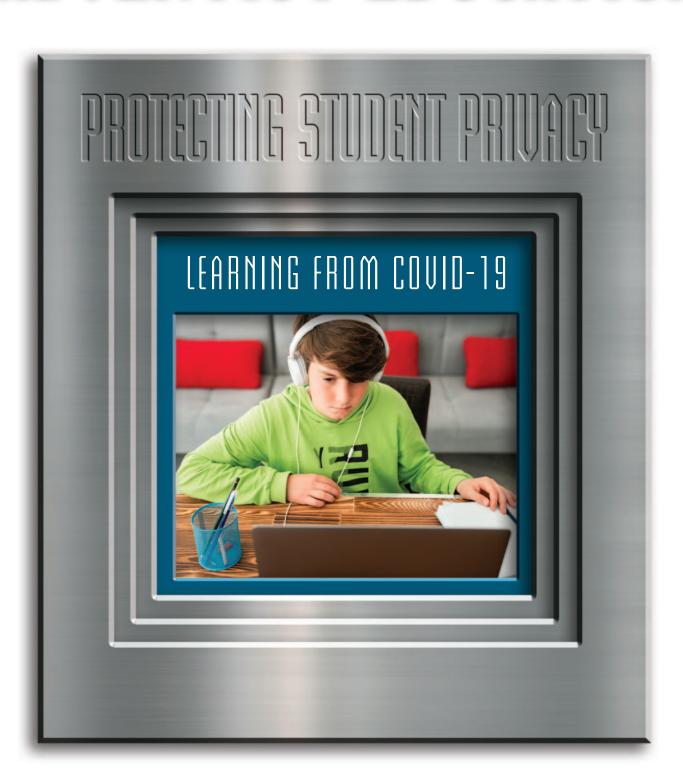
Website: http://jae.adventist.org

THE JOURNAL OF

April-June 2020











APRIL-JUNE 2020 · VOLUME 82, NO. 2

- **Editorial: Seeking Balance in a World of Extremes** By Julián Melgosa
- 4 Age-appropriate Experiences and Rituals That Help Students Encounter God Part II By Barbara J. Fisher
- Protecting Student Privacy: Learning From COVID-19 By Annette Melgosa and Ernest Staats
- 16 Cost-effective Collection Development in the Digital Age: **Considerations for Academic Libraries** By Don Essex
- Supporting the Learning, Growth, and Success of Our Students in the Face of Trauma By Davenia J. Lea
- 27 Ellen White and the Role of Research By John Wesley Taylor V
- 36 Best Practices at Work 1: Classroom Media Literacy Tools for **Combating Disinformation and Fake News** By Suellen Timm
- 42 Best Practices at Work 2: Transitioning to Online School During the COVID-19 Pandemic: San Gabriel Academy Educators **Share Recommendations for Good Practice** By Bonnie Iversen

Photo and art credits: Cover and issue design, Harry Knox; pp. 4, 9, 12, 16, 19, 23, 27, 29, 31, 36, iStock by Getty Images; pp. 43-46, courtesy of San Gabriel Academy.

The Journal of Adventist Education®, Adventist®, and Seventh-day Adventist® are the registered trademarks of the General Conference Corporation of Seventh-day Adventists®.

EDITOR

Faith-Ann McGarrell

EDITOR EMERITUS Beverly J. Robinson-Rumble

ASSOCIATE EDITOR (INTERNATIONAL EDITION) Julián Melgosa

SENIOR CONSULTANTS

John Wesley Taylor V

Lisa M. Beardsley-Hardy Geoffrey G. Mwbana, Ella Smith Simmons

CONSULTANTS GENERAL CONFERENCE

John M. Fowler, Mike Mile Lekic, Hudson E. Kibuuka

EAST-CENTRAL AFRICA

Andrew Mutero

FURO-AFRICA

Marius Munteanu

FURO-ASIA Ivan Riapolov

INTER-AMERICA **Gamaliel Florez**

MIDDLE EAST-NORTH AFRICA

Jeanette Bryson

NORTH AMERICA

Arne Nielsen

NORTHERN ASIA-PACIFIC

Richard A. Saubin

SOUTH AMERICA **Edgard Luz**

SOUTH PACIFIC

David McClintock

SOUTHERN AFRICA-INDIAN OCEAN

Mozecie Kadyakapita

SOUTHERN ASIA

Prahhu Das R N

SOUTHERN ASIA-PACIFIC

Lawrence L. Domingo

TRANS-EUROPEAN

Daniel Duda

WEST-CENTRAL AFRICA

Juvenal Balisasa

COPY EDITORS

Wayne Hall, Randy Hall

ART DIRECTION/GRAPHIC DESIGN **Harry Knox**

ADVISORY BOARD

John Wesley Taylor V (Chair), Ophelia Barizo, Erline Burgess, Jeannette Bryson, George Egwakhe, Lisa M. Beardsley-Hardy, Paola Franco-Oudri, Hudson E. Kibuuka, Linda Mei Lin Koh, Steve Laing, Mike Mile Lekic, Tissiana Bowerman, James Mbyirukira, Julián M. Melgosa, Arne Nielsen, Constance C. Nwosu, Dragoslava Santrac, Evelyn Sullivan, Carla Thrower

THE JOURNAL OF ADVENTIST EDUCATION publishes articles concerned with a variety of topics pertinent to Adventist education. Opinions expressed by our writers do not necessarily represent the views of the staff or the official position of the Department of Education of the General Conference of Seventh-day Adventists.

THE JOURNAL OF ADVENTIST EDUCATION (ISSN 0021-8480 [print], ISSN 2572-7753 [online]) is published quarterly by the Department of Education, General Conference of Seventh-day Adventists, 12501 Old Columbia Pike, Silver Spring, MD 20904-6600, U.S.A. TELEPHONE: (301) 680-5071; FAX: (301) 622-9627; E-mail: mcgarrellf@gc.adventist.org. Address all editorial and advertising correspondence to the Editor. Copyright 2020 General Conference of SDA.



