This propensity is so strong that the Millennials in the congregation seem to have a strong dislike for lessons that depend solely on printed materials. The best solution to reach the targeted population effectively appeared to be a technology rich educational environment. Accordingly, this project focused on discovering the most effective training methods, which meant determining if self-directed technology-based learning was as good as traditional teaching methods in teaching content.

The Scriptures direct believers to be diligent in obtaining understanding so that misleading doctrine will be rejected. Colossians 2:8 says, "See to it that no one takes you captive by philosophy and empty deceit, according to human tradition, according to the elemental spirits of the world, and not according to Christ" (ESV). To effectively meet

[1] Thom Rainer, "The Pastor: Key to A Vibrant, Growing Sunday School," *Enrichment Journal*, Fall 2002, accessed March 27, 2017, http://enrichmentjournal.ag.org/200204/200204_016_pastor_key_ss.cfm.

this biblical directive, it was important to determine the most effective teaching methodology to use in church training programs.

As I discussed the training concept with the founding church members, they immediately acknowledged the urgent and critical need for trained teachers, which they believed was one of the keys to growing a healthy church. They also endorsed the proposed study to determine the best method for the training of teachers. The church leadership team also recognized that there would be some challenges to overcome with a project of this nature, such as, what information should be included in the study curriculum, the depth of the study, what combination of technology would be the most effective, and how much time would the study participants be required it invest.

Across the decades, churches have embraced new technology, using it to enhance the worship service. Likewise, it would be prudent to adapt technology into the Sunday school teacher training program. For the church to remain viable and reach the younger generations, it should adapt the approach of training to a manner and style that enhances the student's ability to learn. It is, therefore, advisable that Christians embrace and apply appropriate technology in teacher training programs.

Rationale

Now that LWBCE is firmly established, the focus of the church is on the issue of developing teachers. When the church was established it only had a few qualified teachers, which was scarcely enough to meet the current requirements. While LWBCE does have volunteers to fill teaching positions, they remain unqualified because no formal educational program has been instituted. In developing a fresh teaching program to equip them, their preference for technology over printed material should inform the method of training.

For many Millennials, the mere thought of sitting through a typical teacher training class with printed text may be enough to prevent them from teaching. Like any specialized field of study, the study of God's Word has its unique set of words,

references, and concepts. The challenge is how to convey this plethora of information in a creative and interesting way to a group of individuals who have shortened attention spans due to the massive infusion of technology and entertainment over the past few decades. Mike Rappaport states, "It is not the short attention span or undisciplined minds of the young that is causing this. Instead, it is the technology that promotes these behaviors that is the primary cause."[2] The answer, especially for younger students, appears to be a technology-rich learning environment. Technology has the tendency to deepen learning by using resources with which the students are familiar and find interesting. A properly designed curriculum has the right mix of technology inspiring students to learn.[3] According to the United States Department of Education, a technology-rich education environment should be the goal in practically all educational activities:

> Technology ushers in fundamental structural changes that can be integral to achieving significant improvements in productivity. Used to support both teaching and learning, technology infuses classrooms with digital learning tools, such as computers and hand held devices; expands course offerings, experiences, and learning materials; supports learning 24 hours a day, 7 days a week; builds twenty-first-century skills; increases student engagement and motivation; and accelerates learning. Technology also has the power to transform teaching by ushering in a new model of connected teaching. This model links the teacher to their students and to professional content, resources, and systems to help them improve their own instruction and personalize learning.[4]

The Department of Education is not alone in their conclusions that a technology-rich learning environment is the way of the future in education. There has

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[2] Mike Rappaport, "Millennials, Technology, and Short Attention Spans," *Liberty Law Forum*, August 10, 2016, accessed March 17, 2017, http://www.libertylawsite.org/2016/08/10/millennials-technology-and-short-attention-span/.

[3] Benjamin Herold, "Technology in Education: An Overview," *Education Week*, February 5, 2016, accessed December 29, 2016, http://www.edweek.org/ew/issues/technology-in-education/.

[4] US Department of Education, "Use of Technology in Teaching and Learning," accessed December 29, 2016, https://www.ed.gov/oii-news/use-technology-teaching-and-learning.

been much independent commercial and academic research as well as practical application of incorporating various types of technology into the classroom. According to Benjamin Herold, "Technology is everywhere in education: Public schools in the United States now provide at least one computer for every five students. They spend more than $3 billion per year on digital content."[5]

Additionally, many teachers have taken the initiative to allow students to use smartphone apps and other handheld electronic devices in the classroom, with most reporting good success. Further, Herold states,

> Digital instructional content is the largest slice of the (non-hardware) K-12 educational technology market, with annual sales of more than $3 billion. That includes digital lessons in math, English/language arts, and science, as well as "specialty" subjects such as business and fine arts. The market is still dominated by giant publishers such as Houghton Mifflin Harcourt and Pearson, who have been scrambling to transition from their print-centric legacy products to more digital offerings. But newcomers with one-off products or specific areas of expertise have made inroads, and some apps and online services have also gained huge traction inside of schools. As a result, many schools use a mix of digital resources, touting potential benefits such as greater ability to personalize, higher engagement among students, enhanced ability to keep content updated and current, and greater interactivity and additivity (or responsiveness to individual learners).[6]

As I observed Millennials in our church services, Bible studies, and Sunday school, I noticed that many, if not most of them will not have a printed version of the Bible; rather, they will have a Bible app on their cell phone or some other electronic device. This is a clear indication that this age group is more comfortable with and prefers to use electronic devices for reading and learning.

In summary, the leadership and congregation of LWBCE is committed to the best training possible for its teachers, small group leaders, and lay people. Creating a technology-rich educational environment appears to be the answer to provide exceptional training for our church leaders and teachers. Additionally, including technology into the training will provide a method that was not previously available to LWBCE. Any training

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[5] Herold, "Technology in Education."

[6] Ibid.

program should provide a well-rounded and stimulating learning process, which should produce better-equipped and more confident teachers.

Purpose

The purpose of this project was to determine if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method.

Goals

The goals of this project determined if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method. This experimental study needed to achieve three goals.

1. The first goal was to assess the biblical and theological knowledge of the study participants by administering a pre-course test.
2. The second goal was to design two equal training courses using traditional lecture and workbook teaching, method 1 (the control group) and self-directed, modern technology-based teaching, method 2 (the experimental group).
3. The third goal was to determine if the two teaching methods had similar outcomes.

Research Methodology

This project had three goals. The first goal was to assess the biblical and theological knowledge of the participants, which set the baseline of the study. A pre-course test was administered to the 44 study participants using a commercially available curriculum that included a test instrument. Once the pre-course test was administered, goal 1 was successfully completed. The measure for success was a 90 percent completion rate, hence, 40 participants had to complete the pre-course test to be successful.

The second goal was to design two equal training courses using method 1 (the control group) and method 2 (the experimental group). The 44 participants were divided into two groups of 22 each. The participants were assigned to their individual group using a random process, which is discussed in chapter 4. The two groups were given

instructions specific to their method of study. The control group was taught by the traditional classroom lecture and workbook method. The test group was assigned to self-directed learning using Information and Communication Technologies (ICT)[7] as their only source of learning. Both groups needed a 90 percent completion rate to be considered successful, hence, 20 participants in each group needed to complete the course.

The third goal was to determine if the two teaching methods had similar outcomes. This goal was accomplished by administering a post-course test. Using a commercially available test instrument a post-course test was administered to the study participants. Once the post-course test was administered and the results analyzed, Goal 3 was successfully completed. The measure for success was a 90 percent completion rate and completion of the statistical analysis.[8]

Definitions and Limitations/Delimitations

Definitions

The following definitions of key terms are used in the ministry project:

Blended learning. The Glossary of Education Reform states, "Also called hybrid learning and mixed-mode learning, the term blended learning is generally applied to the practice of using both online and in-person learning experiences when teaching students."[9] This definition is provided for general understanding. Blended learning as an educational method, was not used in this study.

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[7] *The Tech Terms Computer Dictionary*, "ICT Definition." January 4, 2010. Accessed Mar 11, 2019. https://techterms.com/definition/ict.

[8] All of the research instruments used in this project were performed in compliance with and approved by the Southern Baptist Theological Seminary Research Ethics Committee prior to use in the ministry project.

[9] *The Glossary of Education Reform*, "Blended Learning" August 26, 2014, accessed December 29, 2016, https://www.edglossary.org/blended-learning/.

Curriculum. Merriam Webster's Collegiate Dictionary explains,

> Curriculum is from New Latin (a post-medieval form of Latin used mainly in churches and schools and for scientific coinages), in which language it means "a course of study." It shares its ultimate root in classical Latin, where it meant "running" or "course" (as in "race course"), with words such as corridor, courier, and currency, all of which come from Latin *currere*, to run.[10]

For the purposes of this study, the term *curriculum* refers specifically to the materials used from A Beka Book, both the printed material and the technology-based materials.

Learning environment. Merriam Webster's Collegiate Dictionary states that learning environment,

> Refers to the diverse physical locations, contexts, and cultures in which students learn. Since students may learn in a wide variety of settings, such as outside of school locations and outdoor environments, the term is often used as a more accurate or preferred alternative to classroom, which has more limited and traditional connotations—a room with rows of desks and a chalkboard, for example.[11]

For those in the control group, the *learning environment* refers specifically to the classroom in the church building. For the test group, the *learning environment* refers to any place where they chose to work with access to the internet.

Self-directed learning. Segen's Medical Dictionary states that self-directed learning is "a process in which a student is responsible for organizing and managing his or her own learning activities and needs. Self-directed learning encourages individuals to become responsible for their own learning, identify gaps in their knowledge gaps and critically appraise new information."[12] *Self-directed learning* in this study was limited to the use of technology as the only source of information.

Information and Communication Technologies (ICT). The Tech Term Computer Dictionary states, "ICT refers to technologies that provide access to information through

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[10] *Merriam Webster's Collegiate Dictionary*, 11th ed. (Springfield: Merriam-Webster, 2014), s.v. "curriculum."

[11] Ibid., s.v. "self-directed learning."

[12] *Segen's Medical Dictionary*, "Self-Directed Learning, "accessed February 8, 2019, https://medical-dictionary.thefreedictionary.com/self-directed+learning.

telecommunications. It is similar to Information Technology (IT), but focuses primarily on communication technologies, which includes the internet, wireless networks, cell phones, and other communication mediums."[13] This study focused on the use of the internet, computers, and cell phones.

Delimitations

Three delimitations applied to this project. First, the size of the test group was 44 participants. To help mitigate this delimitation, only motivated and committed candidates were included in the process. Sample size represents the number of observations taken to conduct a statistical analysis. Sample sizes are composed of whatever population is being evaluated—in this study it was church members. As sample sizes increase, estimates become more accurate. Sky Smith explains, "The sample size drives the confidence level of the statistics. In other words, as sample size increases, our confidence in our measurements increases and the size of our confidence intervals decreases. As the sample size increases, standard error, which depends on standard deviation and sample size, decreases."[14]

Consequently, as sample size increases, estimates increase in precision; hence, research built on these estimates are considered more reliable. Based on the small size of LWBCE and the need for an acceptable sample size, a decision was made to include members of our sponsoring church in the study. By including the sponsoring church in the study, the number of participants increased from 30 (LWBCE) to a total of 44, with 14 participants from the sponsoring church.

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[13] *The Tech Terms Computer Dictionary*, "ICT Definition." January 4, 2010. Accessed March 11, 2019, https://techterms.com/definition/ict.

[14] Sky Smith, "Importance of Sample Size in Research," April 24, 2017, accessed February 7, 2019, https://sciencing.com/importance-sample-size-research-5960162.html.

Second, and a less critical issue that needed to be addressed, was the age of the participants. Initially, older teens were considered for inclusion in the study, however, when examining Titus 1, 1 Timothy 3, and Ephesians 4, there is no biblical authority to include children as teachers in the church; therefore, the base age of study was set at eighteen.

Third, the curriculum used was a commercially available product with an exam. To help mitigate this delimitation, the curriculum was a scholastically validated product. Fifth, due to the many forms of technology available, it was not possible to employ every form, therefore, a selection of three technologies were used, specifically, cell phones, computers, and the internet.

Limitations

There were two limitations of the project. The first limitation was the length of the project, which had to be completed within a time period of twelve to fifteen weeks. This limitation restricted the scope and type of curriculum that could be used. As a result of the time constraint, more than one lesson per day had to be taught in order to complete the curriculum.

Second, the literary research on the subject of traditional teaching methodology versus self-directed learning using technology revealed that while there is a plethora of research on self-directed learning using technology there are many voids in the existing research. In fact, no head-to-head research could be found that tested a specific teaching methodology against another teaching methodology. This limited the supporting research for the project.

Conclusion

Jesus gave a clear mission to go into the world to preach and teach the gospel, in short, the Great Commission. Christians have been reaching out to the world for about 2,000 years to fulfill the Great Commission. Today, in the information age, new tools,

technologies, and approaches have been developed that are available to help in this endeavor. Many of the new technologies have been adopted and adapted for use in the preaching and teaching the gospel, but some are yet to be used for the training of teachers in the church. If proven effective, the development and implementation of a technology-rich training program for teachers may be used to support the church's mission to teach the Word of God effectively and correctly.

CHAPTER 2

THE BIBLICAL FOUNDATION FOR TEACHING

The warrant to teach is found throughout the Scriptures, with the foundation to teach being laid in the Old Testament. In the New Testament, Jesus builds on this foundation by teaching and by directing his disciples to go forward and teach. In both the Old Testament and New Testament, a variety of teaching methods are abundantly demonstrated.

The Old Testament

The foundation to teach is initially established in the Old Testament.[1] The Scriptures are God's written communication to mankind, revealing his will, and his plan for salvation. The Old Testament reveals a loving and patient God who consistently communicated with his people to teach them the way they should go. The Old Testament is replete with God's teachings and with his instruction for others to teach.

When God communicates in the Scriptures he is teaching some particular thing to the person or persons he is addressing. From the creation of Adam, God demonstrated a desire to communicate or teach his will to his creation.[2] In Genesis 1, God clearly

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[1] The discussion here focuses primarily on the Pentateuch and Psalms, however, there are numerous references about teaching in the Old Testament. Books that reference teaching include Joshua, Judges, 1 Samuel, 1 Kings, 2 Kings, 2 Chronicles, Ezra, Nehemiah, Job, Proverbs, Ecclesiastes, Isaiah, Jeremiah, Ezekiel, Daniel, and Micah. This list is not intended to be an exhaustive list.

[2] According to Detlef Prozesky, teaching and communication are synonymous:

> What is "communication?" According to the Concise Oxford Dictionary the word means "the act of imparting, especially news" or 'the science and practice of transmitting information." These definitions clearly show the link between "teaching" and "communication:" teachers are constantly imparting new knowledge, or

illustrated his personal involvement with mankind. God created mankind in his own image to fulfill his own purpose (Gen 1:26-27). God blessed Adam and Eve by personally instructing them, speaking to them directly (Gen 1:28). Genesis reveals the first covenant with man, which is called the "Edenic Covenant" (Gen 2:15).[3] Although Adam and Eve's sin of disobedience broke the Edenic Covenant (Gen 3:17; Hos 6:7), God continued to communicate his purpose to mankind (Gen 3:8-13).[4]

Another example of God's effort to teach is his interaction with Noah (Gen 6). God spoke to Noah directly, informing him that because he was righteous, Noah and his family would be spared the coming destruction (Gen 6:8-9). Then God gave Noah specific instructions on how to build the ark. God also provided instruction on what animals to bring and other information that Noah would need in preparation for the flood (Gen 6:13-21).

When God called Moses, his message was delivered within a "burning bush": "When the Lord saw that he had gone over to look, God called to him from within the bush, 'Moses! Moses!' And Moses said, 'Here I am'" (Exod 3:4 NIV) When God called Moses to deliver the people of Israel from bondage in Egypt, he gave Moses five "signs." First, God assured Moses that he would be with him and God allowed Moses to worship

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> transmitting information. (Detlef R. Prozesky, "Communication and Effective Teaching," *Community Eye Health* 13, no. 35 [2000]: 44-45)

In effect, there is no difference between communicating and teaching.

[3] John Frame states, "I believe that the existence of a covenant specifically between God and man is implicit in Genesis 1-2, though there is no record of God's formally announcing it as in other covenants." John M. Frame, *Systematic Theology: An Introduction to Christian Belief* (Phillipsburg, NJ: P & R, 2013), 62-63.

[4] Frame continues,

> Adam broke the covenant with his sin of disobedience. But following the narrative of the fall, Scripture indicates that God intends to save his fallen people. There is good news mixed with bad. God curses Satan, the serpent (Gen 3:14-15), but at the end of this curse in the case that Satan will be crushed by the child of Eve. Though labor and childbearing are to be painful, they will preserve the human race until the time when the special child of the woman will gain this victory and save his people. (Ibid., 66)

him on Mount Sinai (Exod 3:12). Second, Moses's staff would turn into a serpent when thrown on the ground and would return to a staff when it was retrieved (Exod 4:3). Third, God caused Moses' hand to become leprous and then healed it completely (Exod 4:6-7). Fourth, when Moses took water from the Nile River it became blood when he poured it onto the ground (Exod 4:9). Fifth, when Moses objected that he was "slow of speech" (Exod 4:10) "The Lord said to him, 'Who gave human beings their mouths? Who makes them deaf or mute? Who gives them sight or makes them blind? Is it not I, the Lord? Now go; I will help you speak and will teach you what to say'" (Exod 4:11-12 NIV). God used these five "signs" to teach Moses to trust God completely, which gave Moses the courage and confidence to do God's will.

The five signs God gave to Moses were not intended for him alone—they were also given to teach the Israelites and the Egyptians to obey the Word of God. These signs were supernatural and would teach all those concerned that Moses was not speaking for himself but was speaking for God. To remind the Israelites and to teach Pharaoh who the real God is, he brought ten different plagues upon Egypt. In preparation for the last plague brought on Egypt, God gave extensive instructions to Moses on how to prepare for the tenth and final plaque (Exod 12:1-30). This event became a huge and permanent teaching point for God's people. God even changed the Israeli calendar making this a permanent lesson for the Israeli people. "The Lord said to Moses and Aaron in Egypt, 'This month is to be for you the first month, the first month of your year"' (Exod 12:1-2 NIV).

After the Israelites were delivered from Egypt, God provided his law in writing (Exod 20). This law is known as the Ten Commandments and is the first written form of teaching that God provided for mankind. Moses was led by the Holy Spirit to write the first five books of the Old Testament known as the "Pentateuch,"[5] which is the foundation for the rest of the Scriptures.

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[5] Walter A. Elwell and Barry J. Beitzel, "Pentateuch," in *Baker Encyclopedia of the Bible* (Grand Rapids: Baker, 1988), 2:1639. Pentateuch-Word formed by two

In Exodus, God gives Moses detailed instructions regarding the law (Exod 20-23), the annual feast (Exod 23), the construction of the tabernacle (Exod 25-28; 30-40), the consecration of Aaron and his sons (Exod 29) and the Sabbath Law (Exod 31). Moses was taught these things by God and was tasked to teach them to the people of Israel (Exod 20:22, 25:1, 31:12, 35:30, 40:1). The teaching and learning process was extended to others, setting an example for the teaching process. Moses said, "The Lord has chosen Bezalel son of Uri, the son of Hur, of the tribe of Judah, and he has filled him with the Spirit of God, with wisdom, with understanding…And he has given both him and Oholiab son of Ahisamak, of the tribe of Dan, the ability to teach others" (Exod 35:30-34 NIV). Fausset and Brown state, "It was with the greatest propriety he reminded the people that the individuals entrusted with the application of their gold and silver had been nominated to the work by authority to which all would bow."[6] Hoffmeier makes a clear distinction between artisans and artisans who are also called to teach. Moses made it clear that these men were not only gifted by God with the desire and ability to be craftsmen, he also called them to be teachers of the gifts. Bezalel and Oholiab are once again designated as the head artisans, but, unlike in Exodus 35:30-33, where they were called as craftsmen, now they are called as teachers of artisans.[7] God gave to Bezalel and Oholiab two distinct things: knowledge of the crafts and the desire and ability to teach others.

Greek words, *pente*, "five," and *teuchos*, "book" and commonly used to refer to the first five books of the OT (Genesis, Exodus, Leviticus, Numbers, Deuteronomy). This portion of God's Word was written by the prophet Moses (Exod 17:14; 24:4; 34:27; Num 33:1, 2; Deut 31:9, 22) and constitutes the foundation upon which all other Scripture rests. The Pentateuch begins with the creation of the universe and records God's dealings with mankind in the Garden of Eden, his preparation of a seed-bearing line (the patriarchal stories), and the formation of the nation Israel. A substantial portion of the Pentateuch consists of laws governing the religious and civil life of the theocratic nation.

[6] Jamieson R. Fausset and David Brown, *Commentary Critical and Explanatory on the Whole Bible* (Oak Harbor, WA: Logos Research Systems, 1997), 1:71.

[7] James K. Hoffmeier, *Exodus*, Evangelical Commentary on the Bible, vol. 3 (Grand Rapids: Baker, 1995), 62.

In Deuteronomy, God clearly instructs that his teaching should be abundant and absorbed by his people: "Let my teaching drop as the rain, My speech distills as the dew, As raindrops on the tender herb, And as showers on the grass" (32:2 NKJV). Keil and Delitzsch compare God's Word to life giving rain. God's teaching will come drop by drop as the rain, beginning slowly and distinctly and steadily increasing until the plenitude of his righteous Word is poured out on all who will hear, and his divine revelation completed. The teaching is of such importance that it should soak into the hearer, so that he would become completely saturated with the truth. Like the rain and dew, the teaching is refreshing and life giving.[8]

To seek knowledge and wisdom, specifically biblical wisdom, is not only pleasing to God, but it is exampled by God and mandated by God. In Psalms, God makes it clear that "I will instruct you and teach you in the way you should go; I will guide you with My eye. Do not be like the horse or the mule, which have no understanding but must be controlled by bit and bridle or they will not come to you" (32:8-9 NIV). In these verses, God gives a model of a good teacher. A teacher who personalizes instruction strengthens the force of his teaching or doctrine. Personalization causes the teaching to more readily penetrate the mind, making it more applicable to the individual learner. To give proof that he cares about the people, David describes personalization as "the sight of the eye." In short, a good teacher will watch over the students. In verse 9, David exhorts people to not be "like the horse or mule," but rather to heed the teaching of the Lord.[9]

The New Testament

The Old Testament Scriptures reveal the foundation for the teaching of God's

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[8] Carl F. Keil and Franz Delitzsch, *Commentary on the Old Testament* (Peabody, MA: Hendrickson, 1996), 1:987.

[9] Jean Calvin and James Anderson, *Commentary on the Book of Psalms* (Bellingham, WA: Logos Bible Software, 2010), 1:534-35.

Word. Stevens notes, "In his teaching Jesus took his stand distinctly upon the Old Testament. He frequently quoted its language, and illustrated and enforced his truths by appeal to its authority."[10] In the New Testament God makes a change from the way he chooses to teach his people in the Old Testament. Hebrews 1:1-2 states, "God, who at various times and in various ways spoke in time past to the fathers by the prophets, has in these last days spoken to us by his Son, whom he has appointed heir of all things, through whom also He made the worlds" (NKJV).

Jesus spent three years teaching his disciples. He developed them into strong witnesses and teachers, and instructed them to go out into the world telling what they had seen and teaching others what they had learned. Disciple-making involves three steps: (1) people must hear the Word and come to faith in Christ (Rom 10:17 ESV); (2) be baptized (Matt 28:19); and (3) teach the Word (Matt 28:20). Teaching is required in order to develop new believers into strong committed disciples.

In the New Testament, Jesus used his teaching and miracles to communicate truth about himself. The provision of God was taught to the disciples through Jesus' feeding of the five thousand (Matt 14:13-21) and the feeding of the four thousand (Mark 8:1-8)

The biblical foundation for the requirement to communicate and teach the Word of God, specifically the gospel, is clearly present in the Scriptures. The command to teach can be found in the Great Commission:

> Then Jesus came to them and said, "All authority in heaven and on earth has been given to me. Therefore, go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you. And surely I am with you always, to the very end of the age." (Matt 28:18-20 NIV)

Jesus' direction is clear: go into all the world and make disciples and to teach the Word of God.

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[10] George Barker Stevens, *The Teachings of Jesus* (New York: MacMillan, 1913), 47.

There are three universals in the Great Commission: (1) the "authority" of Jesus, which is definitively stated in verse 18, and in verse 19 the first word, "therefore," refers back to the authority stated in the previous verse; (2) the command to "go to all nations," which speaks to his authority over all people; and (3) the command to "teach" those that have been converted.[11]

For someone to have authority, there must be a power supporting the authority. The power and authority that Jesus possessed came directly from God. Verse 19 opens with the statement that Jesus has power and authority over all creation, which is the foundation for all of his commands to follow. The disciples were the instrument by which Jesus would exercise this authority. This power was given by God for the accomplishing of his purpose, and here in Matthew, Jesus is exercising his power and authority to expand his kingdom.[12] Green writes, "The baton has been passed from the Master to the disciples."[13]

Luz succinctly outlines the three levels of Christian pedagogy that form the foundation of Christian discipleship: teaching the basic truths, baptism, and commandments of the Christian life, making a solid case for the mandate to teach.[14] The three levels Christian pedagogy are the key and indispensable ingredients in making and growing disciples. Without the teaching element, the "Great Commission" could not be fulfilled. Morris notes,

> Baptism is not the be-all and end-all; it is no more than the beginning. The new disciple is to be baptized, but he or she is also to be taught "to observe all the things I have commanded you." The church's teaching function is thus of great

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[11] James Montgomery Boice, *The Gospel of Matthew*. *An Expositional Commentary* (Grand Rapids: Baker, 2006), 2:646-49.

[12] Michael P. Green, *The Message of Matthew: The Kingdom of Heaven*, The Bible Speaks Today (Leicester, England: InterVarsity, 2001), 320.

[13] Ibid., 321.

[14] Ulrich Luz, *Matthew 21-28*, Hermeneia (Minneapolis: Augsburg, 2005), 625

> importance. We teach because Jesus commanded us to teach, and there is no way of diminishing the importance of an activity that owes its origin to the command of our Lord himself. But Jesus is not speaking about education for education's sake. He speaks of the taught as "observing" what Jesus has commanded. In other words, Jesus is concerned with a way of life.[15]

Making disciples requires more than simply winning converts and baptizing them. To become a disciple, one must learn an entirely new lifestyle and be committed to learning the Word of God, which means that sharing the gospel and seeking to please to the Father becomes a way of life. Once a person is converted, the process of becoming a disciple should begin in earnest with the focus being on Christian education. In short, learning the Word of God and learning how to apply it in one's daily life brings glory and honor to God.[16] This growing process as a disciple is a lifelong endeavor. Carson writes. "To disciple a person to Christ is to bring him into the relation of pupil to teacher, 'taking his yoke' of authoritative instruction."[17] Richard France observes, "To 'make disciples' is not complete unless it leads them to a life of observing Jesus' commandments."[18]

Jesus said in in John 13:13-15, "You call me 'Teacher' and 'LORD,' and rightly so, for that is what I am. Now that I, your LORD and Teacher, have washed your feet, you also should wash one another's feet. I have set you an example that you should do as I have done for you" (NIV). Jesus acknowledges that he is the disciples' teacher and they should learn from him and teach others what he has taught them. Jesus was doing something humbling, and quite frankly unheard of for a teacher in his day. Kruse notes,

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[15] Leon Morris, *The Gospel according to Matthew*, The Pillar New Testament Commentary (Grand Rapids: W. B. Eerdmans; Leicester, England: Inter-Varsity, 1992), 749.

[16] D. A. Carson, *Matthew*, in vol. 9 of *The Expositor's Bible Commentary*, ed. Tremper Longman III and David E. Garland, rev. ed. (Grand Rapids: Zondervan, 2010), 665-67.

[17] Ibid., 666.

[18] Richard. T. France, *The Gospel according to Matthew*, Tyndale New Testament Commentaries, vol. 1 (Downers Grove, IL: InterVarsity, 1985), 421.

> It was because Peter recognized Jesus as teacher and Lord that he was at first unwilling to allow Jesus to wash his feet. Jesus said the disciples were right to regard him as their teacher and Lord, and his humble act had not changed that. That he had adopted a servant role did not change the fact that he was their teacher; he was just a different sort of teacher.[19]

Jesus made it clear to his disciples that they should not exalt themselves above anyone; rather, they should follow his example and become a different sort of teacher, considering themselves as servants to the people that they would be teaching. Jesus intended for the disciples to learn from his example and to replicate this teaching throughout their journey. Andreas Köstenberger writes,

> The lesson here taught fleshes out Jesus verbal instruction early in his ministry. Commenting on James and John's desire to occupy the place of honor at Jesus side. . . . (Mark10:42-45) Incredibly, Jesus's followers were not convinced. As the account of the foot washing in John 13 makes clear, they needed more than mere verbal instruction-they needed an object lesson, a visual, a practical demonstration of what Jesus's teaching look like in action.[20]

To make his teaching point clear, Jesus first used the verbal method, as noted in Mark 10:42-45. However, to reinforce his original teaching and make sure his disciples understood, Jesus used the practical demonstration method to drive home his point.

Ephesians 4:11-13 states, "So Christ himself gave the apostles, the prophets, the evangelists, the pastors and teachers, to equip his people for works of service, so that the body of Christ may be built up until we all reach unity in the faith and in the knowledge of the Son of God and become mature, attaining to the whole measure of the fullness of Christ" (NIV). Paul explains that Christ gives specific gifts for the purpose of equipping the saints so that they will not be deceived, therefore, fulfilling God's plan. Among the positions named is that of teacher.[21]

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[19] Colin G. Kruse. *John*, Tyndale New Testament Commentaries, vol. 4 (Downers Grove, IL: InterVarsity, 2003), 279.

[20] Andreas J. Köstenberger, *Encountering John: The Gospel in Historical, Literary, and Theological Perspective*, 2nd ed., Encountering Biblical Studies (Grand Rapids: Baker, 2013), 133.

[21] It should be noted that biblical scholars disagree about the exact intent of the phrase "pastors and teachers." Some scholars consider pastors and teachers to be two distinct groups, while others tend to consider them synonymous; however, this issue is

Jesus included teaching in his guidance for his church and on this point there is no disagreement. Ephesians 4:11-13 makes it clear that teaching was directed by Jesus himself and teaching is to be incorporated into the church, thus laying the foundation in the New Testament for teaching in the church.

Finally, Paul writes, "And what you have heard from me in the presence of many witnesses entrust to faithful men, who will be able to teach others also" (2 Tim 2:2 ESV). Paul is exhorting Timothy to find and teach dedicated men the gospel so that they themselves can go out and teach others. Verse 2 presents the perfect example of the

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not germane to this discussion. Regardless of the interpretation that one ascribes to the phrase "pastors and teachers," Marvin Vincent states,

> The verb ποιμαίνω *to tend as a shepherd*, is often used in this sense. See on 1 Pet. 5:2; Matt. 2:6. The omission of the article from teachers seems to indicate that pastors and teachers are included under one class. No man is fit to be a pastor who cannot also teach, and the teacher needs the knowledge which pastoral experience gives. (Marvin R. Vincent, *Word Studies in the New Testament* [New York: Charles Scribner's Sons, 1887], 3:390)

Foulkes takes a somewhat different view and notes, "There is no hard and fast line to be drawn between the two. The duties of the pastor (literally 'shepherd') are to feed the flock with spiritual food and to see that they are protected from spiritual danger." Francis Foulkes, *Ephesians*, Tyndale New Testament Commentaries, vol. 10 (Downers Grove, IL: InterVarsity, 1989), 126. John Stott states,

> Looking back, we observe that all five gifts relate in some way to the ministry of teaching. Although there are neither apostles nor prophets in the original sense today, there are evangelists to preach the gospel, pastors to tend the flock, and teachers to expound the word. Indeed, they are urgently needed. Nothing is more necessary for the building up of God's church in every age than an ample supply of God-gifted teachers (John R. W. Stott, *God's New Society: The Message of Ephesians* [Downers Grove, IL: InterVarsity, 1979], 164)

Erickson writes,

> These would be followed by pastors and teachers, or perhaps pastor-teachers, who then nurtured the flocks converted through the evangelists' message. One must not necessarily think that only one of these gifts could be found in any one given person. Some pastors, for example, could and presumably did do the work of evangelism (see 2 Tim. 4:5)." (Richard J. Erickson, *Ephesians*, Evangelical Exegetical Commentary Series, vol. 2 [Grand Rapids: Baker, 1995], 1027

"teach the teacher" philosophy. Timothy, having served with Paul for years, including participating on missionary trips (Acts 19:22; 1 Cor 4:17; 1 Thess 3:2), is ready and able to pass on what he learned from Paul to other men who could be trusted to also eventually pass it on to others. Timothy also witnessed the hardships and persecution that Paul endured (2 Tim 3:10–11). Paul instructs Timothy to teach these lessons to men who would be faithful to carry on the work of the gospel. Guthrie suggests,

> It is evident that Paul recognized that the manner in which he himself had forged out the doctrines would bot continue in the next generation, and that more normal methods of transmission would not only be restored to, but would be essential. . . . We have here the earliest trace of a theological school is suggested.[22]

Varied Teaching Methods

The biblical foundation for the requirement to teach the Word of God, specifically the gospel and the need to use different teaching methods, are present in the Scriptures. Teaching is not performed with a singular method but is best performed using various methods. An effective teacher will apply various teaching methods depending on the learner, the subject, and the context. Examples of various teaching methods being used can be found in both the Old and New Testaments.

God chose Abraham to be the person by which he would establish his people on Earth (Gen 12). Although God spoke to Abraham directly, he also introduced a new method of communication or teaching, which was the physical sign of circumcision: "You are to undergo circumcision, and it will be the sign of the covenant between me and you" (Gen 17:11). Circumcision was the outward or physical sign of the spiritual covenant between God and Israel. The act of circumcision taught the people of Israel that they had a special relationship with God that was distinct and specific to them alone. The act of circumcision became a strong teaching point and distinction between the Israelites and the Gentiles.

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[22] Donald Guthrie, *The Pastoral* Epistles, Tyndale New Testament Commentaries, vol. 14 (Downers Grove, IL: Inter-Varsity, 2009), 139.

There are numerous occasions in the Old Testament where God used a variety of methods or mediums to teach his purpose to his people. For example, He used dreams to reveal truths to Joseph (Gen 37, 40, 41); to communicate direction, God used a "pillar of cloud" by day and a "pillar of fire by night to guide the Israelites during their flight from Egypt (Exod 13:21); and when communicating to Daniel he used dreams and visions (Dan 1:17).

Throughout recorded history, God used various methods to teach His people, but the ultimate means of teaching was God himself incarnate as a man. John 1:14 reads, "The Word became flesh and made his dwelling among us. We have seen his glory, the glory of the one and only Son, who came from the Father, full of grace and truth" (NIV). Other Scriptures supporting the incarnation of God are Romans 8:3; Ephesians 2:15; and Colossians 1:22.

Hebrews 1:1-2 testifies to the fact that God spoke in various ways: "In the past God spoke to our ancestors through the prophets at many times and in various ways, but in these last days he has spoken to us by his Son, whom he appointed heir of all things, and through whom also he made the universe" (NIV). Having previously used various methods to teach his truths, God finally sent his son Jesus Christ, the perfect form of communication to mankind. Mankind for the first time could not only read God's Word but could hear him in person and see him in the flesh. Throughout the New Testament, all other divine communications are based on the person of Jesus.

Both Jesus and Paul used various teaching methods to make their teaching effective. Three methods Jesus used were questioning, contextualization, and parables. Paul also made effective use of contextualization. An example of the questioning method used by Jesus can be found in Matthew 19:16-18. In Matthew 13, Jesus not only uses parables in his teaching, he also explained why he used this method. Lastly, in Acts 17, when Paul was teaching in Athens, he contextualized his teaching to fit the culture to

which he was speaking. Paul changed his method to reach three different audiences in one teaching. Paul reached the Jews, Stoics and the Gentiles.

Jesus was a master teacher. Friedeman states, "The Biblical evidence reveals that the most far-reaching impact of Jesus' life and work came through his educational method."[23] Scholars have studied his methodologies and emulated his teaching methods for centuries. Jesus was unique among teachers in that he taught with an authority that had not been seen before. In fact, his teaching was so unique even those who were not his followers would acknowledge, "No man ever spoke like this" (John 7:46 HCSB). When Jesus preached the Sermon on the Mount, the crowd recognized his teaching as different and unique. Matthew 7:29 says, "When Jesus had finished this sermon, the crowds were astonished at His teaching, because He was teaching them like one who had authority, and not like their scribes" (HCSB). In Mark 1:22-27, when Jesus drives out unclean spirits, from a man in the synagogue he did it with authority, causing those around to say, "What is this? A new teaching with authority! He commands even the unclean spirits, and they obey him." (Mark 1:27b ESV) Jesus stressed that the kingdom, though inaugurated at His first appearing, will find its consummation in His second coming (Matt 24–25). Charles Draper explains, "Another unique aspect of Jesus' teaching was his ability to connect to the people. Although he often spoke in parables he was able to contextualize his teachings in such a way that it would connect the people that he was addressing. Jesus used 'common things to illustrate spiritual truths.'"[24]

Not only did Jesus teach with authority, he also used a variety of teaching methods, such as preaching, parables, questioning, illustrations, and teaching by example.

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[23] Matt Friedeman, *The Master Plan of Teaching* (Wheaton, IL: Victor Books, 1990), 15.

[24] Charles W. Draper and Chad Brand, eds., *Holman Illustrated Bible Dictionary* (Nashville: Holman Bible, 2015), 901.

He used contextualization to make his teaching understandable and relevant to his audience. A few examples of Jesus using various teaching methods are discussed next.[25]

Teaching by Questions

Roy Zuck writes, "Questions provide one of the most important means by which teachers can involve students of all ages in the teaching-learning process. Questions can arouse student interest and curiosity, lead students to think more clearly, obtain student opinions, and clarify issues."[26] The question and answer method of teaching has been a proven way to effectively teach for centuries. This method of teaching can be traced back to the Greek philosopher Socrates (469-399 BC). He is viewed by many as the founding figure of Western philosophy. His style of teaching was immortalized as the Socratic Method, which involved not conveying knowledge but rather asking question after clarifying question until his students arrived at their own understanding.[27] Jesus was a master of the questioning method; he asked provocative and thought-provoking questions. His questions were often personal—they revealed the character of the person—but they were also practical. According to Charles McKoy, "Socrates sought to secure virtue by the way of knowledge; Jesus, by the way of feeling and will. The immediate aim of Socrates was a new type of thinking; Jesus a new way of living."[28]

Jesus asked a lot of questions. In fact, the first recorded words of Jesus were in the form of a question when he was only twelve years old. When Joseph and Mary found him in the temple he said to his parents, "Why did you seek Me? Did you not know that I must be about My Father's business?" (Luke 2:49 NKJV). The Scriptures indicate that

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[25] This is not an all-inclusive list of the teaching methods employed by Jesus, but rather a sample of the variety of his methods.

[26] Roy B. Zuck, *Teaching as Jesus Taught* (Grand Rapids: Baker, 1995), 235.

[27] Ibid.