Julián Melgosa

t the end of my undergraduate program in education at the Complutense University of Madrid, Spain, I had to choose a topic for my thesis. As I had recently converted to the Seventh-day Adventist faith, I thought that exploring the educational ideology and philosophy of Ellen G. White would be a good topic. After all, her writings made a lot of sense and were quite advanced for her time. I talked to one of the most rigorous professors in the area of history of education about the possibility of developing such a topic and about him being my advisor. His only question was on the relevance of my proposed

author. He had never heard of Ellen G. White, and he would not accept someone just providing sectarian counsel to a minor religious denomination.

For the following weeks I searched for articles, theses, and dissertations where Ellen G. White was the object of study, and I found a half-dozen academic studies to convince my professor. He accepted my proposal, and I had the privilege of studying and writing on this topic for a year under his guidance. By the

end of the academic year, I successfully defended the thesis before a committee of scholars who were very interested in Ellen G. White as a contributor to the history of education in the U.S.A. and the world.

Studying Ellen White's writings and particularly what she had to say about education was enriching. Through this exercise, I learned not only the content of her messages on education but also came to admire and respect this author and to accept her messages as inspired.

One of the things I appreciate about Ellen White's writings is her balance. She tends to present the opposing poles to invite the reader to choose a well-balanced position. Therefore, it is important to consider the whole picture and context, rather than focusing on one sentence or idea. Take for example, this quote:

"Children should be taught to respect experienced judgment. They should be so educated that their minds will be united with the minds of their parents and teachers, and so instructed that they can see the propriety of heeding their counsel."1

This may be read with the understanding that parents and teachers should take full control of their students' minds and not promote independent thinking or opinion. But in the same chapter she also wrote:

"There are many families of children who appear to be well trained while under the training discipline; but when the system which has held them to set rules is

> broken up, they seem to be incapable of thinking, acting, or deciding for themselves. These children have been so long under iron rule, not allowed to think and act for themselves in those things in which it was highly proper that they should, that they have no confidence in themselves to move out upon their own judgment, having an opinion of their own."2

Taken individually, the above quotes can lead to either extreme rigidity or limitless freedom in the training of the church's children.

But in the larger context, one must adopt a more central and balanced position. We therefore should exert care in not falling into either extreme.

The Bible also alerts us to the risks of extremes. It seems like even too much of a good thing may be dangerous. Said the son of David, king in Jerusalem: "Do not be overly righteous, nor be overly wise: Why should you destroy yourself?"3 Without entering into the debate of what it means to be too righteous or too wise, we can easily learn from these words that extremes are not recommendable.

Over the past few months, we have heard multiple explanations and possible consequences of the COVID-19 pandemic. From voices stating that it is a hoax to those affirming that humans and animals will be extinguished



Continued on page 47

Age-appropriate Experiences and Rituals



he origins of some Christian faith-based rituals or practices can be traced back to Adam and Eve's experiences in the Garden of Eden: a weekly rest day (Genesis 2:2); marriage (Genesis 2:24); and daily communication with God (Genesis 3:8). After sin entered the world and Adam and Eve were banished from the Garden, God instituted another ritual, animal sacrifice (Genesis 4:3-5). This ritual was to symbolize and point to Christ's future death on the Cross. While in the desert school during the Exodus, the Israelites were introduced to the sanctuary (Exodus 25:8) and its rituals pointing to (1) the coming of a Savior to rescue a lost world, and (2) God's care for His chosen people.

Around the time of Christ, the ritual of baptism became important, as it indicated a person's religious membership. Today, this ritual is seen as a public acknowledgement and declaration of a person's choice to be a Christ follower and his or her desire to join God's family of believers (Matthew 28:19). After Christ's death, animal sacrifices became redundant. A new Christian ritual was introduced to commemorate Christ's death on the Cross and humanity's rescue from eternal death. Contemporary Christians refer to this ritual as the communion service

(Luke 22:19). Rituals of prayer (Luke 11:2-5); personal reflection (Matthew 14:13); worship (Luke 13:10); Sabbath rest (Luke 4:16); and Bible study (Matthew 28:20) were demonstrated by Jesus when He lived on this earth.

The Reason for Christian Rituals

Christian rituals help 21st-century Christians to maintain and develop their faith and enhance their spiritual lives. Christian rituals are important because they provide a sense of belonging and spiritual identity in the present as well as a sense of connection with the past, and point with confidence to the future. Jennings states: "Rituals are the tools he [God] uses to get us to think and to stimulate conversation with Him."

Sadly, in the 21st century, each of the Christian rituals listed above has a counterfeit, some even within the Christian church community. Students need to know what each ritual represents, why we celebrate each one, and how we should practice them.

Experiencing God Through the Ritual of Prayer

Prayer means different things to different faith and belief groups. Recently "reflective/contemplative/centred prayer practices" are becoming prevalent in some Christian groups.² Adventist educators need to carefully examine these new trends and research their origins and purpose. Careful evaluation may uncover ideas inconsistent with Adventist beliefs.

Some people will pray to God in difficult circumstances only to forget about Him until they need a Power to intervene in their lives again.³ Adventist teachers need to be aware that some students who come to one of our schools may never have experienced or heard a Christian prayer. It is essential that students attending Christian schools are provided with the opportunity to learn about prayer, its power, and its proper ap-

BY BARBARA J. FISHER

plication in the Christian life.

Teaching students about Christian prayer and how to pray introduces them to a personal lifeline that connects them to a living and listening God. God is as close as a whispered prayer. Christian prayer is a response, not an obligation. Christians are not

required to pray. Prayer is a choice. It is a demonstration of a living and dynamic relationship with God. Christian prayer is about seeking God's will. It is not an instrument for selfishness. "The purpose of prayer is not to get what we want from God. That's magic. The purpose of prayer is that God may get what he wants from us. That's faith."4

Prayer can be expressed in different forms (personal or public prayers). All prayers, however, are reliant on a partnership between the Holy Spirit and an individual. Students mature in their understanding of prayer as their faith is nurtured.