[28] Charles Frances McKoy, *The Art of Jesus as a Teacher* (Boston: Judson, 1930), 164.

his parents did not understand what was going on. Verse 51 states, "His mother treasured all these things in her heart." While Mary and Joseph may not have fully understood their son, he was teaching them his true identity. Even in Jesus' first recorded words, he was teaching by asking questions.

Jesus' questions always elicited answers, which oftentimes prompted another question from Jesus. A good example can be found in Mark 8 when Jesus asked his disciples, "'Who do people say I am?' They replied, 'Some say John the Baptist; others say Elijah; and still others, one of the prophets.' 'But what about you?' he asked. 'Who do you say I am?' Peter answered, 'You are the Messiah'" (vv. 27-30 NIV). Jesus used questions to provoke thought and by doing so He taught people through their answers to his questions. Jesus used the technique of asking a broad question and then progressively narrowing the focus to reveal the truth. In this particular case, Jesus narrowed the inquiry to, "Who do you say that I am?" to which Peter declared one of the most profound statements in the Bible: "You are the Christ, the Son of the living God!" Stated differently, Jesus led his disciples to hear one of the most profound statements in the Bible. Jesus is the Christ, the Son of the living God.

Why did Jesus craft this centrally important teaching in the form of a question? Why not just say it to his disciples: "I am the Christ, the son of the living God!" It would have been a lot easier that way. Roy Zuck explains,

> Jesus' questions constituted powerful teaching tools. His pedagogical arsenal was full of interrogations of various kinds that pierced the minds and hearts of his listeners. Some truths that could have been conveyed by discourse or declaration were more effectively communicated by means of incisive questions-questions calling for a response either mental or verbal. By being drawn out of the listeners rather than by simply being declared by Jesus, the correct answer was more convincingly and permanently impressed on their minds.[29]

As he often did, Jesus used the questioning method of instructing to teach one of the most centrally important truths in the Bible. Jesus chose the questioning method because he

[29] Zuck, *Teaching as Jesus Taught*, 240.

knew that answers change lives, especially when someone is led to formulate the answer properly. When Peter declared Jesus to be "the Christ of God," he was changed by that declaration, hence accomplishing Jesus' intent.

Jesus taught that people are changed as much by what they say as by what they hear. Mark 7:15 reads, "Nothing outside a man can make him 'unclean' by going into him. Rather, it is what comes out of a man that makes him 'unclean'" (NIV). "What comes out of a man"—what a man speaks is what makes him clean. People are changed by the truth when they speak the truth. Once Peter declared Jesus to be the "Christ, the son of the living God," he then believed ever more firmly that Jesus was the Christ. Therefore, the Bible clearly declares, "If you confess with your mouth" (Rom 10:9 NIV). God is omniscient, when Christians speak it is not because God needs to hear what they say, he already knows. It is not necessarily for the edification of others; rather, it is needed for the changing of the heart.

In Matthew 19 one sees another example of Jesus teaching someone by asking questions. "Just then a man came up to Jesus and asked, 'Teacher, what good thing must I do to get eternal life?' 'Why do you ask me about what is good?' Jesus replied. 'There is only One who is good. If you want to enter life, keep the commandments.' 'Which ones?' he inquired" (vv. 16-18 NIV). In these verses and the ones that follow, Jesus applies the same questioning technique as he often did asking questions, receiving answers, and then tightening the follow-on questions until the central truth is brought into sharp focus. Morris writes, "In Matthew 19 clearly Jesus was bringing home to the inquirer the fact that he was not using his words carefully enough; the Master was now making him think about what he was saying. . . . the man was engaging in thoughtless flattery, and he had not considered the implications of the term he was using."[30] The result of the entire discourse was that Jesus brought to light the sad truth of this young

[30] Morris, *The Gospel according to Matthew*, 490.

man's real condition—he did not have his heart right, he put his money before God. While this teaching point may have been lost on the young man, it certainly was not lost to the disciples.

Generally, teachers will focus their emphasis on the subject matter or the student. The teaching of Jesus was student focused rather than subject-matter focused. Subject-matter focused teaching lends itself best to subjects such as mathematics, statistics, science, and other facts specific subjects. Conversely, student-centered teaching focuses on the needs and understanding of the students. Lowell Bennion explains student-centered teaching: "The teacher has in mind the students being taught, their level of understanding, their feelings, and the effect the teaching may have on their lives. This latter approach is paramount in gospel teaching."[31] Although Jesus' teaching was primarily student focused he did not compromise or ignore the facts or truths. Bennion notes, "These two emphasis need not be incompatible. One can teach great ideas and rich substance, but in language and in ways understandable and even inspiring to students. Jesus did just that."[32] Jesus' questioning method of teaching specifically focuses on and supports the student-centered teaching emphasis.

An example of Jesus combining the two aforementioned teaching emphasis' is found in John 8 in the woman caught in the act of adultery.[33] Jesus did not refute the law;

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[31] Lowell Lindsay Bennion, *Jesus the Master Teacher* (Salt Lake City: Deseret Book, 1980), 25.

[32] Ibid.

[33] John 8:1-11 says,

> At dawn he appeared again in the temple courts, where all the people gathered around him, and he sat down to teach them. The teachers of the law and the Pharisees brought in a woman caught in adultery. They made her stand before the group and said to Jesus, "Teacher, this woman was caught in the act of adultery. In the Law Moses commanded us to stone such women. Now what do you say?" They were using this question as a trap, in order to have a basis for accusing him. But Jesus bent down and started to write on the ground with his finger. When they kept on questioning him, he straightened up and said to them, "Let any one of you who is without sin be the first to throw a stone at her." Again he stooped down and wrote

instead, he asked a piercing question in the form of a statement. Once her accusers pondered this question, having answered it in their own hearts, they one by one slipped away leaving her with no accusers. Jesus clearly made his teaching point, leaving his followers with yet another salient truth. According to Lowell Bennion, Jesus did not condone adultery, but he recognized that "the woman who stood before him needed encouragement, compassion, and mercy. She was greater in the eyes of Jesus than even the law of Moses."[34] Jesus was teaching a lesson in love, mercy, and compassion, not only to the woman and his disciples but also to the Pharisees.

Teaching with Parables

Although Jesus used various methods of teaching, his use of the parable was the most characteristic and striking. Jesus related many parables during his ministry. Pentz notes, "His teaching was always simple, short, and to the point. Though it was simple, yet it was profound. His teachings have stood the test of time. They have continued down through the years, changing the lives of men, as well as changing communities and nations."[35]

Jesus used two types of parables. First, he used short parables based on actual facts to illustrate a religious or moral principle. These are also known as "parable-germs,"[36] which are short statements about events, customs, or an issue that make a concise point. An example of these type of parable is, "It is not the healthy who need a

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on the ground. At this, those who heard began to go away one at a time, the older ones first, until only Jesus was left, with the woman still standing there. Jesus straightened up and asked her, "Woman, where are they? Has no one condemned you?" "No one, sir," she said. "Then neither do I condemn you," Jesus declared. "Go now and leave your life of sin." (NIV)

[34] Bennion, *Jesus the Master Teacher*, 26.

[35] Croft M. Pentz, *Expository Outlines from Luke* (Grand Rapids: Baker, 1976), 25.

[36] Ibid., 40.

doctor, but the sick. I have not come to call the righteous, but sinners" (Mark 2:17 NIV) Other examples of the "parable-germ" are included in Mark 2:19, 21, 24, and John 3:8 and 12:24. The second type of parable is the "parable story,"[37] which is the parable that elicits the most interest and generates the most thought. The parable story can be based on a real occurrence or can be fictitious. Either way, the parable illustrates a spiritual truth. Examples of the parable story are included in Mark 4:3-9, Matthew 21:33-43, and Luke 15:11-31.[38]

The parables Jesus used were simple and understandable, they did not include complex concepts, and they flowed quickly. Jesus contextualized his teachings by deriving them from common human experiences and nature. The examples used by Croft Pentz are, "the lost sheep, the lost coin, a wayward son, lambs without oil, vineyards, seeds, and barns"[39] were all familiar things to his listeners. In other words, Jesus contextualized his teachings so that his audience could easily relate and apply them in their own lives.[40]

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[37] Pentz, *Expository Outlines from Luke*, 40.

[38] Ibid.

[39] Ibid., 15.

[40] This teaching does not appear to be consistent with what Jesus said in Mark 4:11-12; however, this does not negate the effectiveness in the teachings of Jesus and his use of parables. Several commentaries on this subject discuss it in detail. Next are two examples that may clarify the perceived conflict. Lane writes,

> The sequence of Jesus' parabolic teaching of the multitude is interrupted by Ch. 4:10-20. These verses illustrate the principle formulated in Ch. 4:33-34Jesus spoke to the multitudes in parables, but he explained all things privately to his disciples. Mark 4:11-12 is properly understood only in the context of the contemporaneous situation set forth in Ch. 3, where unbelief and opposition to Jesus is blatant. In Ch. 3:6 Jesus' opponents conspire to secure his destruction, while in Ch. 3:22 they declare that his power is demonic. It is against this background that in Ch. 4:11-12 Jesus makes a sharp distinction between the disciples (to whom God entrusts the mystery of the Kingdom) and the unbelieving multitude (from whom the truth is concealed).

Jesus had been criticized by the Jewish religious leaders for consorting with tax collectors and sinners. To answer this criticism and to illustrate God's concern for the lost, Jesus related three parables, which were "The Lost Sheep" (Luke 15:1-7), "The Lost Coin" (Luke 15:8-10), and "The Lost Son" (Luke 15:11-31). In these examples, Jesus uses the parable teaching method to expose the sinful attitude of the Jewish religious leaders.

The importance of parables in Jesus' teaching cannot be overstated. Price notes,

> It is interesting to notice the "Master Teacher's" large use of stories or parables in his teaching. In fact, they have been called the "consummation of his art." About one fourth of his works as recorded by Mark and about one half as recorded by Luke or in the form of parables. The term parable is used about 50 times in the New Testament. If one includes under this heading the maximums or germ parables, the allegory and other illustrations, probably 100 can be found. . . . If the parables were eliminated from Jesus teaching, much of it would be gone.[41]

Jesus' parables were simple and clear, normally not requiring interpretation. In fact, Jesus only interpreted two of his parables. Some scholars and ministers seek meaning in every detail of a parable and often overlook the main teaching point. This is

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> (William L. Lane, *The Gospel according to Mark*, The New International Commentary on the New Testament [Grand Rapids: Eerdmans, 2008], 155-57)

Blomberg argues,

> In between the parable of the sower and its explanation, Jesus' disciples asked him why he uses this form of teaching. Jesus' reply has perplexed many. He seems to be saying that parables and sill truth rather than reveal it (vv. 11b-12). Yet even in Jesus' enemies elsewhere catch on to his meaning in his parables (Mark 12:12 pars.) An adequate answer to this dilemma requires several considerations: (1) True, spiritual understanding in the Bible is never merely cognitive but also volitional. That is, unless one acts on Jesus' teaching by becoming and obedient disciple, one has not truly understood his message. (2) Jesus is using a shrewd rhetorical device. Parables, once they drive home their lesson, either attract or repel. Those who are not prepared to accept Jesus often become even more hostile against him (again cf. Mark 12:12 pars.), but others are convicted and repent. (3) Jesus is quoting Isaiah 6:9 –10 from a context in which the prophet was told to pronounce judgment on an already rebellious nation. Yet the end of chapter (6:13) promises that a godly remnant will reemerge. (Craig L. Blomberg, *Jesus and the Gospels: An Introduction and Survey* [Nashville: Broadman & Holma., 2009], 304)

[41] John M. Price, *Jesus the Teacher*, 2nd ed. (Nashville: Convention Press, 1981), 101-2.

not the fault of the parable, but rather the fault of the reader. A prime example can be found in Luke 15 in the parable of the lost son. Many want to make the parable about the older son's attitude rather than about the main point, which is Jesus' concern for the lost. Charles McKoy provides some helpful rules for interpreting parables.[42]

Teaching with Contextualization

Jesus used contextualization in the sense that when he addressed his listeners, he used illustrations that focused on nature, commonly understood practices, and well-known events. Friedeman writes, "To penetrate their reality, Jesus' words have to be simple yet challenging, touching on what they knew in bridging the way to what they needed to learn."[43] Jesus connected to his audience through the use of contextualization.

Jesus contextualized his teaching to make it relate directly to his listeners. His teaching contained analogies and references expressly chosen to make the teaching point clear to those listening. When appropriate, Jesus would personalize his teaching to pierce the heart of the person or persons he was addressing.[44]

When calling his first disciples Jesus spoke of fishing: "And Jesus, walking by the Sea of Galilee, saw two brothers, Simon called Peter, and Andrew his brother, casting a net into the sea; for they were fishermen. Then He said to them, 'Follow Me, and I will make you fishers of men'" (Matt 4:18-19 NKJV). Much of Jesus' ministry was conducted around the Sea of Galilee, and many of his followers were fishermen and their families.

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[42] McKoy states,

> The parable should be read and studied as a whole. The context, or circumstances leading up to the parable, should be taken into consideration. The purpose for which the parable was given should be considered. The principle message which the parable was intended to convey should be sought. Meanings for the details of the parables should be allowed only are they are self- evident or fit in easily and naturally into the main theme of the discourse. McKoy. *The Art of Jesus as a Teacher,* 55-56.

[43] Friedeman, *The Master Plan of Teaching,* 167.

[44] Ibid., 175.

These people could certainly identify with the concept that Jesus was teaching in relation to the act of fishing. Jesus saying, "Once again, the kingdom of heaven is like a net that was let down into the lake and caught all kinds of fish" (Matt 13:47 NIV), created a vivid word picture in the minds of his listeners because they understood it in the context of their livelihood.

Jesus' contextual illustrations were not limited to fishing—he spoke about numerous other aspects of life to drive home his spiritual teaching point. To teach spiritual truths, Jesus used common things like salt and light to illustrate his teaching point: "You are the salt of the earth. But if the salt should lose its taste, how can it be made salty? It's no longer good for anything but to be thrown out and trampled on by men" (Matt 5:13 HCSB). To understand why and how Jesus used salt as an illustration, one must remember the function of salt: it seasons, preserves, and purifies. Bearing in mind the uses of salt, it is easy to draw a correlation between what the life of a Christian should be in the common mineral salt.[45]

Light may be the most common of all things—one sees by light, light produces heat, and without light from the sun there can be no life as we know life. In the same way that he used the importance of salt, Jesus used the importance of light to teach that Christians should be a light to the world: "Neither do people light a lamp and put it under a bowl. Instead they put it on its stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your Father in heaven" (Matt 5:15-16 NIV). This teaching point was easy to understand because of the simple contextual analogy that Jesus used.

Jesus also used farming analogies in his teaching. In Mark 4:3:8, Jesus used the parable of a farmer sowing seeds. Again, Jesus contextualizes his teaching by using a commonly known activity to illustrate his message. Jesus compares the seed that fell on

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[45] Friedeman, *The Master Plan of Teaching*, 205-6.

good soil to a person who has a receptive heart, hears the gospel, and then, through faith, that individual is saved.

Jesus did not use scholarly or technical language in his teaching; rather, he used the vernacular of those to whom he was speaking. In this way, Jesus was able to put his words into context for his listeners. Jesus also used references to the Hebrew Scriptures and to the Jewish law, which were well known to his audiences. Much of his teachings included short statements or sayings that referenced well-known truths or observations about human nature. Often these statements compared or contrasted the characteristics or actions of persons.[46]

Conclusion

In both the Old Testament and the New Testament, God revealed the mandate to teach his truths to his people. Throughout the Scriptures, God used various methods to teach his people using the appropriate method in the context of the culture. Jesus the "Master Teacher"[47] used various methods and language in his teaching, adjusting his teaching method to fit the appropriate audience and context.

God continues to teach his children today by his inspired and inerrant Holy Word; however, he does not speak directly to people as he did to Moses. Instead, he uses called teachers to present his truths to others so that they may grow in knowledge and biblical wisdom. Growing in biblical knowledge and wisdom equips the believer to better serve God, avoid pitfalls, identify false teachings, and to become teachers of the truth themselves. Teaching the Word of God is the prescribed way to make disciples from converts. As discussed in this chapter, Jesus tailored his teaching in ways that best illustrated his teaching points. Likewise, the church through the years has adopted

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[46] Pheme Perkins, *Jesus as Teacher*, Understanding Jesus Today (Cambridge: Cambridge University Press, 1990), 38-42.

[47] Bennion, *Jesus the Master Teacher*, vii.

various advances in teaching technology and methods. It is prudent for the church today to continue in this tradition of effective teaching by using various methods, which now should include the latest technological advances and methodologies. Millard Erickson supports this conclusion: "Education may take many forms and occur on many levels. It is incumbent upon the church to utilize all legitimate means and technologies available today."[48]

[48] Millard J. Erickson, *Christian Theology*, 2nd ed. (Grand Rapids: Baker, 1998), 1065.

CHAPTER 3

EDUCATION AND TECHNOLOGY: A BRIEF HISTORY

The challenge for churches is how to develop and maintain a core of scripturally-based and doctrinally-correct Sunday school teachers. This research project was about discovering the best teaching methodology to use when training Sunday school teachers so that they have a solid foundation. With the proper training, the teacher can present information in a creative and interesting way to a group of individuals who have, according to Mike Rappaport, "shortened attention spans due to the massive infusion of technology and entertainment over the past few decades."[1] Many believe shortened attention spans are especially true for Millennials and younger people, however, the issue of shortened attention spans actually applies to most people today.[2] For many, the mere thought of sitting through a typical Sunday school class with printed text and a "boring" teacher is enough to prevent many from attending. One answer, especially for younger students, appears to be a technology-rich learning environment, also known as ICT.

Over the years, educational methodologies have changed to incorporate the advancement in technology, adapting to the circumstances and needs of each era. The educational reality today is nothing like that of past centuries; it continues to change quickly, adapting to the latest advancements in technology. The article, "The Evolution

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[1] Mike Rappaport, "Millennials, Technology, and Short Attention Spans," *Liberty Law Forum*, August 10, 2016, accessed March 17, 2017, http://www.libertylawsite.org/2016/08/10/millennials-technology-and-short-attention-span/.

[2] Susan Greenfield, *I. D: The Quest for Identity in the 21st Century* (London: Sceptre, 2008), 76, 107, 173-174.

of Technology in the Classroom" states, "In looking at where educational methods and tools have come from to where they are going in the future, technology's importance in the classroom is evident now more than ever."[3]

Educational Technology

It is prudent in this discussion to understand what is meant by the term *educational technology*. Educational technology should be seen as an integral part of the emergence and growth of education from antiquity to modern times, which incorporates methodologies, hardware, and software. One of the clearest definitions of educational technology is offered by Howard Gardner, "Educational technology is a complex, integrated process involving people, procedures, ideas, devices, and organizations, for analyzing problems, and devising, implementing, evaluating and managing solutions to those problems, involved in all aspects of human learning".[4] Educational technology is more than the electronic devices, which normally come to mind when thinking of technology in education. It is instead, the methodologies, the hardware, software, and processes of educational technology. Paul Saettler makes this point quite well when he states,

> If technology is to be completely understood, in either ancient or modern terms, it should be seen as a system of practical knowledge not necessarily reflected in things or hardware. In the past, many technological innovations have emerged that involved little or no changes in tools or machinery. For example, in the three-field system of crop rotation, often called "the greatest agricultural novel of the middle ages in Western Europe," no machines were involved. . . . In modern terms, technology is "any systemized practical knowledge, based on experimentation and /or scientific theory, which enhances the capacity of society to produce goods and services, which is embodied in productive skills, organization, or machinery." This

[3] Purdue University Online, "The Evolution of Technology in the Classroom," accessed September 15, 2018, https://www.online.purdue.edu/ldt/learning-technology/resources/evelution-technology-classroom.

[4] Howard Gardner, *The Mind's New Science: A History of the Cognitive Revolution* (New York: Basic Books, 1998), 391.