Figure 1 lists commonly asked

	Figure 1: Questions and Answers About Prayer
Question	Answer
What is Christian prayer?	Christian prayer is talking to your best friend, Jesus, and sharing your concerns, secrets, worries, and joys just the way you do with your earthly friends. Jesus knows all about you, and He only wants what is best for you. You can always depend on Him, talk to Him, and expect that He will be listening.
Why do Christians pray?	Christians pray because they like to communicate with God, their best friend. God asks His children to "pray continually" (1 Thessalonians 5:17), ⁵ as He wants to communicate with them all day every day, anywhere, and anytime.
How do Christians pray?	The disciples asked Jesus to teach them how to pray. His model prayer is recorded in Matthew 6:9 to 13. This prayer includes seven petitions. Many times, people assume an attitude of prayer when they pray to God. It may mean closed eyes, kneeling, bowed head, and folded hands. It is one way that humans show reverence and acknowledge God's greatness and goodness when they are talking to the God of the universe.
Where do Christians pray?	A Christian can pray anywhere. Some examples include privately at home, in the classroom, in a group setting, privately in the forest, silently on the bus, or collectively in a church service.
When do Christians pray?	Christians pray whenever they want to. There is no need for a church setting to pray. It can be a breathed prayer of desperation on the road, a prayer of gratitude for a sensational sunset, or a formal, carefully prepared prayer in a church setting.
What happens when Christians pray?	Several things happen when Christians pray: (a) it changes their thinking; (b) it gives God permission to act in their lives; and (c) their prayer can make a difference in the life of someone else.
What do Christians say when they pray?	Private prayer is about personal things near and dear to us. Corporate prayer is more involved with the needs of the community (local and world).
How does God answer prayer?	God answers prayer by many and various means. God has often surprised people in the way He has answered their prayers. There are many stories of great people throughout history, like George Müller, a minister who relied entirely on God each day to provide for his needs.
Why does God not always answer a Christian's prayer?	God always answers prayer, but it may not be the answer that the person requested. There are three answers to prayer: <i>Yes, No,</i> and <i>Wait Awhile</i> . God is the best parent Christians can have. He only gives His children what is for their best good. We may not understand why He says <i>No</i> or <i>Wait Awhile</i> until we get to heaven. God is not an errand boy fulfilling everyone's wishes. That would create chaos. He is God. He sees the whole picture. We only see a small portion of life's jigsaw puzzle, but we can have implicit trust that God has everything in His hand. God is never caught off guard. ⁶
Can the devil read my lips as I pray?	The great cosmic conflict is being fought over who obtains control of a person's mind. Individuals have the power to choose and decide who is going to guide their thought patterns. God waits to be invited into each person's life (Revelation 3:20). Some believe that the devil can read faces and behavior but cannot read minds, and that he can influence a person's choices. If God is not invited to inhabit a person's mind, then the devil will harass him or her and try to influence that person's choices until he eventually weakens the person's resolve and takes control of his or her mind. God can read minds but will not go against any person's choice. God tries to persuade each person to let Him come into his or her life but will always respect a person's choice.

questions about prayer, with some suggested responses.

Experiencing God Though the Ritual of a Personal Quiet Time

Most belief- and faith-based traditions encourage personal quiet time for spiritual reflection and meditation. In the 21st century, Adventist educators need to be aware of the many counterfeit spiritual-reflection programs being promoted in some educational institutions. Often these programs involve repeating a special word or mantra (an idea taken from Eastern philosophies) to aid students in achieving relaxation of the body and the emptying of the mind.7 Consequently, it is becoming increasingly necessary for Adventist teachers to inform their students about the origins of Eastern relaxation methods and practices. One relaxation method being promoted involves the meditation practice of emptying the mind. This practice can expose students to supernatural forces and powers that can cause harm and create confusion.

In contrast to the meditation practice of emptying the mind with the objective of looking inward for peace and spiritual renewal, the Christian meditation practice engages in a conscious filling of his or her mind with Scripture with the objective of connecting with God. It is during those quiet times when the body is still, extraneous distractions are absent, and the mind is alert that God speaks through His Word, the Bible. Developing a personal devotional quiet time is one way that students can experience God on a daily basis for the rest of their lives.8 The following suggestions offer strategies that may encourage constructive personal quiet time engagement:

• From the ages of 2 to 3 years, students can look at Bible storybooks or play with quiet toys for about five minutes.

- Three- to-5-year-olds are given five minutes where they can listen to an audio Bible story through headphones, use play dough or quiet toys, or look at Bible storybooks. A copy of a young person's version of the Bible can also be included for the children to browse through.
- At school, 6- to-9-year-olds can have a quiet time of five to 10 minutes they can use to respond after reading a portion of the Bible silently. Some examples of how they can respond include: (a) creating something from play dough, (b) writing a song, (c) drawing a picture, (d) writing a prayer, (f) completing a Bible puzzle, or (e) writing a poem.
- Ten- to-17-year-olds can be encouraged to engage in personal, reflective, Bible study habits by using the example outlined below (Figure 2). The activity, a simple journaling technique adapted from My Quiet Time, ocan be adjusted for any age group and will help students to establish a personal devotional time. The only requirements are access to a Bible and the ability to read independently. The students are given one or more specific passages related to the Scripture lessons for that week. They are encouraged to follow the guide taught in class, and then

complete the activity at home. Several times a week, small-group sharing is encouraged in an affirming atmosphere. As the student's faith matures, more sophisticated methods and programs can be implemented.