> definition clearly exceeds narrow conceptions of technology that equated it exclusively with hardware and machines.[5]

Education in Ancient Civilizations

Clearly there have been advances in education, educational methodologies, and educational technologies throughout history across the globe. The main emphasis here will be restricted to focusing primarily on educational advances in Western civilization. The advances in education were fueled by advances in various forms of technology, which included devices, development of the written word, methodologies, and even the technology of conquest to name a few.

Oral Tradition

The oral tradition of passing knowledge from one generation to the next generation reaches back to the dawn of human history before written language existed. In time, the great civilizations of the ancient world developed and mastered the written word; however, the majority of people in those days remained illiterate, thus continuing to depend upon the oral tradition for communication, education, and the spread of ideas.[6] Saettler writes, "The oral tradition emphasized memory and training, and continued to be the primary method of instruction even after the development of the simplified and flexible alphabet led to the spread of writing and reading."[7]

For hundreds of years, the oral tradition was relied upon to teach practical knowledge as well as academic concepts. Some of the methods used in the oral tradition were reciting, chanting, singing, and storytelling; all of which facilitated memorization of

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[5] Paul L. Saettler, *The Evolution of American Educational Technology* (Englewood, CO: Libraries Unlimited, 2004), 3.

[6] Ibid.

[7] Ibid., 23.

information.[8] Children were to observe and imitate the actions and methods of their parents. As with modern education, the goal was to prepare the next generation for self-sufficiency and to establish an understanding of the ways of the culture. During this prehistory period, education was a primary and individual system where the parents taught their children the basic needs for survival as well as the social norms of the era.[9] As a culture grew and advanced in knowledge, it became necessary for the system of education to advance, hence the technology of instruction developed to support emerging cultural needs.[10] According to Saettler, education evolved to meet "each significant shift in cultural values over the centuries and to new theories of knowledge and learning and to new technologies of instruction."[11]

Since information was primarily transmitted orally in ancient civilizations, accurate memorization became a critical skill. In ancient Greece, oratory was the preferred means by which learning and information was passed along, even after written language was perfected.[12] In fact, Homer's Iliad and the Odyssey were intended to be recitative poems, for public performance. They were not to be learned by reading, but by being memorized from listening, and shared by recitation, rather than writing.[13] The oral

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[8] Ann Whittenmore, "Oral Tradition: Facilitating Education through Verbal Tradition," Lessonplanet, November 7, 2012, accessed October 2, 2018, https://www.lessonplanet.com/article/social-studies/oral-tradition-facilitating-education-through-verbal-tradition.

[9] The Mobile World Capital Barcelona Foundation, "The Evolution of Educational Systems through History," September 14, 2015, accessed October 4, 2018, https://mobileworldcapital.com/2015/09/14/the-evolution-of-educational-systems-through-history/.

[10] Saettler, *The Evolution of American Educational Technology*, 4.

[11] Ibid., 23.

[12] *The Stanford Encyclopedia of Philosophy*, "Socrates," accessed October 11, 2018, https://plato.stanford.edu/archives/spr2018/entries/socrates/.

[13] John Miles Foley, *The Theory of Oral Composition: History and Methodology* (Bloomington: Indiana University Press, 1988), 1-30.

tradition is seen in the New Testament, especially in the teaching of Jesus. Although Jesus was a prolific teacher, he penned no extant written work; rather, all of his teaching was done orally and memorized. Gerhardsson writes, "Turning to Jesus' oral teaching, we must reckon with the fact that he used a method similar to that of Jewish and Hellenistic teachers: the scheme of text and interpretation. He must have made his disciples learn certain sayings off by heart; if he taught, he must have required his disciples to memorize."[14]

Although the written word has been around for thousands of years, people are still learning by various oral methods. It can be argued that every other method or technique in education is basically an enhancement to oral methodology. Interestingly, the oral tradition is still the primary method of education in many cultures today.

According to Ann Whittenmore,

> Today, a wide variety of indigenous people still speak to teach; Native American, South American, African, and Australian tribes to name a few. In some cultures, and religions it is considered taboo to write down ancient words because they are considered to be alive, and therefore, sacred. It is felt that through writing, meaning is lost, or can be misinterpreted.[15]

As good as oral tradition was, the written word is a stronger and more enduring form of recording and storing information. Denise Schmandt-Besserat writes, "Speech, the universal way by which humans communicate and transmit experience, fades instantly: before a word is fully pronounced it has already vanished forever. Writing, the first technology to make the spoken word permanent changed the human condition."[16]

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[14] Birger Gerhardsson and Eric J. Sharpe, *Memory and Manuscript: Oral Tradition and Written Transmission in Rabbinic Judaism and Early Christianity*, The Biblical Resource Series (Grand Rapids: William B. Eerdmans; Livonia, MI: Dove Booksellers, 1998), 328.

[15] Whittenmore, "Oral Tradition."

[16] Denise Schmandt-Besserat, *How Writing Came About* (Austin: University of Texas Press, 1996), 1.

Champion states this idea more succinctly, "The most retentive memory is weaker than the palest ink."[17]

Written Communication

Mankind began the quest for knowledge well before the written word, but with the advent of written communication the accumulation and spread of knowledge exploded. Arguably, the development of written language could be considered the first and most important technological development in educational technology. Steven Fischer states, "Writing is humankind's principal technology for collecting, manipulating, storing, retrieving, communicating and disseminating information."[18] In the mid-fourth millennium BC, the Mesopotamians developed their own written form of communication, known as cuneiform. The Egyptians following shortly thereafter creating a system of picture writing called hieroglyphics. Additionally, the Egyptians developed a medium called papyrus, which was a significant improvement over the clay tablets used by the Mesopotamians.[19]

Cuneiform script in not only the oldest known writing system, it is the only one that can be traced to its prehistoric origin. The precursor to cuneiform script were clay tokens, which were a technology developed to address the need for record keeping as trade and the availability of goods increased. This simple system of tokens was primarily used as a means to track and record goods.[20]

The antecedent to the written word were the aforementioned clay tokens, which were developed to meet the needs of a developing society. They were used to

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[17] Selwyn Gurney Champion, *Racial Proverbs* (New York: MacMillan, 1938), 365.

[18] Denise Schmandt-Besserat, "The Evolution of Writing," The University of Texas at Austin, January 25, 2014, accessed October 11, 2018, https://sites,utexas.edu/dsb/tokens/the-evolution-of-writing/.

[19] Steven R. Fischer, *A History of Writing* (London: Reaktion, 2001), 34-36, 44.

[20] Denise Schmandt-Besserat, *Before Writing* (Austin: University of Texas Press, 1992), 1:6-7.

track agricultural and manufactured goods, especially during shipment and storage. Additionally, the use of tokens can be traced to the rise of social structure and formation of the state. Tokens were stored inside a clay ball with markings on the exterior. The next step toward the development of writing was the replacement of tokens with signs written on a clay tablet. The markings on the clay tablets developed into a system called pictographs. The symbols written on the clay tablets was a "one-to-one" pictorial representation of the goods recorded, as an abstract numbering system had not yet been invented.[21] The research of Schmandt-Besserat definitively shows that the written word is an offshoot of early counting and record keeping. She writes,

> Near East writing emerged from a counting device and that, in fact, writing was the by-product of abstract counting. When the concepts of numbers and that of items counted were abstracted, the pictographs were no longer confined to indicating numbers of units of goods and one-to-one correspondence. With the invention of numerals, pictography was no longer restricted to accounting but could open to other fields of human endeavor. From then on, writing to become phonetic and develop into the personal tool that is today.[22]

The use of written language in education has a long and important history. Although, Socrates is known as the father of Western philosophy and of the Socratic teaching method, he left no written text and is reported to have argued against the use of writing, especially in education.[23] While Socrates may have railed against writing, civilization could not have advanced as it did without written communication.[24] Written communication facilitates the accumulation and storage of vast quantities of knowledge. It makes literature, academic discussions, legal arguments, lengthy chains of reasoning, and analytical data, etc., accessible and reproducible with a high degree of confidence in

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[21] Schmandt-Besserat, *How Writing Came About*, 7.

[22] Schmandt-Besserat, *Before Writing*, 1:199.

[23] *The Stanford Encyclopedia of Philosophy*, "Socrates."

[24] Tony Bates, "A Short History of Educational Technology," Online Learning and Distance Education Resources, December 10, 2014, accessed October 10, 2018, https://www.tonybates.ca/2014/12/10/a-short-history-of-educational-technology/.

its accuracy. Additionally, written communication is more easily critiqued and analyzed than the ephemeral nature of speech. Denise Schmandt-Besserat states, "Writing is regarded as the threshold of history, because it ended the reliance upon oral tradition, with all the inaccuracies this entailed."[25]

Like most technologies, writing was an evolving process becoming more refined and improved over time. Writing technology progressed from a semasiography stage through various stages to phonographic, with the final outcome of today's writing systems.[26] Simply stated, writing progressed from pictographic writing to ideographic to rebus writing and finally to the phonetic alphabet.[27] Additionally, the evolution of writing includes the ability of writing to handle data in abstraction. For example, Schmandt-Besserat points out that, "Certain English numerical expressions referring to particular sets, such as twin, triplet, quadruplet and duo, trio, or quartet are comparable to concrete numbers."[28] This ability is not limited to English, but is also common in other written languages. Writing developed progressively moving from pictures, to semasiography (descriptive and identifying), then to phonography, which can be further identified as word-syllabic, syllabic, and finally alphabetic. Figure 1 outlines the progression of writing.[29]

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[25] Schmandt-Besserat, *Before Writing*, 1:1.

[26] I. J. Gelb, *A Study of Writing* (Chicago: The University of Chicago Press, 1953), 190.

[27] Ibid., 25-41.

[28] Schmandt-Besserat, "The Evolution of Writing."

[29] Gelb, *A Study of Writing*, 191.

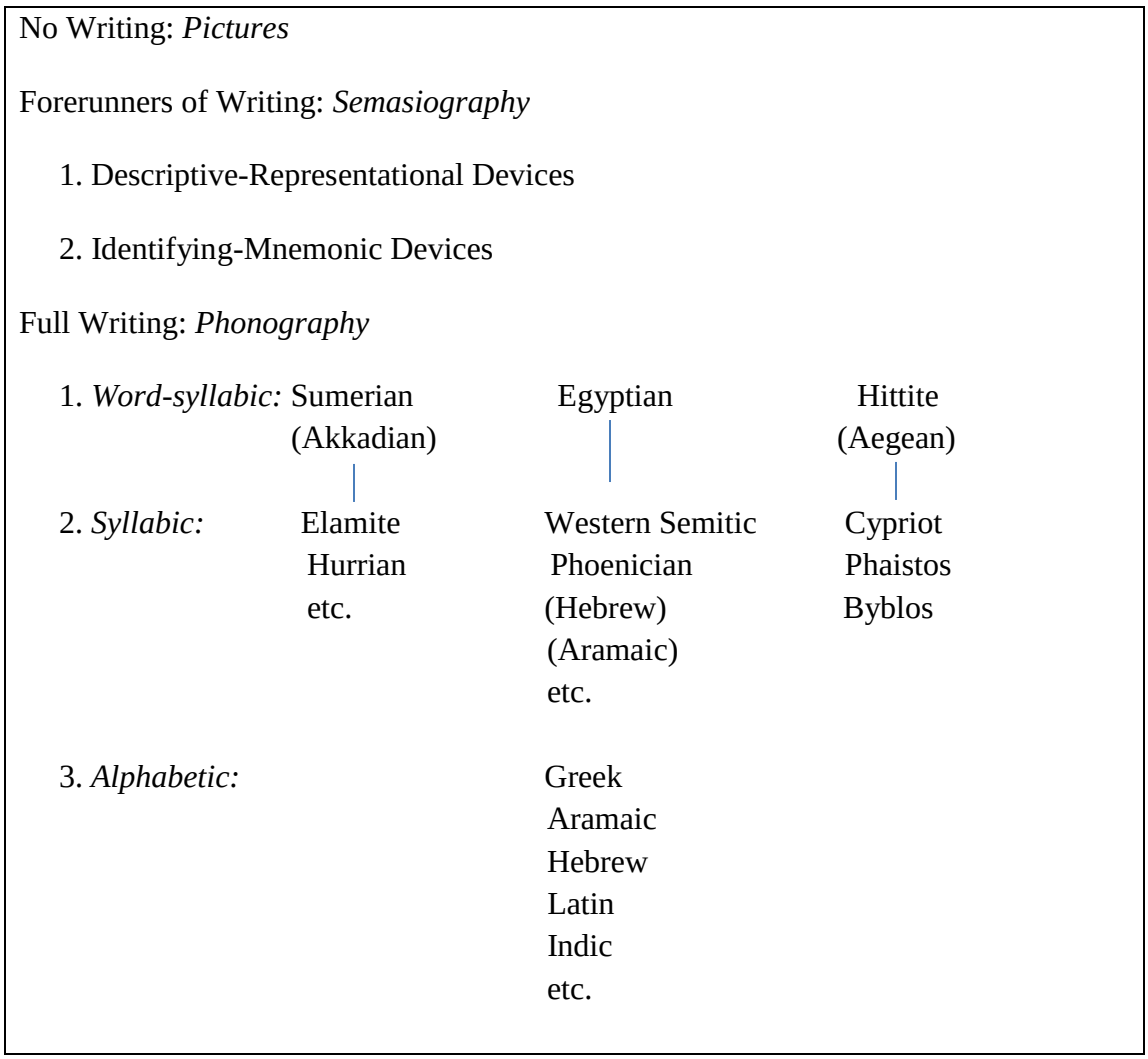

Figure. 1. The stages of the development of writing

As the technology of writing advanced, the need for changes in education also advanced. Often the development of one technology creates the need for a supporting technology, and in the case of writing, it was the need for a suitable medium on which to write. There were several mediums developed specifically to support writing, including clay tablets, tree bark, wax-covered boards, parchment made of goatskin, vellum made of calfskin, papyrus, chalk boards, various types of paper, and the computer screen.[30] As

[30] Allison Karmel Thomason, *Luxury and Legitimation: Royal Collecting in Ancient Mesopotamia* (Burlington, VT: Ashgate, 2005), 25.

each of these technologies developed (writing and the mediums) they were adopted and used to support societal needs, which included education.

Formal Education

The first formal schools occurred in the late third millennium BC and were primarily for the education of priests, scribes, royalty, and the upper class. These schools first came about in Sumer, Mesopotamia, and were focused primarily on writing.[31] In Greece, during the first millennium BC, schools were first established independent of religious authorities or institutions. There are three distinct educational periods in ancient Greece: the Old Greek or Historic period, the New Greek or Transitional period, and the Cosmopolitan period. During the Historic period, the curriculum, organization, and character of this early Greek system of education was determined by each independent polis or city-state, which focused on the needs of that polis. The Transitional period saw the emphasis shift from the needs of the polis to the needs of the individual. The Cosmopolitan period saw the creation of the rhetorical and the philosophical schools and the creation of formal educational institutions, specifically the Greek universities. The University of Athens included three schools, the Peripatetic, the Academy, and Stoic, each focusing on a different aspect of education.[32]

The Roman educational system developed in two periods, the early period when the practices and ideas were strictly Roman, and the later period of Greek influence. The design of education during the early period was home-based with tutors. Near the beginning of the Greek influence period, elementary schools were established throughout the Roman world. During this period teaching methodologies and curriculum

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[31] Thomason, *Luxury and Legitimation*, 25.

[32] Francesco Cordasco, *A Brief History of Education: A Handbook of Information on Greek, Roman, Medieval, Renaissance, and Modern Educational Practice*, rev. ed. (Totowa, NJ: Littlefield, Adams, 1976), 4-9.

were developed and public support for education grew. Although education was widely popular, it was not until AD 370 that local schools were universally funded by the Roman government.[33] Francesco Cordasco writes, "The higher education of Rome was largely an imitation of that of Greece . . . many libraries were taken as spoils in the conquest of Greece."[34] The university of Rome as well as other Roman universities were built around libraries taken in conquest. As education advanced to meet the needs of society, educational methodologies were developed in an effort to improve the learning outcome.

Methodologies

There are distinctive educational methods that were antecedents of the current teaching technologies and methodologies.[35] Advancements in any field do not just appear they are conceived and developed by a person or a group of persons in order to meet specific needs. The first of these educational innovators were the Sophists, who were a group of teachers in Athens in the latter half of the fifth century BC. Saettler says that the Sophists, "were probably the first instructional technologists."[36] A major innovation that the Sophists implemented was mass instruction. Until this time, the teaching relationship was between the single student and a teacher; the teaching of a group of people was a huge paradigm shift that had a lasting impact on education. The Sophists developed methods that allowed them to teach any subject. Saettler writes,

> The Sophists technique of analysis applied to the teaching of rhetoric was extended to other instructional content. Whole bodies of cognitive rules were formulated in every field they sought teach. . . . They also evolved a branch of rhetoric devoted to

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[33] Cordasco, *A Brief History of Education*, 14, 15.

[34] Ibid, 16.

[35] There are so many contributors in the development of educational methods that they all cannot be covered in this short paper; therefore, the focus will be narrowed to a few of the earlier contributors. This in no way minimizes the contributions of the others.

[36] Saettler, *The Evolution of American Educational Technology*, 24.

> the invention and discovery ideas. Here again their analytical approach to instruction enable them to develop a rather sophisticated technology of instruction or extracting every possible topic for any given case, a technology which combined rhetoric with eristic (the art of disputation). Because Sophist instructional procedures are inherently systematic, the student always knew what was expected of him, how he might achieve his goals, and how well he was progressing. . . . The influence of the Sophists on subsequent instruction in courses of study has been enormous.[37]

The Sophists taught that all men possessed an intellectual ability, but education was required to achieve the full potential of that intellect. On shaping the intellect, Jaeger states, "It begins by instruction in the form of language, the form of oratory, and the form of thought. This educational technique is one of the greatest discoveries which the mind of man has ever made: it was not until it explored these three of its activities that the mind apprehended the hidden law of its own structure."[38]

Another thinker in early education was Socrates (470-399 BC). What is known of Socrates is gleaned from the writings of Plato and Xenophon, as Socrates himself left no written record.[39] Socrates is best known for his method of instruction, which come to be known as the Socratic method. The Socratic method is a questioning conversation guided by a series of leading questions intended to guide the student to the proper answer. Werner Jaeger points out, "In contrast to the relativism of the Sophist, Socrates sought to attain universally valid knowledge of the nature of virtue which should serve as a guide and motivation to moral conduct."[40] Clearly, Socrates and his Socratic method have had a lasting influence on education.

Another educational methodology is Scholasticism, which was an educational movement that dominated Europe in the twelfth and thirteenth centuries. The tenets of

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[37] Paul Saettler, *A History of Instructional Technology* (New York: McGraw-Hill, 1968), 16, 17.

[38] Werner Wilhelm Jaeger, *Paideia: The Ideals of Greek Culture*, 2nd ed. (New York: Oxford University Press), 1965, 311.

[39] *The Stanford Encyclopedia of Philosophy*, "Socrates."

[40] Saettler, *A History of Instructional Technology*, 17.

Scholasticism were developed by Pierre Abelard while teaching at the Notre Dame Cathedral School.[41] Saettler writes, "Abelard allowed any subject or thought to be reasonably examined for the purpose of understanding, verification, or qualification. This method shocked many of his colleagues, who felt that Abelard gave his students the freedom to arrive at heretical conclusions."[42] Scholasticism played a key role in the development of the universities in Europe. St. Thomas Aquinas was strongly influenced by Abelard's methods and continued refining the methods, ultimately developing the final technique of instruction. No doubt Abelard was a major contributor to the advancement of education and is a "forerunner in modern educational technology."[43]

Johann Amos Comenius (1592-1670) was an innovative educator and thinker who developed ground breaking methodologies in education. In fact, Saettler points out, "Comenius proposed a system of education open to all, one which led from kindergarten through the University, a proposal some three centuries ahead of his time."[44] Comenius had a clear vision of what worked in education and what did not. He used the inductive method of Bacon but rejected the scholastic tradition of studying grammar and memorizing texts. He believed that the teaching methods in European schools were haphazard and the teaching methods actually reduced the student's interest in learning.[45] Modern education has embraced many of the principles and content of Comenius. The

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[41] Notre Dame became the University of Paris in 1180; Saettler, *The Evolution of American Educational Technology*, 28.