Experiencing God Through the Ritual of Bible Study

God speaks through His Word, the Bible, to guide, instruct, convict, and give victory in each person's life. There are many varied methods of studying the Bible that can assist Christians to grow in their faith, but there is no one best method of Bible study. Different approaches will appeal to different people. 10

Adventist educators experienced in their own personal Bible study techniques and methods can capably share their passion and expertise with their students. My Quiet Time Reflection Journal (see Figure 2) can be linked effectively with any Bible study approach.11

Experiencing God Through the Ritual of Worship

A Christian's life is a testament to the fact that experiencing God involves worshiping Him in everything that he or she does and says throughout each day. Reynolds

Figure 2: My Quiet Time Reflection Journal					
Step 1	Pray	Ask God to: • help you to understand the passage you are going to read. • help you to learn something about Him from the reading.			
Step 2	Read and Reflect	Read and reflect on the selected passage from the Bible. I think this passage is saying I think this passage means I have learned this about God: I think God is telling me			
Step 3	Write	 I still do not understand I would like to share this with others: My favorite verse today is 			
Step 4	Pray	Today I will			

points out that worship provides an insight into who Christians are and why they are here.12 It unleashes for them the power, through God's grace, to become more than they are. Worship for the Christian is not relegated to certain times or special occasions. However, Christian history has shown that to maintain and assist this daily, vital connection of experiencing God, Christians need to adopt various structured forms of worship. The following list includes some of these structured forms that may be used at home, at school, and at church.

At home:

- Private worship, which involves daily personal devotional time spent in Bible study and prayer.
- Family worship, which involves the entire family at regular times each day, in reading the Bible, praying, and singing faith-based songs.

At school:

- Classroom worship, which involves a devotional time conducted by the teacher(s) in each classroom at the commencement of each school day. It sets the tone for the day as the Spirit of God is invited to be present in the classroom through Bible reading, prayer, and singing. When students are given the opportunity to prepare and conduct this short devotional time, it can be a valuable learning experience for them. They can be encouraged, individually and as a group, to choose the topic and music as well as to pray.
- School worship, which involves the entire school, usually once a week, worshiping together in a combined program. It is mainly organized by the chaplain, local minister, teachers, or school administrators. This is a valuable learning experience for students, if they are encouraged to participate in the music and prayer, and occasionally to present the spiritual talk for the day.
- Special worship week, which involves the entire school or specific age groups in the school. A specific week is chosen to promote a specified spiritual emphasis. It is conducted at the same time every day and may involve

- a specific theme or a guest speaker. At church:
- Corporate worship, which involves the faith-based community regularly meeting to worship as a community. We want our students to experience God at church, since the church is a place where the family of God comes to meet together and share and worship together.

Experiencing God Through a Sabbath Rest Ritual

For Adventists, the ritual of a "seventh-day or Sabbath rest" reminds us that God created our world in six days. On the seventh day, He created a holy rest day for His children, a special celebratory time away from daily routines and agendas (Genesis 2:2, 3). He planned that for 24 hours, once a week, humans would celebrate God's involvement in their lives, recharge their spiritual batteries, re-establish their dependence on Him, and interact with their Christian family.

For students and teachers in Adventist boarding schools, the observance of the Sabbath rest ritual (Hebrews 4:9) has the following added benefits: It provides them with 24 hours of guilt-free "scholastic rest"; it frees them so they can spend time in worship and community; it offers them the time and space to enjoy God's other book, nature; it provides the opportunity for them to commence the new school week spiritually refreshed and academically rested; it demonstrates that in six days, they can accomplish what most people achieve in seven days; and it reminds them that they belong to an extended, worldwide family of believers.

Experiencing God Through the Ritual of Baptism

The ritual of baptism, as demonstrated in Matthew 28:19, is observed throughout Christendom. In Adventism, the ritual of baptism by immersion celebrates a person's acceptance

of Jesus as his or her personal Saviour. "Baptism does not mean you no longer need a Saviour; rather, it is recognizing that you have one." Witnessed by family and friends, this shared, public ritual is a reminder that the church family is responsible for the support, mentoring, and nurture of the candidate as he or she develops a mature faith. 14

John baptized Jesus in the Jordan River when He was an adult (Matthew 3:1-17; Luke 3:21). Adventists believe it is best for students to wait for the experience of baptism until they are old enough to understand the meaning of the ritual. A conscious decision to accept Jesus as one's personal Savior is not age-specific but essential before any student considers participating in the ritual of baptism. Regardless of the student's age, each request for baptism needs to be treated sensitively and genuinely.

Some young people choose to graduate from Adventist schools without being baptized. It is interesting to consider, however, how many of these students might have been baptized if a significant adult had suggested it to them. Both before and after baptism, students need a mentor to help them mature in their Christian faith. Adventist schools and churches are well situated to provide this mentoring, but it needs to be intentional, relevant, and appropriate; and mentors need to be chosen with care and screened.

Experiencing God Through the Ritual of Marriage

For some people living in the 21st century, the marriage ritual is seen as unnecessary and outdated. Contemporary media trivializes and belittles the institution of marriage. This ritual was created by God for a man and a woman (Genesis 2:23, 24) to live in a monogamous relationship. Sadly, this is no longer the expected norm, even in some Christian circles.

Adventists often choose to be married in churches because they

want God to bless their home and family. Adventists believe that families are the foundation of the Christian community, and therefore view the ritual of marriage as an important aspect of their belief system. Adventist educators can help students understand that God regards the ritual of marriage so highly that He has used it as an illustration to explain His relationship with His family of believers, the church (Revelation 19:7, 9).

Experiencing God Through the Ritual of Communion

The ritual of communion can be likened to a special meal. This is not like a snack in church, but a special meal Jesus ate with His disciples just before He died. As Jesus' followers, we still eat this special meal to remember and celebrate His love and sacrifice for us15 as we look toward the hope of His soon return (1 Corinthians 11:23-29). It reminds Christians that, in Christ, their lives are pure, and their sins are no more. An important aspect of the Adventist communion ritual, the foot-washing ceremony, reminds us that we are all equal in God's eyes and that we need to serve others in love, just as Jesus did. Adventist educators want their students to be able to understand the implications of this ritual in their daily lives.

Closing Thoughts

Growing in Christ and experiencing God are enhanced when students actively engage in Christian rituals. As students mature, they will question previously accepted beliefs as they take greater responsibility for their own faith, and this questioning should be welcomed as a learning opportunity. Experiencing God through Christian rituals can have a life-transforming impact on children and young adults as they grow in their relationships with others. Christian teachers are privileged to have the opportunity to introduce, model, and nurture students through living a Christian lifestyle.

This article has been peer reviewed.



Barbara J. Fisher, MA, is a retired senior lecturer at the School of Education at Avondale University College, Cooranbong, New South

Wales, Australia, where she researched and lectured in Literacy and Religious Education (Curriculum Studies) for 30 years. She has taught in New Zealand and Australia and studied and taught in the U.S.A. Ms. Fisher has presented lectures on faithbased education for teacher in-service seminars in Australia, Mexico, Ukraine, Nigeria, and the South Pacific. She is passionate about faithbased education and is currently a member of the International Advisory Board/Consultants for the new International Journal of Faith Integration. Her book Developing a Faith-based Education: A Teacher's Manual (Terrigal, N.S.W., Australia: David Barlow Publishing, 2010), has been translated into Spanish and Russian.

Recommended citation:

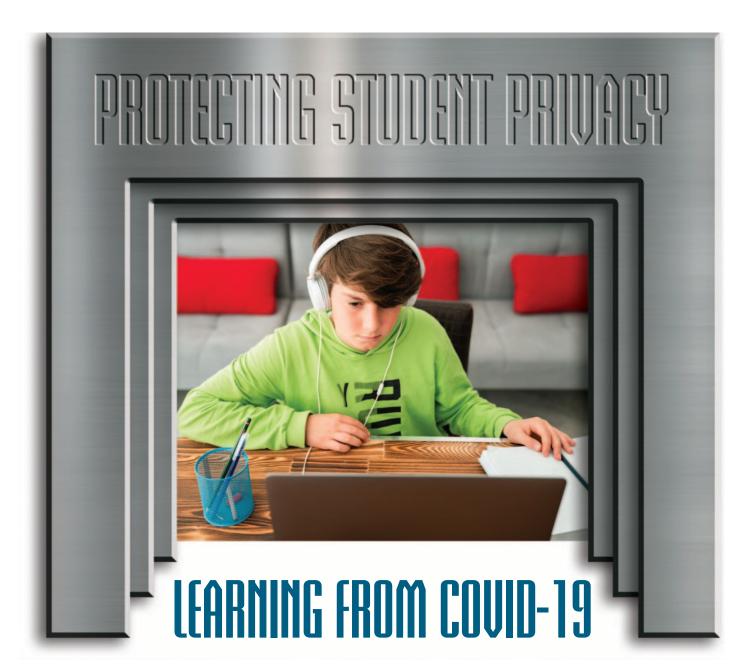
Barbara J. Fisher, "Age-appropriate Experiences and Rituals That Help Students Encounter God Part II," The Journal of Adventist Education 82:2 (April-June 2020): 4-8.

This article has been adapted from a chapter in the book Developing a Faith-based Education: A Teacher's Manual (Terrigal, N.S.W.: David Barlow Publishing, 2010), and is printed with permission from the publisher and author. For more information about the book, see https://dbpub lishing.net.au/dbporders.html.

NOTES AND REFERENCES

1. Timothy R. Jennings, The God-Shaped Brain. How Changing Your View of God Transforms Your Life (Downers Grove, Ill.: InterVarsity Press, 2013), 115.

- 2. See http://www.lovolapress.com/pray ing-the-ignatian-way-reflective-prayer.htm for information on Reflective Prayer Practices and http://www.contemplativeoutreach.org/faq/ centering-prayer; Check out Chapter 2: "Do You Even Need God When You Pray?" of How God Changes Your Brain: Breakthrough Findings From a Leading Neuroscientist (New York: Ballantine Books, 2009), pages 22 to 40 by Andrew Newberg and Mark Waldman.
- 3. Stephen Chavez, "The Prayer of Last Resort," The Journal of Adventist Education 71:2 (December 2008/January 2009): 18-21: http://circle.adventist.org/files/jae/en/jae20 0871021804.pdf.
- 4. Alan Reynolds, Reading the Bible for the Love of God (Grand Rapids, Mich.: Brazos Press, 2003), 93.
- 5.1 Thessalonians 5:17. Unless stated otherwise, all Scripture quotations in this article are taken from the New International Version (NIV) Holy Bible, New International Version®, NIV® Copyright © 1973, 1978, 1984, 2011 by Biblica, Inc.® Used by permission. All rights reserved worldwide.
- 6. The song, "Trust His Heart," written by Eddie Carswell and Babbie Mason, express this sentiment through music. See https://www.youtube.com/watch?v = vh65w LVbaww.
- 7. See http://www.innerhealthstudio. com/spiritual-meditation.html for information on non-Christian meditation.
- 8. See Chapter 3 in Barbara J. Fisher's Developing a Faith-based Education: A Teachers' Manual, for a further discussion on learning in solitude. See https://dbpublish ing.net.au/dbporders.html.
- 9. Child Evangelism Fellowship, Children's Resource Bible. New King James Version, 1, 159.
- 10. See Donna Habenicht and Larry Burton. Teaching the Faith: An Essential Guide for Building Faith-shaped Kids (Hagerstown, Md.: Review and Herald, 2004), pages 29 and 30.
- 11. For an example of the Inductive Bible Study Approach, see: Volcano Adventure Team, My Volcano Adventure: Discovering the Bible's Power (Fort Collins, Colo.: Through the Bible Publishers, 2004), 52.
- 12. Reynolds, Reading the Bible for the Love of God, 101.
- 13. Seth J. Pierce, What We Believe: Seventh-day Adventists Believe for Teens (Nampa, Idaho: Pacific Press, 2007), 95.
- 14. For current research on Before and Beyond Baptism see http://www.adventist archives.org/summit-on-nurture-andretention.
- 15. For more ideas about communion for children see https://children.adventistchurch. com/wpcontent/uploads/sites/14/2017/03/ Communion-Just-for-Kids.pdf.