[42] Saettler, *The Evolution of American Educational Technology*, 27.

[43] Ibid., 28.

[44] Saettler, *A History of Instructional Technology*, 21.

[45] *Encyclopedia of Education*, "Comenius, Johann," accessed November 9, 2018. https://www.encyclopedia.com/education/encyclopedias-almanacs-transcripts-and-maps/comenius-johann-1592-1670.

following is a summary Comenius' instructional principles, condensed by Saettler.[46] Saettler writes,

> Instructional method should follow the order of nature. . . . Instruction should begin at infancy and should be designed for the age. . . . Whatever is to be taught should be taught as being of practical application to life. . . . Instruction should proceed by the inductive process from the simple to complex. . . . A graduated series of illustrative materials should be correlated with instruction… Sequence is important. . . . General principles should be explained. . . . Subjects should be correlated whenever possible. . . . Learning is to be approached through the senses. . . . Content presented orally by the teacher and pictorially illustrated whenever possible. . . . All parts of an object or subject matter must be learned with reference to their order, position, and connection with one another. . . . Corporal punishment should not be used for failure to learn. . . . Schools must be cheerful, equipped with real and illustrative materials, and staffed with sympathetic teachers.[47]

Saettler argues, "It is evident from the instructional principles enumerated above that Comenius was the first real forerunner of modern instructional technology."[48] Unfortunately, much of his work was lost until the middle of the nineteenth century; however, when his work was rediscovered it was clear that he was the greatest educator of his time.[49] Examining education today, it is easy to see many of Comenius' principles and methodologies being vindicated.

The last innovative educator discussed here is Maria Montessori (1870-1952). She is an internationally-known educator and the developer of the Montessori teaching method. To Montessori, "The child is in a state of continuous and intense transformation, of both body and mind, whereas the adult has reached the norm of the species."[50] Her system, which included graded materials designed to provide proper sequencing of subject

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[46] For the full list, see appendix 2.

[47] Saettler, *A History of Instructional Technology*, 21, 22.

[48] Ibid.

[49] Cordasco, *A Brief History of Education*, 73.

[50] Edwin Mortimer Standing, *The Montessori Method: A Revolution in Education*, 4th ed. (Fresno, CA: The Academy Library Guild, 1962), 8.

matter for individual students, had a dramatic effect on educational technology. The Montessori methodology is summed-up by E. M. Standing:

> She realized that neither the ordinary nursery school, nor yet the environment of the home, had been made to suit the needs of the children. And so, if one may use the paradox, she created a natural environment for the child (that is, one suited to his nature.) Then, while other people talk about the necessity of given children freedom in education, she actually provided them with it. . . . She studied their free behavior in this new environment and discerned its significance. Indeed, one could sum up the Montessori method by saying that it is a method based on the principle of freedom in a prepared environment. . . . A method of education through the senses and sense training . . . education by self-activity . . . education by means of liberty in a prepared environment.[51]

The distinguishing feature of the Montessori method is that it was designed specifically to address not only the needs of the children, but it actually sought to understand how, what, and why children learn.

Montessori, like the other innovators discussed here, was not motivated by advancements in technology, but by a desire to improve education. Today, however, new educational methods are often a direct response to the development of technology.

Hardware and Software

Educators and methodologies are not what comes to the mind of most people when the subject of educational technology is mentioned. Rather, what comes to mind are devices, hardware, or software. Often, technology being used for educational purposes was not originally designed with an educational application in mind—most were developed for business.[52] However, once a certain technology is proven and application to education made, it is quickly adopted. This section will trace the development and implementation of educational devices or technology through the annals of the history of education. To be clear, this timeline of educational hardware and software is not exhaustive; rather, it presents a trend of technology adaptation and use in

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[51] Standing, *The Montessori Method*, 4-7.

[52] Bates, "A Short History of Educational Technology."

education through history starting with the invention of the Guttenberg printing press in 1453.

Tony Bates says, "The invention of the printing press in Europe in the 15th century was a truly disruptive technology, making written knowledge much more freely available, very much in the same way as the Internet has done today."[53] Although many factors drove Renaissance and Enlightenment movements in Europe, the printing press was one of the prime movers. As printed documents became more prolific, the need for business men and government officials to become literate increased, which led to a corresponding demand for more formal education.[54] Although not immediate, the printing press changed educational practices and the student-teacher relationship. Eisenstein writes, "Previous relationships between masters and disciples were altered. Students who took full advantage of technical texts which served as silent instructors. . . . Young minds provided with aided additions, especially of mathematical texts began to surpass not only their own elders but the wisdom of ancients as well."[55] While the printing press was not specifically developed for education, it clearly had a positive impact on education and hence, societal literacy. Tony Bates states, "Even today, printed materials, in the form of textbooks, dominate as the main technology of teaching and formal education, training and distance education."[56] Educational methodologies continue to evolve and develop to keep pace with the rapidly advancing world of electronic communication.

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[53] Bates, "A Short History of Educational Technology."

[54] Ibid.

[55] Elizabeth L. Eisenstein, *The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe* (Cambridge: Cambridge University Press, 1997), 1:689.

[56] Tony Bates, *Technology, E-Learning, and Distance Education*, 2nd ed., Routledge Falmer Studies in Distance Education (London: Routledge, 2005), 67.

Distance learning has become convenient and popular as a result of the growth of the internet and electronic devices, making online courses possible. Distance learning has been around since 1858, when the University of London started offering a degree by correspondence program. In 1892, the University of Chicago followed suit and used the mail system to submit assignments. The technology of the postal service was leveraged to aid in education, creating a new method of obtaining a degree.[57]

There are many technologic advances throughout history with many being adapted to education, and there are some technologies designed specifically for education. The Timeline of Educational Technology below shows how technology has been used to support education.[58] This time line is not intended to be exhaustive, nor will it discuss the developmental stages of any technology (see table 1).

Table 1. Education technology timeline

Year	Technology or Device Developed
1650	The Horn-book was a wooden paddle with paper attached which had the alphabet and/or a Scripture verse. It was used to teach reading.
1870	The magic lantern was the forerunner of the slide projector. This was a technology that was by affluent school systems.
1880	School desk: before the invention of the school desk students had to use adult sized desk, long tables, benches or whatever they had for their studies.
1890	The School Slate: was used in the nineteenth century and into the early twentieth century.
1890	The chalkboard is perhaps one of the best known inventions of educational technology and it is still in use today.

[57] Denise M. Casey, "A Journey to Legitimacy: The Historical Development of Distance Education through Technology," *TechTrends* 52, no. 2 (May 2008): 45-51.

[58] This timeline is a compilation of sources, which are here cited in order of use: Jessica Miller, "Educational Technology Timeline," June 10, 2012, accessed October 20, 2018, https://www.sutori.com/story/educational-technology-timeline; E-Learning Infographic, "Timeline of Educational Technology in Schools Infographic," March 31, 2014, accessed November 8, 2018, https://elearninginfographics.com/timeline-of-educational-technology-in-school-infrographic/; University of Illinois in Urbana-Champaign, "Educational Technology Timeline," Fall 1999, accessed November 8, 2018, https://chip.web.ischool.illinois.edu/people/project/timeline.shtml; Purdue University Online, "The Evolution of Technology in the Classroom."

Table 1 continued

1900	The pencil was invented in 1662, but did not become economical too use until much later.
1925	Radios were first introduced to the classrooms by the New York School System and soon other major cities followed. Instruction on radios included penmanship, history, and arithmetic.
1930s	The overhead projector which was first used by the U.S. military for training purposes quickly spread to schools.
1933	The use of film projectors became popular in schools.
1939	The television first appeared in the classroom in the Los Angeles school system and was quickly adopted by school systems across the country. Until computers; it was the most widely used electronic technology in schools.
1940	The ballpoint pen made its debut and became the writing instrument of choice.
1940	The mimeograph machine was widely used in school systems for 50 years.
1950	Headphones became popular in schools and listening stations were set-up in libraries and in classrooms. They were used to listen to audio tapes of lessons, which could be repeated as often as needed.
1950	The slide rule came into common use for math, engineering, and scientific courses. It was made obsolete by the hand-held calculator by the mid-1970s.
1964	BASIC, developed at Dartmouth College with the intent to give students a simple programming language that was easy-to-learn.
1967	Texas Instruments develops the handheld calculator.
1967	The LOGO programming language was developed.
1972	The Scantron machine could automatically grad multiple choice exams.
1980	The Plato computer was the first computer widely adopted by school systems and was the computers foot in the door of education.
1984	The Apple Macintosh computer is developed and used in schools.
1985	Touch typing software Mavis Beacon Teaches Typing is developed and widely used in schools.
1988	Laptops are developed and are eventually utilized as teaching tools.
1990	CD-ROM disks provided students with a portable storage device.
1992	School systems started using Gopher servers to provide students with online information.
1993	The internet becomes available for civilian use.
1996	Schools create instructional web pages.
1999	Interactive whiteboards or SMART boards introduced in schools.
2002	99 percent of schools had internet access.
2005	The iClicker was introduced to schools, which allowed teachers to get feedback from students in real time.
2007	Apple popularized the smartphone. Smartphones have continued to grow in capabilities and popularity.
2010	The Apple iPad was introduced.
2013	90 percent of students under the age of 18 have access to mobile technology.
2016	Tech-Factor Inc. a developer of software for educational use to include animation and Virtual-reality software.

Conclusion

The transformation of education through history has paralleled the development and growth of mankind. Not all, but many technologies developed to support business and other societal needs have been adapted for use in the educational process. This trend continues as school systems around the globe hungrily devour the latest electronic developments. The religious community, once in the forefront of education, now appears to be content as a follower. Churches often fail to see the need to stay abreast of the latest teaching methods and technologies, which causes issues with younger people, especially Millennials, who appear to have a shorter attention span that older generations.[59] This is not to say that new technology is only for the younger generations, on the contrary, most people today have a smart phone, and as of 2016, 89 percent of households had a computer.[60] The article "The Evolution of Technology in the Classroom" states, "In looking at where educational methods and tools have come from to where they are going in the future, technology's importance in the classroom is evident now more than ever."[61] Across the centuries, the church has adopted various technologies to advance the gospel, as exampled by the printing press, various forms of transportation, electricity, television, radio, computers, sound systems, and teaching methodologies. If the church is to stay healthy and relevant, it should continue to emulate the public and private school systems by adopting and utilizing the latest technologies in hardware, software, and teaching methodologies.

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[59] Rappaport, "Millennials, Technology, and Short Attention Spans."

[60] US Department of Commerce, Economic and Statistics Administration, US Census Bureau, "Computer and Internet use in the United States," accessed November 14, 2018, https://www.census.gov/content/dam/census/library/publications/2018/acs/ACS-39.39.pdf, 4.

[61] Purdue University Online, "The Evolution of Technology in the Classroom."

CHAPTER 4

ELEMENTS OF THE MINISTRY RESEARCH PROJECT

This project was developed around the search for an effective training method for Sunday school teachers at LWBCE. The purpose of this project was to determine if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method. The project had three goals. The first goal was to assess the biblical and theological knowledge of the study participants by administering a pre-course test. The second goal was to prepare the experiment by designing two equal training courses using traditional lecture and workbook teaching, method 1 (the control group) and self-directed learning using technology, method 2 (the experimental group).[1] The third goal was to determine if the two teaching methods had similar outcomes.

Goal 1

Recruiting Participants

The recruiting of participants was conducted as follows: a flyer asking for volunteers describing the reason and nature of the study was published and inserted into the church bulletin each Sunday for one month. Additionally, announcements were made from the pulpit. A sign-up sheet was placed at the rear of the sanctuary for those interested. Because of the small size of the LWBCE, volunteers were solicited from a sister church. When the study was ready to begin, 44 volunteers signed up to participate in the study, there were 30 participates from LWBCE and 14 participates from our sponsoring church.

[1] Goal 2 included the actual training using these methods.

All participants were at least 18 years old and over. The average age for participants was 35.27 years (SD = 12.96) (see table 2). Of the participants, 54.5 percent were female (n=24) and 45.5 percent were male (n=20).

Table 2. Age distribution

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Age	44	35.2727	12.96034	.530	.357	-.479	.702
Valid N (listwise)	44						

Once the volunteers were established, a meeting was held to further explain the project and the participant's role. Once a person made a commitment to participate in the study, he or she was given an agreement to participate, to be completed before being included in the study.

Randomization

The study participants were assigned randomly into two groups, the control group (traditional lecture and workbook teaching method—group A) and the test group (self-directed learning using technology—group B). Participants were randomly assigned a number in the following way. The numbers (1 through 44) were written on the face of 3x5 cards, the cards were thoroughly shuffled (so the numbers would be random), then the cards were placed face down on chairs in the sanctuary. There were 44 chairs arranged in the sanctuary. All others had been removed to prevent confusion. Participants arrived in the sanctuary and were instructed to take a seat. The number on the participant's chair became that person's number, which was used throughout the study. Using a random number generator, participants were assigned to a specific group. The random number generator used for this study was a sequence generator. A sequence generator was used because it randomizes a specific set of integers. In this case, the integer sequence was (1-

44). The sequence generator used was from Random.org.[2] Two sets of 22 numbers each were generated, one for each of the groups.

Curriculum

The curriculum for this study had to meet several criteria. First, the company providing the material had to be qualified, known, and accepted in academia. Second, the curriculum could not be new and must be academically vetted. Third, the material was required to come with test instruments. Fourth, the material had to be available to be presented by traditional teaching methods and by self-directed learning using technology. Finally, the company selected had to agree to allow their material to be used in the study. After examining various providers of educational materials, a product from A Beka Book was selected.[3] A Beka Book is a well-established producer of educational materials. Permission to use the A Beka Book material for the purpose of the study was granted by the Curriculum Support Division of A Beka Book.

Developing the Tests

In the curriculum selected there were three unit quizzes with a total of thirty combined questions, which were used for the pre-course test and post-course test. The pre-course test and post-course test were comprised of fifteen questions, each taken from

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[2] Random.org, "Quotations about Randomness," accessed December 28, 2018, http://www.random.org/quotations/.

[3] Beka Horton, *Jesus and His Followers: The Gospels* (Pensacola, FL: A Beka Book, 2009). The study used copyrighted material from A Beka Book in the teaching and their test instrument to test the hypothesis that self-directed learning using technology is as effective as traditional teaching methods. The A Beka product was used by permission from A Beka Book for the purpose of this study, with the exception of publication in the appendices or any other place in the actual study. A Beka Book provides both conventional teaching methodologies by producing a workbook and a teacher guide for lecture. This conventional material was used for Group A. A Beka Book also provides the same lesson using electronic technologies via their *Flex Teach* system, utilizing various digital products and video lessons. The *Flex Teach* system was used with Group B. A Beka Book is a well-established and a fully accredited educational organization, providing teaching materials to many schools and individuals.

the quizzes, specifically five questions were taken randomly from each quiz. To randomize the test questions, again, a sequence generator was used. In this case, the integer sequence was (1-10) the numbers were entered into the random number generator,[4] which was set to produce five random numbers. This process was used independently for each of the three quizzes. Then, the five questions from each quiz were compiled into a pre-course test and a post-course test.

Administering the Pre-Course Test

The pre-course test was administered to both groups at the same time and in the same room. Goal 1 was successfully met when the test subjects completed the pre-course test. Once the pre-course test was administered, goal 1 was successfully completed. The measure for success was a 90 percent completion rate. The goal was met with a 100 percent completion rate.

Goal 2

The second goal was to prepare the experiment by designing two equal training courses using method 1 (the control group) and method 2 (the experimental group). The two groups were separated and given instructions specific to their method of study. The control group (group A) was taught by the traditional classroom lecture and workbook method. The test group (group B) used self-directed learning using technology-based learning.

Group A (Control Group)

The curriculum for group A was divided into three units. Each lesson was assigned a start and finish date, which was rigidly followed.

[4] Random.org, "Quotations about Randomness."

Lessons—Unit 1. The first lessons were in Unit 1: "The Bible—God Communicates with Us." The first lesson was "The Wonderful Word of God" workbook pages 2-4, and was a general discussion of the Bible. The second lesson was presented to the control group. Lesson 2 was "How Our English Bible Came to Us through the Ages," workbook pages 5-15. It was a basic history of the Bible. The third, fourth, and fifth lessons were presented to the control group. Lesson 3, "The English Bible in the 20th Century," was a discussion of modern translations of the Bible, workbook pages 16-24. Lesson 4, "The Living Word is Jesus Christ," workbook pages 25-30. Lesson 5, "Four Portraits of Christ in the Gospels," was an examination of the four gospels, workbook pages 31-35.

Lessons—Unit 2. Unit 2 was titled "Birth and Preparation for Ministry." The sixth and seventh lessons were presented to the control group. Lesson 6, "A Savior is Borne—The First Christmas," taught Jesus' lineage and birth, workbook pages 38-42. Lesson 7, "In the Temple at Age Twelve—'About My Fathers Business,'" focused on Luke 2:39-52, workbook pages 43-45. The eighth and ninth lessons were also presented to the control group. Lesson 8, "The 'Lamb of God' Baptized in the Jordan River," focused on Matthew 3:3-17, workbook pages 46-49. Lesson 9, "Jesus Is Tempted Forty Days in the Wilderness," focused on Matthew 4:1-11, workbook pages 50-56.

Lessons—Unit 3. Unit 3 begins with the tenth lesson presented to the control group. Lesson 10, "A Wedding Mishap Turns into a Miracle of Joy," focused on Jesus' first miracle, and had a Scripture focus of John 2:1-25, workbook pages 58-61. The eleventh and twelfth lessons were also presented to the control group. Lesson 11, "Jesus Cleanses Temple—Visits with Nicodemus," had a Scripture focus of Mark 11:15-19 and John 3:1-21, workbook pages 62-65. Lesson 12, "Samaritan Woman at Well—and Rejection in Nazareth," focused on John 4:4-42 and Mark 6:1-6, workbook pages 66-69.

The lessons were taught using the traditional teaching method of lecture, workbook, and homework. Before the students came to class they were to have completed the assigned work for each chapter, which consisted of reading the assigned chapters, answering the chapter review questions, and reading the associated biblical text. During the class period, the subject material was covered using lecture, group discussion, illustrations, and question answer. Learning aids such as maps were used as the curriculum advised.

Test Group (Group B)

Group B was provided a start date and a completion date only, meaning that the lessons were completed at a self-directed pace. Group B was assigned to self-directed learning using ICT as their only source of learning.

Technologies. The technologies used during the study were computers, the internet, and cell phones. Specific instructions and a demonstration were given to group B on how to access and use the technology, and a help desk was available throughout the course. The content and sequencing of the lessons presented to group B were identical to the lessons presented to group A. The group B participants learned by watching online lectures, participating in video teleconferencing, online review unit reviews, and online reading. Both groups needed a 90 percent completion rate to be considered successful. The actual completion rate was 100 percent.

Goal 3

The third goal was to determine if the two teaching methods had similar outcomes. This goal was accomplished by the completion of a post-course test, the statistical analysis of the results accomplished, and the interpretation of the data completed.

Post-Course Test

The post-course test was administered two days after completion of the teaching curriculum. Using a test instrument previously described in goal 1, a post-course test was administered to the study participants. Once the post-course test was administered and the results were analyzed, goal 3 was successfully completed. The measure for success was a 90 percent participant completion rate and completion of the statistical analysis. The first measure of success for goal 3 was met with a 100 percent participant completion rate. The second measure of success was the completion of the statistical analysis between the pre-course test and post-course test.