eemingly overnight, COVID-19 stay-at-home orders shuttered K-12 schools and institutions of higher education (HE), and educators were expected to rapidly employ educational "triage" to move a generation of kindergarten to graduate-level students into remote education. Educational institutions in technologically advanced regions quickly adopted a wide variety of online tools including video conferencing, collaboration apps, project planning software, and cloud storage to piece together curriculum, resources, and communication. Within weeks, education worldwide had instituted Emergency Remote Teaching (ERT).

ERT is not like the planned, pedagogically sound, online learning already in existence, which uses course management or learning-management systems (CMS/LMS). Tradi-

tional CMS/LMS are developed with student security and privacy in mind.² They provide a clearly written privacy policy and terms of agreement and meet regulatory compliance. Traditional systems support a planned curriculum, pedagogically sound learning, and secure storage and grading.

In contrast, Emergency Remote Teaching during COVID-19 has often brought together poorly vetted online applications that utilize undefined levels of encryption and include terms of agreement that do not meet privacy regulations. Student (and teacher) security and privacy were further at risk due to their connecting via home or public networks—often using their own personal devices.

Many of the online tools cobbled together during the COVID-19 emergency are user-friendly,³ which means that

BY ANNETTE MELGOSA and ERNEST STAATS

teachers and students quickly embraced them to share lessons, engage collaboratively, and to post assignments.⁴ This makes the task of deciding whether or not to permanently adopt these technologies after COVID-19 more difficult. Institutions choosing to do so will need to enact privacy policies and procedures for teachers and students.

What Is Personal Data, and Why Should We Care About Guarding It?

Online data privacy refers to how entities collect, host, store, use, share, and secure a user's personal data. Protecting users' rights to manage and determine how others handle their personal data is the purpose of privacy,⁵ and the Universal Declaration of Human Rights declares that entities should not intrude upon this right of an individual.⁶ In line with this, in 2013, the U.N. adopted The Right to Privacy in the Digital Age.⁷

The right to personal-data privacy has been legislatively codified around the world to prevent individuals or organizations from obtaining other people's information and unethically or illegally using it to exploit them and cause harm. In today's digital world, where tracking a user's activity is ubiquitous to the online experience, even one piece of digital information can reveal additional personal data and put that person in harm's way. For example, a predator who possesses a child's age, username, or e-mail address can easily target that child. With a device ID, a hacker can spoof a person's mobile device and receive copies of incoming text messages which can then be used for blackmail or identity theft. Unfortunately, criminals in possession of student personal data have been known to threaten students and their families with physical harm.

As Christian educators, it is up to us to follow all data privacy laws within our own countries to protect the personal data of those in our care from unscrupulous and unauthorized use. We should do this not only for regulatory compliance but also because God asks us to do justice and protect the vulnerable (Isaiah 1:17).

Given that educators and educational administrators must work within a legislative environment that seeks to protect children's data privacy, it is helpful to understand the different types of personal data. Personal data is traditionally categorized as *linked* or *linkable* data. In today's digital world, electronic identifiers may also be included. Table 1 provides some examples.⁸

Personal Data may pertain to a specific area of one's life. In an educational setting, for example, a student's Personal Data includes grades, educational records, and personal information exchanged within his or her educational experience. Data privacy principles hold an organization responsible to protect all personal data in its possession. Entities that collect, store, or distribute Personal Data are accountable for enacting policy and procedures to protect it.⁹

Privacy Guidelines and Regulations Affecting Education

Data and child privacy regulations around the world cover similar principles while navigating a complex series of cultures and legislative traditions. ¹⁰ Table 2 provides three

Table 1. Examples of Personal Data Data Type **Examples of Data Type** Linked Data—Data that Data traditionally linked to a when linked to an individual person such as name, adcan identify him or her dress, phone number, date of birth, driver's license number or other ID, biometric data Linkable Data—Data that Place of birth, Zip/postal alone cannot identify a percode, gender, age range, son but if combined with ethnicity, e-mail address, other data can be used to religion identify the individual Other Electronic Identi-Persistent Identifiers are fiers—Persistent Identifiers often used to personalize a (long-lasting references to a user's digital experience or resource such as a dataset to advertise to him or her. or a person) may be consid-These include things like ered as personal data if they Device ID, Cookies, or an can be used to identify an Internet Protocol (IP) ad-

examples of regulations that have had an impact on world-wide regulatory efforts. Included are the U.S. Family Educational Rights and Privacy Act (FERPA), the U.S. Children's Online Privacy Protection Act (COPPA), and the EU General Data Protection Regulation (GDPR). Each reader should become familiar with privacy regulations in his or her own region of the world and consult educational authorities and legal counsel as he or she applies these regulations.

dress. Geolocation is an-

other digital identifier that

can often reliably track an

individual.

individual; other digital iden-

tifiers may also link to indi-

viduals under certain cir-

cumstances.

- The Global Education Privacy Standard (GEPS) incorporates common standards upon which all privacy regulations are based. Use this adapted list¹¹ to identify what your institution needs to understand and document:
- Understand what is or is not allowed with data, based on your jurisdiction's regulatory laws;
- Be clear about why you are going to use data in a specific manner;
- Understand what the law requires of you concerning data privacy;
- Understand the basic technical standards that relate to data privacy;
 - Understand data retention and purging regulations;
- Identify who will handle the data, have access to it, or be notified if concerns arise; and
- Consider compliance across borders (Which countries may be impacted?).