Statistical Analysis

Once the post-course tests were scored, the data analysis began with the input of the raw data into the SPSS 25[5] statistical analysis program. The statistical analysis was conducted using analysis of variance (ANOVA), which assumes normality of distribution; therefore, the normality of several variances were tested. Once the statistical assumptions were met it was possible to move forward with interpreting the mixed-effects ANOVA. The final results were that there is no difference between the control group and the test group. All analyses were conducted using SPSS Version 25.[6]

The statistical analysis began by checking each distribution for the assumption of normality using skewness and kurtosis statistics. If either statistic was above an absolute value of 2.0, then the assumption was violated. The test of normality was met (see table 3).

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[5] IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp. SPSS is a statistical analysis program used to calculate the results of an ANOVA method of research. SPSS uses marginal means with 95 percent confidence intervals were reported and interpreted for the interaction effect of between- and within-subjects effects. With SPSS statistical significance is assumed at an alpha value of 0.05.

[6] Ibid.

Table 3. Descriptive statistics

N	Mean	Std. Deviation	Skewness		Kurtosis	
Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
44	57.0386	14.82650	.254	.357	-.738	.702
44	78.3955	12.31242	-.357	.357	-.566	.702
44						

Levene's Test of Equality of Variances was used to check for the statistical assumption of homogeneity of variance. Leven's Test of Variances is used to tests the null hypothesis that the error variance of the dependent variable is equal across groups. The homogeneity of variances was met (see table 4).

Table 4. Levene's test of equality of error variances

		Levene Statistic	df1	df2	Sig.
Pre-course test	Based on Mean	.012	1	42	.914
	Based on Median	.025	1	42	.876
	Based on Median and with adjusted df	.025	1	38.382	.876
	Based on trimmed mean	.005	1	42	.943
Post-course test	Based on Mean	.243	1	42	.625
	Based on Median	.259	1	42	.614
	Based on Median and with adjusted df	.259	1	41.859	.614
	Based on trimmed mean	.270	1	42	.606

Box's M test was used to check for the statistical assumption of homogeneity of covariance matrices across groups using $p < .05$ as a criterion. In short, it tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. The generated test statistic is called Box's M statistic. The test of equality of covariance was met—as *Box's M* was not significant, (3.469) $p >$ a (.05). Additionally, (F) test the means between two groups, (df1) represents the degrees of freedom, (df2) represents the total number of observations minus the degrees of freedom, and (Sig.) represents the *p* value (.05) any number greater than *p* is reported as not significant. (see table 5).

Table 5. Box's test of equality of covariance matrices

Box's M	3.469
F	1.097
df1	3
df2	317520.000
Sig.	.349

Another statistical assumption is the homogeneity of variance. This statistic is used because there are two groups (treatment and control; between-subjects) and two observations of the outcome (pre and post; within-subjects). Mauchly's Test was used to assess the assumption of sphericity. When sphericity was violated, a Greenhouse-Geisser correction was applied. This assumption was met (see table 6).

Table 6. Multivariate tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power[c]
Test	Pillai's Trace	.779	148.165[b]	1.000	42.000	.000	.779	1.000
	Wilks' Lambda	.221	148.165[b]	1.000	42.000	.000	.779	1.000
	Hotelling's Trace	3.528	148.165[b]	1.000	42.000	.000	.779	1.000
	Roy's Largest Root	3.528	148.165[b]	1.000	42.000	.000	.779	1.000
Test * Group	Pillai's Trace	.000	.015[b]	1.000	42.000	.903	.000	.052
	Wilks' Lambda	1.000	.015[b]	1.000	42.000	.903	.000	.052
	Hotelling's Trace	.000	.015[b]	1.000	42.000	.903	.000	.052
	Roy's Largest Root	.000	.015[b]	1.000	42.000	.903	.000	.052

Mixed-effects ANOVA was used to compare the treatment and control groups on their respective rates of change from pre-course test to post-course test. There was a non-significant interaction between the treatment groups and their change across time, $F(1,42) = 0.02$, $p = 0.90$, $\eta 2 < 0.0001$, power = 0.05. This means that the groups did not differ in their rates of change across time (see tables 7, 8).

Table 7. Difference

Test	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	57.432	3.197	50.979	63.884
2	79.005	2.653	73.651	84.358
1	56.645	3.197	50.193	63.098
2	77.786	2.653	72.433	83.140

Table 8. Rate of change

Group	Pre- course test	Post-course test	*p*-value
Control	57.43 (50.98 – 63.88)	79.01 (73.65 – 84.36)	
Treatment	56.65 (50.19 – 63.10)	77.79 (72.43 – 83.14)	0.90

The results of the ANOVA indicate that the groups did not differ in their rates of change across time. The two groups gained knowledge at the same rate across time. Indicating that there was no difference between group A and group B. Figure 2 depicts the interaction as a line graph, showing virtually no divergence in the lines.

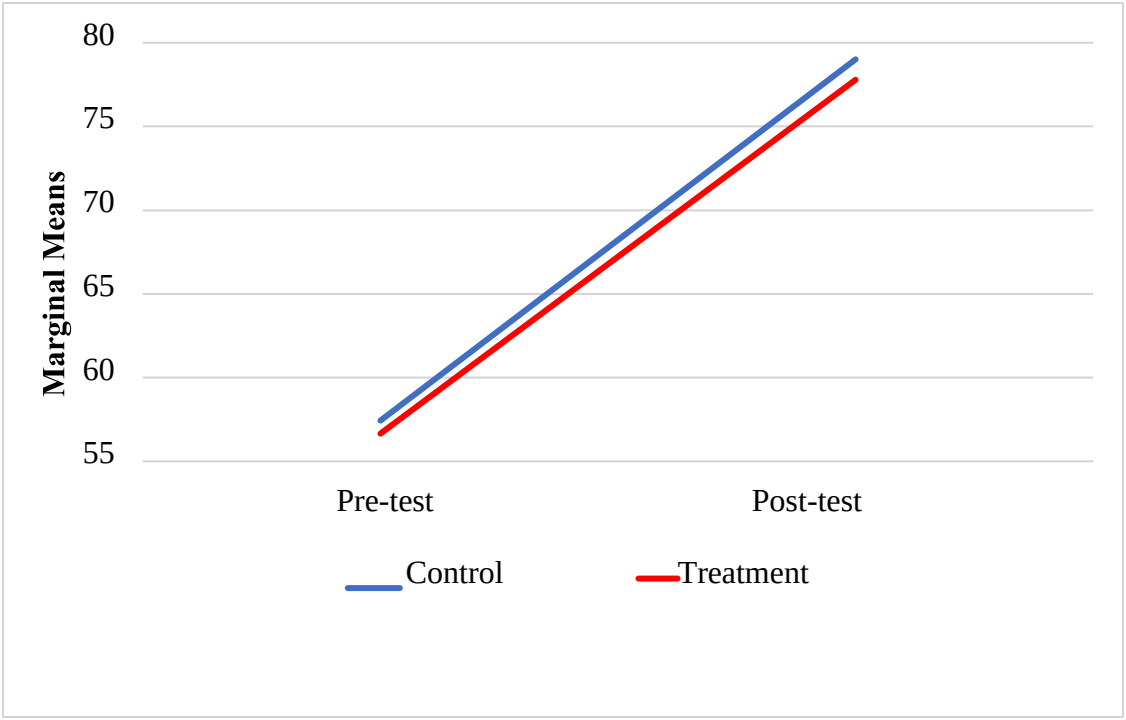

Figure 2. Results

Conclusion

The purpose of this project was to determine if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method. To meet the project's purpose, three goals were developed. These goals were to assess the biblical and theological knowledge of potential teachers at LWBCE, present a course of study to two groups of students using different teaching methodologies, and to conduct a post-course test to measure the change in the participants' biblical and theological knowledge. Each of the three goals set for the project were met.

The study demonstrated that there was a non-significant interaction between the treatment groups and their change across time. In other words, the two groups performed the same despite the differences in teaching methodologies. While this study is a snapshot of one small church, the results of the study clearly indicate that self-directed learning using technology is as effective as conventional educational methods in teaching content.

The subject of including self-directed learning using technology in Sunday school programs has not been seriously studied, creating a void in the available information. To date, the only source of empirical research available to Christian educators are studies from the secular world of education; however, as good as those studies are, they are not a perfect fit for Christian education, the church as a whole, and specifically for Sunday school teacher training.

CHAPTER 5

EVALUATION OF THE PROJECT

Introduction

This research project was about discovering the most effective teaching methodology to use when training Sunday school teachers. While this study may not have discovered which teaching method was the most effective, it certainly shows that self-directed learning using technology-based education methodology is as effective in teaching content, as traditional lecture and workbook methods.

Evaluation of the Project's Purpose

The purpose of this project was to determine if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method. The results of this limited study showed no significant difference in learning between the control group (traditional teaching methods—group A) and the test group (self-directed learning using technology—group B). The discussion in this section will focus on the use and effectiveness of technology in education.

Evaluation of the Project's Goals

The purpose of this project was to determine if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method. There were three supporting goals for this project. Additionally, a survey captured the perceptions of the participants toward using self-directed learning and technology. The survey was conducted using qualitative research methods. The survey uses questions to understand the perceptions and preferences

of Sunday school teachers and prospective teachers at LWBCE regarding the integration of ICT into the teacher training curriculum.[1] The survey was not part of the quantitative study for this project.

Goal 1

The first goal was to assess the biblical and theological knowledge of potential teachers at LWBCE. Goal 1 was accomplished by administering a pre-course test to the study participants. The pre-course test was critical to the study because it set the baseline of the study. This study began with 44 participants and all 44 completed the pre-course test.

During this study all eligible members of LWBCE who were interested in becoming Sunday school teachers volunteered to participate in the study. The participation of the members of LWBCE was sufficient to meet the requirements of goal 1, however, in an effort to improve the robustness of the study additional participants were accepted from our sponsoring church. A total of 14 members from the sponsoring church participated in the study.

Goal 2

The second goal was to prepare the experiment by designing two equal training courses using the traditional lecture and workbook method (the control group) and self-directed learning using the technology-based method (the experimental group). The two groups were separated and given instructions specific to their method of study. The control group was taught by the traditional classroom lecture and workbook method. The test group used self-directed learning using technology-based resources.

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[1] The survey was developed as part of the Advanced Research project completed under Michael Wilder as part of the class requirements for Applied Empirical Research (course 80950, Summer, 2017) The study used qualitative research methods to understand the perceptions of the study participants as it relates to the use of technology and traditional methods in education. The survey and results can be found in appendix 3.

Traditional teaching methods. For the purpose of this study, the traditional teaching method used was a teacher-centered lecture and workbook approach. This educational method has been used in various educational institutions for years and continues in be use as the predominate method of instruction in most schools today. Richard Adams writes that "some schools and teachers continue using methods that cause little or no improvement in student progress, and instead rely on anecdotal evidence to back fashionable techniques."[2] On the surface this sounds like a scathing report on traditional education, but Adams goes on to say, "The best research suggests that teachers with a command of their subject, allied with high-quality instruction techniques such as effective questioning and assessment, are the most likely to impart the best learning to their pupils."[3] The point made is that there are good and bad teachers in traditional education and success is based on the skill and dedication of the teachers. In other words, it is teacher-centered learning. It should be noted that Adam's comments are addressing the education of children, not adults. For adults who are motivated to learn the situation changes; hence, self-directed learning may be better for adult learners. Geri Manning states, "The relationship between adult learning and self-directed learning is a topic worth exploring on both theoretical and practical grounds."[4]

Self-directed learning. According to the Center for Teaching Excellence, University of Waterloo "self-directed learning is a four-step process" that consists of

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[2] Richard Adams, "Education Study Finds in Favor of Traditional Teaching Styles," *The Guarding*, October 31, 2014, accessed February 10, 2019, https://www.theguardian.com/education/2914/oct/31/education-traditional-teaching-versus-progressive.

[3] Ibid.

[4] Geri Manning. "Self-Directed Learning: A Key Component of Adult Learning Theory," *Journal of the Washington Institute of China Studies* 2, no. 2 (June 2007, accessed February 11, 2019, https://www.bapastudies/bapastudies/article/view/38/78.

assessing learning readiness Setting the learning goals, engaging the learning process, and evaluating the learning.[5] These four steps in the self-directed learning process were followed during this project. The first step is the assessment of the participants' readiness to learn, which includes the participants conducting a self-evaluation of their current situation, study habits, past experiences with independent learning, and preferences.[6] A survey was developed and used to satisfy this requirement of the four steps in the self-directed learning process.[7] The survey determined basic perceptions about the use of technology in self-directed learning and traditional teaching methods. The survey was taken prior the start of the study and again after the study. A comparison of both surveys indicate no difference in attitudes. The full survey and the results can be found in appendix 3.

The next step is to set the learning goals. This is a critical step in the self-directed learning process. The student must know what is expected. While this is not an all-inclusive list, some important parts are goals for the unit of study, structure and sequence of activities, timeline for completion, details about resources, help that is available, self-evaluation, and grading procedures.[8]

The third step is the learning process itself. This does not take much explanation, it is simply following instructions and working through the lessons. It is

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[5] Center for Teaching Excellence, University of Waterloo, "Self-Directed Learning: A Four Step process," accessed February 7, 2019, https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/tips-students/self-directed-learning/self-directed-learning-four-step-process.

[6] Ibid.

[7] The survey was developed as part of the Advanced Research project completed under Michael Wilder as part of the class requirements for Applied Empirical Research (course 80950, Summer, 2017). The study used qualitative research methods to understand the perceptions of the study participants as it relates to the use of technology and traditional methods in education. The survey and results can be found in appendix 3.

[8] Center for Teaching Excellence, "Self-Directed Learning."

helpful to the student if he understands his learning preferences and study habits. Understanding preferences and study habits will help the student understand his needs as a self-directed learner.[9]

The final step in the self-directed learning process is to evaluate the learning. Evaluation is a two-fold process, external and internal. External refers to the actual graded exam or whatever grading process is in place. Second, is the internal process where the student should do a self-evaluation of the entire process. Success in self-directed learning requires the student to be able to engage in an honest introspective evaluation of his learning experience, to include goal achievement and his overall satisfaction with the learning process.[10]

Technology. Technology has the tendency to deepen learning by using resources with which students are familiar and interested. A properly designed curriculum incorporating technology-rich teaching methods, which may include self-directed learning, should bring a renewed interest in Sunday school and inspire students to learn. Technology has the tendency to deepen learning by using resources with which the students familiar and interested. According to the United States Department of Education,

> a technology rich education environment should be the goal in practically all educational activities. Technology ushers in fundamental structural changes that can be integral to achieving significant improvements in productivity. Used to support both teaching and learning, technology infuses classrooms with digital learning tools, such as computers and hand held devices; expands course offerings, experiences, and learning materials; supports learning 24 hours a day, 7 days a week; builds 21st century skills; increases student engagement and motivation; and accelerates learning. Technology also has the power to transform teaching by ushering in a new model of connected teaching. This model links teachers to their students and to professional content, resources, and systems to help them improve their own instruction and personalize learning.[11]

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[9] Center for Teaching Excellence, "Self-Directed Learning."

[10] Ibid.

[11] US Department of Education, "Use of Technology in Teaching and

The Department of Education is not alone in their conclusions that a technology-rich learning environment is the way of the future in education. There has been much independent commercial and academic research as well as practical application of incorporating various types of technology into the classroom. According to Benjamin Herold, "Technology is everywhere in education: Public schools in the United States now provide at least one computer for every five students. They spend more than $3 billion per year on digital content."[12] Additionally, many teachers have taken the initiative to allow students to use smartphone apps and other handheld electronic devices in the classroom, with most reporting good success. Further, Herold states,

> Digital instructional content is the largest slice of the (non-hardware) K-12 educational technology market, with annual sales of more than $3 billion. That includes digital lessons in math, English/language arts, and science, as well as "specialty" subjects such as business and fine arts. The market is still dominated by giant publishers such as Houghton Mifflin Harcourt and Pearson, who have been scrambling to transition from their print-centric legacy products to more digital offerings. But newcomers with one-off products or specific areas of expertise have made inroads, and some apps and online services have also gained huge traction inside of schools. As a result, many schools use a mix of digital resources, touting potential benefits such as greater ability to personalize, higher engagement among students, enhanced ability to keep content updated and current, and greater interactivity and additivity (or responsiveness to individual learners).[13]

The long pole in the tent, however, is educating Sunday school teachers to embrace and use a modern approach in teaching, more specifically self-directed learning using ICT. During preliminary conversations with existing Sunday school teachers there appears to be a prevailing attitude that existing teacher do not need or want professional development training on using technology; however, there may not be as much resistance to ICT methodology with prospective Sunday school teachers.

Learning," accessed August 19, 2017, https://www.ed.gov/oii-news/use-technology-teaching-and-learning.

[12] Benjamin Herold, "Technology in Education: An Overview," *Education Week*, February 5, 2016, accessed December 29, 2016, http://www.edweek.org/ew/issues/technology-in-education/.

[13] Ibid.

Engaging current and prospective Sunday school teachers is the necessary first step in making such a paradigm shift in pedagogical practices of Sunday school teacher training. An opinion survey was conducted and analyzed to better understand the perceptions of Sunday school teachers and prospective teachers as it relates to professional Sunday school teacher development, specifically toward the use of technology.[14] This information along with the empirical data should aid in the development and implement a dynamic Sunday school teacher training program.

Goal 3

The third goal was to determine if the two teaching methods had similar outcomes. The post-course test was accomplished with a 100 percent completion rate. With the statistical analysis of the results accomplished and the interpretation of the data completed, goal 3 was completed. The results of the study definitively show that there was no difference in teaching content between the two methodologies.

All three goals were necessary for the study, but goal 3 was the culmination of the preceding effort. It was at this point that the entire study was focused; therefore, it was imperative that the statistical analysis be precise, verifiable, and accurately describe the data. It was important to select the right type of statistical test to analyze the data. Depending on the data, it may be analyzed in multiple ways with each method yielding legitimate results. The decision of which statistical test to use depends on the research design, distribution of the data, and type of variables. There are a wide range of statistical tests available; therefore, it is prudent to understand which statistical test will best describe the data.

The method used in this study was ANOVA, which tests the difference between group means after all other variances in the outcome variables are accounted for. The

[14] See appendix 3.

ANOVA method was well suited for this study because it provided a clear exemplification of the data.

Many studies examine various aspects of education methodologies, including traditional teaching method effectiveness, teacher training, self-directed learning, problem-based learning, the impact of technology on education, and many others. This study may be the first to examine traditional teaching versus self-directed learning, and more specifically, as it applies to training Sunday school teachers.

The need for an effective training program for Sunday school teachers exists and is a void that should be filled. The Scriptures clearly provide the foundation to teach the Word of God and defines the qualified teacher in Titus 1, 1 Timothy 3, and Ephesians 4. Throughout history the church has used advances in secular educational methods to enhance the teaching of the gospel. The results of this study may provide one answer.

Implications of Technology in Education

School systems across the country and around the world spend millions of dollars each year on continuing education for teachers, with much of the money focused on education technology. The landscape of technology that can be used to support secular education is vast and varied. Secular educators benefit from a more detailed and disaggregated view of what tools are available, and how they can be used most effectively in support of specific teaching and learning goals. The most current research definitively proves that technology properly applied to education not only has a positive impact on learning, but also a positive impact on behavior and attitude. According to *The Impact of Education Technology on Student Achievement: What the Most Current Research Has to Say,* "Students in technology rich environments experienced positive effects on achievement in all major subject areas. Students attitudes toward learning and

their own self-concept improved consistently when computers were used for instruction."[15] Additionally, studies show that the improvement is not limited to any specific age group.

Unfortunately, there is a technology gap when it comes to church education, more specifically Sunday school teacher training. It certainly appears that the church lags behind in its pursuit of teaching excellence, especially in the arena of technology in the classroom. This study not only indicates that there was no difference in the groups regarding the improvement of test scores, it also shows an interest in including technology in Sunday school with Sunday school teachers and potential Sunday school teachers.

There are potential risks, cost, and benefits for any church that decides to enter the landscape of technology that is available for the education of the saints. The cost is obvious but need not be out of reach. The greatest risk is not getting older generations behind such a venture. Regardless of the challenges, churches have ventured into the world of technology and education, mostly with good results. One advantage of embracing technology is that it is like building blocks, it is not all or nothing, a program can be built a piece at a time as finances and talent allows.

Strengths of the Project

Like most projects strengths and weaknesses became clear as the project progressed. These strengths and weaknesses provide an opportunity for reflection on how to improve future studies. Additionally, the strengths and weaknesses provoked an introspective look into my thought processes during the project's planning and execution phases.

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[15] John Schacter, comp., "The Impact of Education Technology on Student Achievement: What the Most Current Research Has to Say," *Milken Exchange on Education Technology*, 1999, accessed September 10, 2017, www2.gsu.edu/~wwwche/Milken%20report.pdf, 5.

Vetted Material

The decision to find and use existing credible educational material was a major strength of this project. There are numerous sources of academically-excellent material available on the commercial market; therefore, using thoroughly vetted teaching materials saved time during this project. Additionally, the material used was not only available in traditional form but was available in a self-directed technological format.

Existing Research

There is a flood of research on the effects of technology on education, in fact under the United States Department of Education is an office of Educational Technology. Thousands of studies have been conducted in the secular world of education examining how the inclusion of technology in education impacts learning, teaching methods, cost, and everything in between.

The Milken Exchange on education and technology produced an analysis of hundreds of research studies titled, "The Impact of Education Technology on Student Achievement: What the Most Current Research Has to Say." Included in the Milken compilation survey were over 700 empirical research studies, a study of the entire state of West Virginia, and a national study of fourth and eighth grade students. According to their findings, on average, students who used computer-based instruction scored 14 percentiles higher on achievement test than the students in the control group. Students learned more in less time. Students like their class more and develop a more positive attitude when their class included computer based learning.[16] The findings were conclusive, students with access to a technology-rich learning environment showed positive gains in achievement and improvement in attitude toward learning.

[16] Schacter, "The Impact of Education Technology," 4-5

Void in Literature

When it comes to empirical research related to Sunday school teaching methodologies and technology, a void exists. While there are numerous training resources and books about how to include technology in the Sunday school class, little or no empirical research exists, which would indicate the best methodologies to use. As a result of this project, the void in research useful to developing an effective Sunday school training program utilizing technology was identified.

While the Barna Research Group has conducted some research in the area of technology and Millennials, it has not conducted research related specifically to Sunday school or other age groups. The Barna Group published their findings on technology and Millennials in an article titled, *How Technology is Changing Millennial Faith*.[17] Although this research is not specific to Sunday school nor does it look at any other age group, the information it provides offers insight into the mindset of Millennials. David Kinnaman, president of Barna Group points out the implications of this research:

> Millennials live in an era of radical transparency, powered by social and digital tools. Any leader or organization who wants to engage Millennials must learn this—whether from the pulpit or the front of the classroom, whether fundraising or marketing. If Millennials are doing their own research on what happens from the stage, leaders need to take care not to make false promises or exaggerations in their messages. Millennials, who already exhibit institutional distrust, have heightened sensitivity for artificiality and false promotion. Instead, Millennials desire relevant, two-way conversations on a wide-range of topics. In many ways, these conversations are already happening online. The digital world simply makes this kind of interaction and transparency a non-negotiable among the youngest generations. For church leaders, the data point to lots of opportunities to engage Millennials spiritually online. This stems from the convergence of two trends: Millennials leaving the Church, and Millennials taking their faith discussions and explorations online. One of the most positive trends among Millennials is that they want faith that is holistically integrated into all areas of life—including their technology. How the Church acknowledges and engages the digital domain—and teaches faithfulness in real-life to young adults as well—will determine much about its long-term effectiveness among Millennials.[18]

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[17] Barna Group, "How Technology Is Changing Millennial Faith," October 15, 2015, accessed November 10, 2018, https://www.barna.com/research/how-technology-is-changing-millennial-faith/.

[18] Barna Group, "Millennials & Generations Archives," October 15, 2013, accessed September 4, 2017, http://www.barna.com/category/millennials-generations.

As allude to previously, Millennials are not the only age group in the church, but it is imperative to engage them in the most effective manner available, which means embracing technology. The church must pursue Millennials, however, it must not forget other age groups that also have needs. Massive amounts of research exist on Millennials and technology, but little on technology and other age groups, especially Baby-Boomers. Therefore, the question remains, how do other age groups react to the implementation of technology in teaching and more specifically to Sunday school? While this study does not provide all the answers, it does indicate that all age groups tested positively responded to self-directed learning using technology.

As mentioned, even though books and programs exist that intend to help Sunday school teachers include some types of technology in their classes, there remains a void of empirical research on the subject. Clearly, a strength of this research project was that it identified the lack of research related to churches and the use of technology in education and the lack of research with older groups as it relates to technology.

Type of Research

This study was a true experimental design using quantitative methods, which by design is a strong research method. One goal in data analysis is to efficiently describe or measure the relationships between variables. Another goal may be to determine which variables are related in a predictive sense to a particular response variable, or put another way, to learn how best to predict an outcome based on specific variables. There are two types of statistics: descriptive statistics and inferential statistics. Descriptive statistics refer to the analysis of data of an entire population. Because of the population size of the study, descriptive statistics were not of much use. The purpose of inferential statistics is to estimate and/or predict an outcome. This study relied on inferential statistics to test if

the outcome of different teaching methodologies could be determined. Inferential statistics provides empirical evidence of experimentation, which should be reproducible.[19]

Weaknesses of the Project

In the beginning of this project I did not devote enough time to clearly thinking through the entire project and what the true goal should be. Once I began writing, the project came into focus, but this really did not happen until somewhere in chapter 3. With a clear purpose in mind, I was determined to construct a project that not only could be useful for LWBCE but would set a foundation that others could build upon. The vision was a project that would not only be useful for the church but could be used to assist educators everywhere. My advice for anyone attempting such a project is two-fold. First, spend much time in serious thought about what is important, not only to the researcher, but to others. Focus on a project that is applicable, and reproducible for other churches, Christian schools, and even secular education. Second, do not be afraid to make course corrections or even change direction completely if it takes the researcher in a more defined direction or will make the project useful to others who may follow. Granted this advice will cause a researcher to spend more time writing and more time doing literary research, but the results achieved will be well worth the investment.

Another weakness of the project was the relatively small size of the study population, which was only 44 participants. The small size of the population prevented any comparison between age groups, gender, race, or education levels. Another weakness was that the population was local, therefore, the results may not be transferable to other areas of the country. While this second weakness may be more perception than reality, only a broader study can reveal the truth.

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[19] Research Methodology, "Types of Research Methods," January 10, 2019, accessed 2 February, 2019, https://research-methodology.net/research-methodology/research-types/.

What Would I Do Differently

I would do three things differently in a subsequent study. First, the makeup of the study should be more diverse, in that it should have participants from other areas of the country. Second, the size of the study should be large enough that other data could be harvested. It would be helpful to know if there are any differences based on age, gender, race, socio-economic group, and education level.

Third, I did not realize the length of time required to obtain permission from the curriculum publisher to use their material in the study; therefore, the request was not initiated in a timely manner. Due to the lateness of permission from the curriculum publisher, a time constraint developed, which forced the teaching into a condensed time period. While this situation did not make for the best learning environment, the results did not reflect the time constraint. Fortunately, the participants were motivated and dedicated to completing the project within this time constraint. With that said, I would endeavor to gain whatever permissions that are needed as soon as a resource is identified.

Theological Reflections

In Matthew 28:19-20 Jesus said, "Therefore go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you." Jesus instructs his disciples to teach those who are converted. Discipling someone means teaching another person the things he needs to know so that he may become a disciple; hence, teaching is implied. The instruction to teach Christians is directly from Jesus and cannot be clearer; hence, one of the major roles of the church is to teach plainly and powerfully the Word of God. To effectively fulfill the teaching role, the church must be able to equip its teachers with the most effective teaching tools available.

When LWBCE was founded, two serious weaknesses surfaced almost immediately: a lack of trained teachers and a lack of biblical knowledge and understanding by many members. As the church grew, these problems grew along with the church. It

was obvious that LWBCE urgently needed to develop strong and effective Bible training programs, and more specifically a strong Sunday school program. The first step was to develop a system to grow trained Sunday school teachers.

In the development of an effective training program, two issues needed be addressed. First was curriculum—the teaching must be biblically and doctrinally sound. The curriculum focused on the gospel as the foundation on which teacher training is built. Second, the teaching methodologies should be effective. Through the years, the church has adopted various teaching methods and technologies, which have served the church well. As new methods and technologies continue to develop, such as self-directed technology-based learning, the church must evaluate the value of such methods and adopt these methods as appropriate. Adopting new educational methods and tools continues the tradition of the church to embrace new technologies, using them to advance the kingdom of God.

Personal Reflections

As the pastor of LWBCE, my focus is two-fold: first, to reach the lost for Christ and, second, to effectively disciple the members of the church. One aspect of discipling is effectively teaching the Word of God so that the saints are equipped to live out their faith daily and able to share the gospel with the lost. In the beginning, our church had only fourteen people, so I could easily do all the teaching myself, however, as the church grew the need for other teachers became apparent.

As I interacted with my people it became obvious that we had a critical need for properly trained Sunday school and Bible study teachers. Our church had ample volunteers to teach Sunday school, but few were really qualified to teach. What I mean by qualified, is that they did not have the depth of knowledge and understanding of Scripture or doctrine to be a Sunday school teacher. At this point I started looking for the best avenues to train our volunteers.

As I observed my congregation's likes and dislikes regarding the types of teaching methods they desired, it became clear that the standard workbook and lecture teaching method may not be the best method to train the teachers. Our people appear to have a strong propensity toward electronic technology. This preference for technology appeared to be based on the fact that the majority of the church population are Generation X and millennials. I realized that these people were the future leaders of the church. One day these young people will be the elders, deacons, and teachers of not only LWBCE, but perhaps other churches.

It is my responsibility as pastor to train the future leaders of the church, so it is imperative that I am intentional on selecting the best training methods possible. The future will be defined by how well we do the job of training the teachers of the church. Often it is through the teaching of a good Sunday school teacher that children, youths, and young adults learn to experience the gospel of Jesus Christ, which enriches and guides their daily lives. The bottom line is that it is the duty of church leaders is to provide the best trained teachers possible, however, leaders must never lose sight of the fact that it is the Holy Spirit that transforms lives.

Conclusion

The big picture for this study was discovering an effective method for training Sunday school teachers. Beyond the obvious requirement that all Sunday school teachers need to be well versed in biblical knowledge and doctrine, there are other considerations, including time, money, and availability of participants (both teacher and students). A technology-based self-directed teacher training program may be the answer to many, if not all of these stated issues. It must be noted that there was no difference between the control group and the test group in the study, therefore, either teaching methodology selected can be equally effective.

In this project it was determined that self-directed learning using technology is at least as effective as traditional teaching methods (lecture and workbook). LWBCE will

embrace self-directed learning using technology. Also, it follows that the same teaching methods are transferable to Sunday school classes and small group training.

According to Tom Rainer, a strong Sunday school program is necessary for a healthy church: "The data is in, and it is difficult to dispute the facts. Sunday school is alive and well in healthy churches."[20] If a church is to be a healthy church it must have an effective Sunday school program. For the Sunday school and church to remain viable and reach the younger generations, it would be prudent to adapt the approach to teaching to a manner and style that enhances the student's ability to learn. It is imperative that Christians embrace and apply the appropriate teaching methodology in Sunday school training programs and especially in teacher training.

Anyone observing millennials in church services, Bible studies, and Sunday school, will notice that many, if not most of them will not have a printed version of the Bible. Instead they have a Bible app on their cell phone or on some other electronic device. This is a clear indication that this age group is more comfortable with and prefers to use electronic devices for reading and learning.

This is not to say that older methodologies are no longer applicable, or in some cases preferred, but the merging of technology into the teaching curriculum can enhance and energize a failing or stale Sunday school program and possibly provide better trained teachers. Self-directed technology-based learning is a time saver for staff and requires little or no facility support. It allows learners to work at their own pace, which in turn may provide a way for teachers to stay current, at a reasonable cost in time and money. Another advantage is the ability to add non-biblical training, such as courses on teaching strategies, which can be tailored to meet age specific needs. Self-directed learning using technology may not be the preferred method for training in many churches, but because

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[20] Thom S. Rainer, "The Pastor: Key to a Vibrant, Growing Sunday School," *Enrichment Journal*, accessed March 27, 2017, http://enrichmentjournal.ag.org/200204/200204-016-pastor-key-ss.cfm.

of the affordability in time, money, and staff LWBCE will adopt the use of self-directed learning using technology for training Sunday school teachers.

The results of this study will enable curriculum developers and instructors to choose a teaching methodology that is the most effective for their particular situation. Allowing them to craft lesson plans and projects that will best develop Sunday school teachers. It will allow them to identify goals and objectives, create specific lessons, and develop unique activities to reinforce the training being provided.

Future research should be conducted to ascertain the true condition of churches as they relate to education technology, its use, and prevailing attitudes. Additionally, the results of this study may generate an interest for a more in-depth study with a larger sample group. Hopefully, this study will be the start of the conversation and not the last word on the subject.

APPENDIX 1

AGREEMENT TO PARTICIPATE IN A STUDY

Agreement to Participate

The research in which you are about to participate is designed to ascertain the most effective training method for small group leaders. This research is being conducted by Harold W. Noble for purposes of developing a leader-training program for Living Word Baptist Church Elizabethtown and is part of a doctoral research project. In this research, you will take a pre-course test of biblical knowledge, participate in a training program, and take a post-course test to determine knowledge gained. Any information you provide will be held *strictly confidential,* and at no time will your name be reported, or your name identified with your responses. *Participation in this study is totally voluntary and you are free to withdraw from the study at any time.*

By your completion of the pre-course test, training phase, and post-course test you are giving informed consent for the use of your responses in this research.

APPENDIX 2

INSTRUCTIONAL PRINCIPLES OF COMENIUS

These instructional principles of Comenius are compiled and quoted from Paul Saettler, *A History of Instructional Technology* (New York: McGraw-Hill, 1968), 21, 22.

1. Instructional method should follow the order of nature. Content should be studied according to the developmental stage of each learner.

2. Instruction should begin at infancy and should be designed for the age, interest, and capacity of each learner.

3. Whatever is to be taught should be taught as being of practical application to life and should possess some value for the learner.

4. Subject matter should be organized according to its difficulty. Instruction should proceed by the inductive process from the simple to complex.

5. A graduated series of textbooks and illustrative materials should be correlated with instruction.

6. Sequence is important. For example, it is irrational to teach a foreign language before the native language has been learned.

7. General principles should be explained in examples given before rules are learned; nothing should be memorized until it is understood.

8. Reading and writing to be taught together; subjects should be correlated whenever possible.

9. Learning is to be approached through the senses. Actual objects and things should be studied and associated with words.

10. Content that first be presented orally by the teacher and pictorially illustrated whenever possible.

11. All parts of an object or subject matter must be learned with reference to their order, position, and connection with one another, and not more than one thing should be taught at any one time. (Comenius suggested outlining all the texts specified for use on the walls classroom so the learner can see the entire content to be studied.)

12. Corporal punishment should not be used for failure to learn.

13. Schools must be cheerful, equipped with real and illustrative materials, and staffed with sympathetic teachers. (Something of the monitorial plan was latent in

Comenius's system. He believed that it was possible for one teacher to instruct several hundred children at one time. After the general presentation by the teacher, the large group was to be divided into sections of ten for further drilling and reciting two small-group student teachers).

APPENDIX 3

QUALITATIVE SURVEY

The survey was developed as part of the Advanced Research project completed under Michael Wilder as part of the class requirements for Applied Empirical Research (course 80950, Summer, 2017). This survey was developed to understand the perceptions of the study participants as related to the use of technology in education versus traditional methods of education. The research methodology for this assignment included a survey using qualitative research method. The survey uses questions to understand the perceptions and preferences of Sunday school teachers and prospective teachers at LWBCE regarding the integration of ICT into the teacher training curriculum. The questions address three categories, illustrated in the following table.

Table A1. Primary questions

Three Categories of research Questions	Questions
Attitudes toward incorporating technology into teacher training.	1, 4, 7, 11
Teaching methodologies perceived to be the most effective.	2, 5, 8, 10
Comfort level, familiarity, and skill with using technology.	3, 6, 9, 12

Sampling Method

The second phase of the research was a survey using a Likert Scale questionnaire. The survey was a twelve (12) sub-questions, four (4) dedicated to each of the three (3) primary questions. Once the survey was completed analyzation of the data to determine if there is a significant difference in perceptions and attitudes between current Sunday school teachers and aspiring Sunday school teachers.

Survey Questions

Three main questions will guide this study. Each guiding question will have four sub-questions on the survey that will answer the main question.

1. What are the attitudes of current and prospective teachers toward incorporating technology into teacher training?
    a. Utilizing electronic technology in the classroom will have a positive result on learning.
    b. Utilizing electronic technology in the classroom may be a distraction.
    c. The use of electronic technology in the classroom can make the class more interesting.
    d. I support the incorporation of electronic technology into the classroom.

2. Which teaching methodologies are perceived to be the most effective?
    a. The lecture method of teaching is a proven and effective way of teaching.
    b. The self-paced home study method, using printed materials, is an effective way of learning.
    c. Integrating Information and Communication Technologies into the classroom enhances learning.
    d. A mixture of printed materials and technology use provides the best learning environment.

3. What are the levels of comfort, familiarity, and skill of the teachers with using technology?
    a. I am completely comfortable with using all modern electronic technology and electronic devices.
    b. Using Information and communication technologies in the classroom would be no problem for me
    c. I consider myself to be skilled in the use of electronic technology.
    d. I am proficient in the use of smart phones, computers, and other electronic devices.

Findings

Data Compilation

A qualitative survey was used to gain a better understanding of the attitudes and perceptions of current and aspiring Sunday school teacher at LWBCE as it relates to teaching methodologies and the integration of technology into the Sunday school teacher development curriculum.

Primary question 1: What are the attitudes of current and prospective teachers toward incorporating technology into teacher training? (see table A2)

Table A2. Attitude toward technology

Attitude toward technology	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Experienced Teachers	43%	21%	7%	4%	18%	7%
Aspiring Teachers	35%	30%	15%	10%	5%	5%

Primary question 2: Which teaching methodologies are perceived to be the most effective? (see table A3)

Table A3. Methods

Should methods include technology	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Experienced Teachers	32%	18%	29%	11%	7%	3%
Aspiring Teachers	25%	15%	40%	15%	5%	0%

Primary question 3: What are the levels of comfort, familiarity, and skill of the teachers with using technology? (see table A4)

Table A4. Comfort level with technology

Comfort level with technology	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Experienced Teachers	46%	22%	21%	0%	4%	7%
Aspiring Teachers	35%	35%	10%	0%	5%	15%

Analyzing the Data

In order to simplify the data analyzation this study will divide the data into two categories, positive and negative. Any question answered Strongly agree, agree, or somewhat agree is considered a positive response. Any questions answered strongly

disagree, disagree, or somewhat disagree is considered a negative response. The responses to the survey questions are summarized as follows:

Primary Question 1: What are the attitudes of current and prospective teachers toward incorporating technology into teacher training? 71% of teachers indicated that they have a positive attitude toward including technology in teacher training, while 80% of aspiring teachers have a positive attitude. 29% of experienced teachers have a negative attitude toward incorporating technology into teacher training, while only 20% of aspiring teachers have a negative attitude.