Why Now?

Why should educators concern themselves about data privacy during this time of crisis? Many of the online applications that educational institutions embraced during COVID-19 did not typically cater to school or student data privacy, as they were made for public use. To their credit, they recognized the educational sector need and temporarily offered their products to schools for free or nearly free. At their core, however, they remain focused on profit.

Several applications that rolled out to schools quickly succumbed to security or privacy issues.12 Code fixes and patches were applied. But according to VPNoverview.com, ¹³ people now worry about video conferencing that allows strangers to enter sessions and wreak havoc. They wonder whether children's private data is being monetized and express concern over poor or nonexistent data encryption. They ask about the information being shared, with whom, and for what purpose.

Understanding Privacy Vulnerabilities

It is up to administrators and teachers to understand the vulnerabilities that online Web applications bring to the educational setting. We summarize below a list of vulnerabilities which we compiled based in our own experience and the works of Aljawarneh¹⁴ and Dennen¹⁵:

- 1. Web-based applications servers typically reside in a variety of locations around the globe, raising privacy issues.
- 2. "Free" online services may monetize Personal Data, causing conflict of interest.
- 3. Commercially oriented online applications such as video conferencing, cloud storage, or media-sharing apps pose privacy risks. Cobbling them together increases that risk.

	FERPA (U.S.)	COPPA (U.S.)	GDPR (EU)		
To whom does it apply?	Schools and HE institutions that accept Federal funding	Technology solutions that are used by children under the age of 13	Organizations that collect Personal Data from Europeans		
Who or what does it protect?	Student educational Personal Data, including records	Personal Data from children 12 years or younger (e.g., name, address, date of birth, Social Se- curity number, location, IP ad- dress, et cetera)	The rights of the user to manage his or her Personal Data		
What is regulated?	Data-use limitations; parental or adult student permission to share; length of retention	Requires published privacy policy stating how data is collected, used, or shared, including length of retention; requires parental per- missions at various levels	Requires policies, plans, and procedures for collection and management (including length of retention) of user data along with evidence of compliance		
How to ensure that technological solu- tions comply	Encrypt data and utilize enhanced identity authentication. Confirm that the product has written policies that indicate compliance.	Check that the site has a clearly published privacy policy that meets COPPA compliance.	Ensure fair and lawful data handling; state the purpose and limits for data collection, use, and transfer; minimize amounts collected; ensure data accuracy; specify storage limitations; ensure data integrity and confidentiality; be accountable.		
Noncompliance risks from online services	Online services with student data may not follow FERPA compliance; the school has no control over user behavior.	Online services that aren't specifically catering to children may not be COPPA compliant.	Use of online services requires due diligence to ensure that services are compliant in collecting, storing, sharing, and protecting Personal Data.		

If yours is a small school with limited legal or technical resources, reach out to your educational authority. professional associations, or colleagues in other school systems for guidance. Raise data privacy concerns with your school board, which may engage the assistance of professionals in

4. Online services frequently change features and/or terms of service, which may create regulatory nightmares.

What Can Educational Administration Do?

Educational institutions can emerge safely from the COVID-19 crisis and protect the school and its students and teachers by building a systematic security and data privacy plan. This is not only a regulatory imperative but also a spiritual consideration, as we know that God is not a god of confusion (1 Corinthians 14:33). Based on several authors, 17 we provide a list of actions that educational administrators can take to improve student and teacher online data privacy:

• Establish a network of legal and information-security professionals who can advise about and securely implement new technologies. If yours is a small school with limited legal or technical resources, reach out to your educational authority, professional associations, or colleagues in other school systems for guidance. Raise data privacy concerns with your school board, which may engage the assistance of professionals in the community or provide guidance for a school data-security and privacy plan.



- Adopt a data-privacy vetting procedure for new software or applications. Question how the online service collects, shares, retains, and protects private information. Consider what rights and responsibilities belong to the educational institution and/or the user. While the sidebar, Simple Steps to Begin Vetting an App, is useful to any educator, it provides a clear roadmap for the small school that wants to vet new educational apps.
- Appoint someone to lead in the creation and adoption of privacy policy and user training. Policies should include data collection, management, and planned deletion, any class session recording or participant monitoring, storage of student work and grades, and appropriate behavior in collaborative online settings.
- Include parents along with students (if the students are less than 18 years of age) and adult students in discussions about student privacy and what it means for them (e.g., their right to control data about themselves: biometrics, behavior, and action such as religious practices, communication such as e-mail or voice, personal data or images, personal feelings or thoughts, movement through public space, associations with others).
- Share with parents of minors and adult students the steps the educational institution is taking to protect students. Inform them about technologies or sites used as well as instances where the institution has signed consent agreements on behalf of students. Solicit parental or adult student support for the school privacy policy to mitigate risks such as cyberbullying or unauthorized dissemination of students' and teachers' personal information.
- Develop and provide parents or adult students with an institutional privacy pledge like this sample pledge: https:// studentprivacypledge.org/privacy-pledge/.
- Explain how the context (private use versus educational use) determines the ways in which an application should be used and the behaviors that students (and teachers) should follow in the educational setting.
- Share with adult students and parents of minors the steps to maintain privacy in the home educational environment (for example, disable voice assistance devices such as Alexa®, Google Assistant®, or Siri® that may be active in the environment; and ensure that the student's screen is free from open tabs or visible files before video conferencing or screen sharing occurs).

What Can Teachers or Professors Do?

The following list gleaned from four authors¹⁸ provides examples of steps that teachers and professors should take to protect student privacy when utilizing online applications.