Table A5 shows not only a nine-point difference between the teachers and aspiring teachers, however, the somewhat agree column is where 8 of the 9 points are located. Additionally, the disagree and strongly disagree columns are scientifically stronger on the teacher side of the survey. With the age of the Aspiring teacher group being younger it was expected that the results would be significantly different.

Table A5. Difference primary question 1

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Teacher	43	21	7	4	18	7
Non-teacher	35	30	15	10	5	5

Primary Question 2: Which teaching methodologies are perceived to be the most effective? The sub-questions for this question directs the participants toward answering whether or not including technology into teaching methods is preferable. 79% of teachers favor a teaching methodology that includes the use of technology, while 80% of aspiring teachers gave a positive response. The negative responses were 21% for teacher and 20% for aspiring teachers.

While the compiled numbers only indicate a one-point difference between teachers and aspiring teachers, a close look at Table A6 may indicate weaker support from aspiring teachers for modernizing teaching methods. Aspiring teachers are seven

points lower on strongly agree and three points lower in the agree column. It is the eleven-point advantage in the somewhat agree column that closes the gap, therefore, it should not be argued that both teachers and aspiring teachers are in agreement on the survey question related to teaching methodologies. A more in depth study of the issues should be conducted building on the foundation of this study.

Table A6. Differences primary question 2

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Teacher	32	18	29	11	7	3
Non-teacher	25	15	40	15	5	0

Primary question 3: What are the levels of comfort, familiarity, and skill of the teachers with using technology? 89% of teachers answered that they feel comfortable with their skill and ability to use various forms of technological devices, while 80% of aspiring teachers answered positively. The negative responses were 11% for teacher and 20% for aspiring teachers. With most of the aspiring teachers being younger that the teachers, these results did not appear to be logical.

The data in Table A7 indicates that aspiring teachers appear to be less comfortable with using new technology. The respondents, specifically the aspiring teachers, however, may have concerns about how to apply technology in a teaching environment, rather than being uncomfortable with the technology itself. A follow-up survey or perhaps an interview process may be able to answer this question.

Table A7. Differences primary question 3

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Teacher	46	22	21	0	4	7
Non-teacher	35	35	10	0	5	15

BIBLIOGRAPHY

Barth, Markus. *Ephesians*. The Anchor Bible, vol. 34. Garden City, NY: Doubleday, 1974.

Bates, Tony. "A Short History of Educational Technology." Online Learning and Distance Education Resources, December 10, 2014. Accessed October 10, 2018. https://www.tonybates.ca/2014/12/10/a-short-history-of-educational-technology/.

_____. *Technology, E-Learning, and Distance Education*. 2nd. ed. RoutledgeFalmer Studies in Distance Education. London: Routledge, 2005.

Bennion, Lowell Lindsay. *Jesus the Master Teacher*. Salt Lake City, UT: Deseret Book, 1980.

Blomberg, Craig L. *Jesus and the Gospels: An Introduction and Survey*. Nashville: Broadman & Holman, 2009.

Blount, Douglas K., and Joseph D. Wooddell, eds. *The Baptist Faith and Message 2000: Critical Issues in America's Largest Protestant Denomination*. Lanham, MD: Rowman & Littlefield, 2007.

Boice, James Montgomery. *The Gospel of Matthew*. *An Expositional Commentary*. Vol. 2. Grand Rapids: Baker, 2006.

Bower, William Clayton. *The Educational Task of the Local Church . . . A Textbook in the Standard Course in Teacher Training, Outlined and Approved by the Sunday School Council of Evangelical Denominations.* St. Louis: Bethany, 1921.

Boyd, Douglas A., and Mary Larson, eds. *Oral History and Digital Humanities: Voice, Access, and Engagement*. Palgrave Studies in Oral History. New York: Palgrave Macmillan, 2014.

Brown, David G., ed. *Interactive Learning: Vignettes from America's Most Wired Campuses*. Bolton, MA: Anker Pub., 2000.

Brown, Gordon B. *Guiding Faculty to Excellence: Instructional Supervision in the Christian School*. 2nd ed. Colorado Springs: Purposeful Design, 2002.

Brown, Michael Joseph. *What They Don't Tell You: A Survivor's Guide to Biblical Studies*. 2nd ed. Louisville: Westminster John Knox, 2015.

Brown, Raymond E. *The Gospel and Epistles of John: A Concise Commentary*. Vol. 13. Collegeville, MN: Liturgical, 1988.

Bruce, F. F. *The Epistles to the Colossians, to Philemon, and to the Ephesians*. The New International Commentary on the New Testament. Grand Rapids: Eerdmans, 2008.

BusinessDictionary.com. “Teaching Point. Accessed March 30, 2018. http://www.businessdictionary.com/definition/teaching-point.html.

Carson, D. A. *Exegetical Fallacies*. 2nd ed. Carlisle, UK: Paternoster; Grand Rapids: Baker, 1996.

_____. *The Gospel according to John*. Leicester, England: Inter-Varsity; Grand Rapids: W. B. Eerdmans, 1991.

_____. *Matthew*. In vol. 9 of *The Expositor’s Bible Commentary*. Edited by Tremper Longman III and David E. Garland, 25-670. Rev. ed. Grand Rapids: Zondervan, 2010.

Chamberlain, Mary, and Paul Richard Thompson, eds. *Narrative & Genre: Contexts and Types of Communication*. Memory and Narrative Series. New Brunswick, NJ: Transaction, 1998.

Champion, Selwyn Gurney. *Racial Proverbs*. New York: MacMillan, 1938.

Cole, Robert A., ed. *Issues in Web-Based Pedagogy: A Critical Primer*. The Greenwood Educators’ Reference Collection. Westport, CT: Greenwood, 2000.

Cordasco, Francesco. *A Brief History of Education: A Handbook of Information on Greek, Roman, Medieval, Renaissance, and Modern Educational Practice*. Rev. ed. Totowa, NJ: Littlefield, Adams, 1976.

Cubberley, Ellwood Patterson. *History of Education: Educational Practice and Progress Considered as a Phase of the Development and Spread of Western Civilization.* New York: Forgotten Books, 2017.

Diringer, David. *The Alphabet: A Key to the History of Mankind*. New York: Philosophical Library, 1948.

Dunaway, David King, and Willa K. Baum, eds. *Oral History: An Interdisciplinary Anthology*. 2nd ed. American Association for State and Local History Book Series. Walnut Creek, CA: AltaMira Press, 1996.

Edglossary. “Hidden Curriculum.” August 26, 2014. Accessed December 29, 2016. http://edglossary.org/hidden-curriculum.

Eisenstein, Elizabeth L. *The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe.* 2 Vols. Cambridge: Cambridge University Press, 1997.

Elwell, Walter A., and Barry J. Beitzel, eds. *Baker Encyclopedia of the Bible*. Vol. 2. Grand Rapids: Baker, 1988.

Erickson, Millard J. *Christian Theology*. 2nd ed. Grand Rapids: Baker, 1998.

_____. *Ephesians*. Evangelical Commentary on the Bible, vol. 3. Grand Rapids: Baker. 1995.

Evening, Margaret. *Approaches to Religious Education*. London: Hodder and Stoughton, 1972.

Fausset, Jamieson R., and David Brown. *Commentary Critical and Explanatory on the Whole Bible*. Vol. 1. Oak Harbor, WA: Logos Research Systems, 1997.

Fernando, Ajith. *Acts*. NIV Application Commentary. Grand Rapids: Zondervan, 1998.

Finkelstein, Jonathan. *Learning in Real Time: Synchronous Teaching and Learning Online*. Jossey-Bass Guides to Online Teaching and Learning. San Francisco: Jossey-Bass, 2006.

Fischer, Steven R. *A History of Writing*. London: Reaktion, 2003.

Foley, John Miles. *The Theory of Oral Composition: History and Methodology*. Folkloristics. Bloomington: Indiana University Press, 1988.

Frame, John M. *Systematic Theology: An Introduction to Christian Belief*. Phillipsburg, NJ: P & R, 2013.

Friedeman, Matt. *The Master Plan of Teaching*. Wheaton, IL: Victor Books, 1990.

Gardner, Howard. *The Mind's New Science: A History of the Cognitive Revolution*. Paperback ed. New York: Basic Books, 1998.

Gelb, I. J. *A Study of Writing*. Chicago: The University of Chicago Press, 1953.

Gerhardsson, Birger, and Eric J. Sharpe. *Memory and Manuscript: Oral Tradition and Written Transmission in Rabbinic Judaism and Early Christianity.* The Biblical Resource Series. Grand Rapids: William B. Eerdmans; Livonia, MI: Dove Booksellers, 1998.

Grudem, Wayne A. *Systematic Theology: An Introduction to Biblical Doctrine*. Leicester, England: Inter-Varsity; Grand Rapids: Zondervan, 1994.

Hammett, John S. *Biblical Foundations for Baptist Churches: A Contemporary Ecclesiology.* Grand Rapids: Kregel, 2005.

Henige, David P. *The Chronology of Oral Tradition: Quest for a Chimera*. Oxford Studies in African Affairs. Oxford: Clarendon, 1974.

Herold, Benjamin. "Technology in Education: An Overview." *Education Week.* February 5, 2016. Accessed December 29, 2016. http://www.edweek.org/ew/issues/technology-in-education/.

Hoffmeier, J. K. *Exodus*. Evangelical Commentary on the Bible, vol. 3. Grand Rapids: Baker, 1995.

Holley, Raymond. *Religious Education and Religious Understanding: An Introduction to the Philosophy of Religious Education*. London: Routledge & K. Paul, 1978.

Johnson, Luke Timothy. *The First and Second Letters to Timothy*. Anchor Bible Commentary, vol. 35. New York: Double Day, Yale University Press, 2001.

Juengst, Sara Covin. *Equipping the Saints: Teacher Training in the Church*. Louisville: Westminster John Knox, 1998.

Knight, George W., III. *The Pastoral Epistles*. New International Greek Testament Commentary. Grand Rapids: W. B. Eerdmans; Carlisle, England: Paternoster, 1992.

Köstenberger, Andreas J. *Encountering John: The Gospel in Historical, Literary, and Theological Perspective*. 2nd ed. Encountering Biblical Studies. Grand Rapids: Baker, 2013.

Kramer, Rita. *Maria Montessori: A Biography*. Radcliffe Biography Series. Reading, MA: Addison-Wesley Pub., 1988.

Kruse, C. G. *John.* Tyndale New Testament Commentaries, vol. 4 Downers Grove, IL: InterVarsity Press. 2003.

Lane, William L. *The Gospel according to Mark.* The New International Commentary on the New Testament. Grand Rapids: Eerdmans, 2008.

Laniak, Timothy S. *Shepherds after My Own Heart: Pastoral Traditions and Leadership in the Bible.* Downers Grove, IL: InterVarsity, 2006.

Laurillard, Diana. *Rethinking University Teaching: A Conversational Framework for the Effective Use of Learning Technologies*. 2nd ed. London: Routledge Falmer, 2002.

Lea, Thomas D., and Hayne P. Griffin. *1, 2 Timothy, Titus*. New American Commentary, vol. 34. Nashville: Broadman & Holman, 1992.

Liberty Law Forum. "Millennials, Technology, and Short Attention Spans." Accessed March 17, 2017. http://www.libertylawsite.org/2016/08/10/millennials-technology-and-short-attention-spans/.

Liefield, Walter L. *1 and 2 Timothy, Titus.* NIV Application Commentary. Grand Rapids: Zondervan, 1999.

Lombaerts, Herman, ed. *Hermeneutics and Religious Education*. Bibliotheca Ephemeridum Theologicarum Lovaniensium 180. Leuven: Peeters, 2004.

Luz, Ulrich, and Hulmet Koester. *Matthew 21–28.* Hermeneia. Minneapolis: Augsburg, 2005.

Mandl, Heinz, and Alan M. Lesgold, eds. *Learning Issues for Intelligent Tutoring Systems*. Cognitive Science. New York: Springer-Verlag, 1988.

Manternach, Janaan, and Carl J. Pfeifer. *Creative Catechist: A Comprehensive, Illustrated Guide for Training Religion Teachers*. Mystic, CT: Twenty-Third, 1983.

McKoy, Charles Frances. *The Art of Jesus as a Teacher*. Boston: The Judson Press, 1930.

McNeal, Reggie. *Revolution in Leadership: Training Apostles for Tomorrow's Church. Ministry for the Third Millennium*. Nashville: Abingdon, 1998.

Mitch, Curtis, and Edward P. Sri. *The Gospel of Matthew*. Catholic Commentary on Sacred Scripture. Grand Rapids: Baker, 2010.

Morris, Leon. *The Gospel according to John*. Rev. ed. The New International Commentary on the New Testament. Grand Rapids: Eerdmans, 2008.

_____. *The Gospel according to Matthew*. The Pillar New Testament Commentary. Grand Rapids: W. B. Eerdmans; Leicester, England: Inter-Varsity, 1992.

Mounce, William D. *Pastoral Epistles,* Word Biblical Commentary, vol. 46. Nashville: Thomas Nelson, 2000.

Nye, David E. *Technology Matters: Questions to Live with*. Cambridge, MA: MIT Press, 2007.

Pennington, Jonathan T. *Reading the Gospels Wisely: A Narrative and Theological Introduction*. Grand Rapids: Baker, 2012.

Plummer, Robert L. *40 Questions about Interpreting the Bible*. 40 Questions Series. Grand Rapids: Kregel, 2010.

Polhill, John B. *Acts*. The New American Commentary, vol. 26. Nashville: Holman, 1992.

Price, John, M. *Jesus the Teacher*. Nashville: Convention Press, 1981.

Prozesky, Detlef R. "Communication and Effective Teaching." *Community Eye Health* 13, no. 35 (2000): 44-45.

Purdue University Online. "The Evolution of Technology in the Classroom." Accessed September 15, 2018. https://www.online.purdue.edu/ldt/learning-technology/resources/evelution-technology-classroom.

Rainer, Thom S. "The Pastor: Key to a Vibrant, Growing Sunday School." *Enrichment Journal*. Accessed March 28, 2017. http://enrichmentjournal.ag.org/200204/200204_016_pastor_key_ss.cfm.

Reuss, Joseph. *The First and Second Epistle to Timothy*. New Testament for Spiritual Reading, vol. 19. London: Burns & Oats, 1969.

Robinson, Andrew. *The Story of Writing*. New York: Thames and Hudson, 1995.

Saettler, Paul. *The Evolution of American Educational Technology*. Englewood, CO: Libraries Unlimited, 1990.

_____. *A History of Instructional Technology*. New York: McGraw-Hill, 1968.

Schmandt-Besserat, Denise. *Before Writing*. Austin: University of Texas Press, 1992.

_____. *How Writing Came About*. Austin: University of Texas Press, 1996.

Schwartz, Beth M., and Regan A. R. Gurung, eds. *Evidence-Based Teaching for Higher Education*. Washington, DC: American Psychological Association, 2012.

Selwyn, Neil. *Schools and Schooling in the Digital Age: A Critical Analysis*. London: New York: Routledge, 2011.

Squires, Walter. *The Pedagogy of Jesus in the Twilight of Today*. New York: George H. Doran Company, 1927.

Standing, Edwin Mortimer. *The Montessori Method: A Revolution in Education*. 4th ed. Fresno CA: The Academy Library Guild, 196.

The Stanford Encyclopedia of Philosophy. "Socrates." Spring 2018 ed. Accessed October 11, 2018. https://plato.stanford.edu/archives/spr2018/entries/socrates/.

Stavredes, Tina. *Effective Online Teaching: Foundations and Strategies for Student Success*. The Jossey-Bass Higher and Adult Education Series. San Francisco: Jossey-Bass, 2011.

Stevens, George, Barker. *The Teachings of Jesus*. New York: MacMillan, 1913.

Techopedia. "Technology Dictionary." Accessed September 30, 2016. https://www.techopedia.com/dictionary.

Teeple, John B. *Timelines of World History*. London: DK Pub, 2006.

Thomason, Allison Karmel. *Luxury and Legitimation: Royal Collecting in Ancient Mesopotamia*. Perspectives on Collecting. Burlington, VT: Ashgate, 2005.

Towner, Philip H. *The Letters to Timothy and Titus*. New International Commentary on the New Testament. Grand Rapids: Wm. B. Eerdmans, 2006.

US Department of Education. "Use of Technology in Teaching and Learning." Accessed December 29, 2016. https://www.ed.gov/oii-news/use-technology-teaching-and-learning

Ware, Bruce. "Putting It Altogether: A Theology of Church Leadership." In *Shepherding God's Flock: Biblical Leadership in the New Testament and Beyond,* edited by Benjamin L. Merkle and Thomas Schreiner, 283-308. Grand Rapids: Kregel, 2014.

Wellum, Stephen J., and Kirk Wellum. "The Biblical and Theological Case for Congregationalism." In *Baptist Foundations: Church Government for an Anti-Institutional Age,* edited by Mark Dever and Jonathan Leeman, 47-78. Nashville: B & H, 2015.

Whitney, Elspeth. *Medieval Science and Technology*. Greenwood Guides to Historic Events of the Medieval World. Westport, CT: Greenwood, 2004.

Whittenmore, Ann. "Oral Tradition: Facilitating Education through Verbal Tradition." LESSONPLANET, November 7, 2012. Accessed October 2, 2018. https://www.lessonplanet.com/article/social-studies/oral-tradition-facilitating-education-through-verbal-tradition.

Wilhoit, Jim, and Leland Ryken. *Effective Bible Teaching*. 2nd ed. Grand Rapids: Baker, 2012.

Wilkerson, Barbara, ed. *Multicultural Religious Education*. Birmingham, AL: Religious Education, 1997.

Wilson, Douglas. *Recovering the Lost Tools of Learning: An Approach to Distinctively Christian Education*. Turning Point Christian Worldview Series. Wheaton, IL: Crossway, 1991.

ABSTRACT

MODERN VERSUS TRADITIONAL TEACHING METHODOLOGIES: AN EXPERIMENTAL DESIGN

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The purpose of this project was to determine if a self-directed, modern technology-based teaching method was as effective at teaching content as the traditional lecture and workbook teaching method. With the demographics of Living Word Baptist Church Elizabethtown being mostly Generation X and Millennials, it appeared prudent to tailor any teacher training program to meet the needs of the church demographics. While programs and books are available for teacher training, most focus on traditional teaching methods. Generation X and Millennials generally have a strong propensity toward the use of electronic technologies; therefore, the best solution to reach the targeted population effectively appeared to be a technology-rich educational environment. Accordingly, this project focused on discovering the most effective training methods, which meant determining if self-directed learning using technology is as effective as traditional teaching methods.

Chapter 1 explains the ministry context of Living Word Baptist Church Elizabethtown, along with the rationale, purpose, goals, research methodologies, definitions, and delimitations of the project.

Chapter 2 establishes that the warrant to teach is found throughout the Scriptures, with the foundation to teach being laid in the Old Testament and expanded in the New Testament. Jesus builds on this foundation by teaching and by directing his

disciples to go forward and teach. Additionally, in both the Old and New Testaments a variety of teaching methods are abundantly demonstrated.

Chapter 3 is a brief history of education, specifically the growth and use of new technologies in education, including hardware, software, and methods. The argument is made that as civilization advances, education advances as well. Also, the church, which was once a leader in education, no longer enjoys that position. The point is made that if the church is to stay healthy and relevant, it should emulate the public and private school systems by adopting and utilizing the latest technologies in hardware, software, and teaching methodologies.

Chapter 4 outlines the elements of the research project, which is an explanation of the goals, the methods to meet the goals, and the statistical methods of analysis. The final analysis of the data examines the differences in the two teaching methods. Chapter 5 is an evaluation of the project's purpose and goals. In short, it is a conflation of the project results and includes recommendations for future projects.

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