- Share your institution's privacy pledge and your online classroom privacy guidelines with parents and adult stu-
- Recording of classes should be done only if school policy allows. If so, seek parental or participant (if over 17) permission. Announce any recording before every session, including how a student can participate silently. Remove voice-activated devices from the vicinity of your computer/

tablet, and ask students or parents to do the same.

- Use only technologies that have been vetted and approved by your institution. Be aware that by requiring a student to use a social-media platform that he or she already uses privately, the student may need to change his or her privacy settings to be compliant for educational purposes.
- · Learn how to use the security and privacy features of your chosen technologies. In the COVID-19 crisis, Zoombombers (unwelcome strangers) invaded online classes and dissertation defenses because the waiting room and password features that control permission to enter were not used, and screen sharing was not turned off.
- Discuss online privacy with students to ensure that they not only exercise proper privacy protocols while working within online classes but that they also understand its importance.

Teaching Students About Privacy

When teaching adolescents and young adults about online privacy, recognize that their views are different from those

Simple Steps to Begin Vetting an App

Follow these guidelines to vet any online service or app before you use it in the classroom:

- 1. Look for a privacy statement and read it to make sure it makes sense to you. If it seems too vague, consider another app. A privacy policy should cover how the app handles children's personal information and will explain what it collects and why.
- 2. Check how the app or Website seeks parental permission before it collects the personal information of minors
- 3. Do a quick Web search to make sure the app is legitimate and reputable.
- 4. Don't use an app it if requires permission to access data or takes other actions you find intrusive or unnecessary. Very few apps need access to your contacts list or your physical location. Be very careful with these apps.
- 5. Communicate with parents about what apps or online services you plan to use and how you plan to use them. This allows any parent who has general privacy concerns or specific concerns with the app to voice them.
- 6. Remember, free apps and services have to make money. They often do this by selling users' personal infor-

Finally, "Privacy Guidelines for Apps for Children" (https://www.termsfeed.com/blog/privacy-guidelinesapps-children) provides examples of app privacy policies as well as examples of privacy laws from several countries.

Additional Resources

COVID-19 and Privacy

Consortium for School Networking (CoSN), "COVID-19 Response: Preparing to Take School Online": https://covid 19edtechguidance.com/covid-19-response-preparing-totake-school-online/

Consortium for School Networking (CoSN), "Cyber Security Considerations in a COVID-19 World": https://covid19 edtechguidance.com/cybersecurity-considerations-in-acovid-19-world/

Janssen, David, "Secure Video Conferencing Software: How to Ensure Your Privacy": VPNOverview.com (April 14, 2020): https://vpnoverview.com/internet-safety/business/ video-conferencing-software/

Staats, Ernest, "Remote Working: Data Privacy and Security Tips + Usage Considerations" (March 31, 2020): https://www.linkedin.com/pulse/remote-working-dataprivacy-security-tips-usage-ernest-staats/

Data Privacy in K-12 and Higher Education

Consortium for School Networking (CoSN). "Protecting Privacy in Connected Learning Toolkit: Moving From Compliance to Trust" (June 2017): https://www.cosn.org/pro tecting-privacy-connected-learning-toolkit (requires you to enter your information)

Durand, Michael, "To Better Protect Student Data, Know the Difference Between Security and Privacy," EdTech: Focus on Higher Education (February 20, 2020): https://ed techmagazine.com/higher/article/2020/02/better-protectstudent-data-know-difference-between-security-andprivacy

Knorr, Caroline, "Keep Your Kids Safe Online: Essential Student Privacy Questions to Ask Your Kid's School," Thrive Global (December 22, 2017): https://thriveglobal. com/stories/ask-your-kid-s-school-these-essential-studentprivacy-and-safety-questions/

Smith, Larry. "Student Data Privacy: What Are Your Obligations?" Student Data Privacy Consortium (February 2020): https://cdn.ymaws.com/www.a4l.org/resource/ resmgr/files/sdpc-publicdocs/sdpcpresentations/2020 02_12_oetc_obligations.pdf (first half of slide show defines regulations)

of older adults. Three studies, taken as a whole, paint a picture of how students perceive online privacy and what teachers might do to engage them in discussion on the subject. Based in the findings of these studies, ¹⁹ adolescents tend to:

• View privacy in transactional terms (e.g., it is OK to

give up a certain amount of privacy for the convenience of a service viewed as trustworthy and providing value);

- View privacy not as a regulatory issue but as one's own personal responsibility;
- Feel confident in their ability to manage their own online privacy;
- Have little concern about privacy when using online applications for educational purposes unless they have been negatively affected.

From the same sources,²⁰ we gleaned ideas that teachers or professors may consider using to engage students in discussions about data privacy. Teachers might use experiential learning to explore with students:

- How information retrieval algorithms can be politicized (e.g., searching one position on an argument leads to fewer sources with alternate views);
- How their personal information can lead to profiling for monetization purposes (different pricing for different users based on data profiling);
- Examples of how they have inadvertently shared emails, location, or other personal information when using a single device for school and private life; and
- What personal information is being shared in popular apps, with whom, and whether it is being indexed and archived and for how long.

Embrace New Technologies While Promoting a Sustainable Culture of Data Privacy

Education has changed! Due to the pandemic, K-12 and higher education institutions "temporarily" enacted emergency measures that put into motion a level of online engagement never before experienced across such a broad cross-section of students and teachers. Some pieces of the experiment in Emergency Remote Teaching have failed and will likely not be repeated. But the overall experience has exposed teachers and students to a wide range of popular, easy-to-use online applications in an educational setting.

Educational institutions must now choose whether or not to embrace this new opportunity more permanently as they emerge from COVID-19. For ethical and regulatory reasons, they must carefully consider how to do so securely in ways that protect users' privacy. Teachers and administrators in faith-based educational institutions understand this responsibility in terms of the immeasurable worth of a student in God's eyes (Matthew 18:2-6, 10). Any efforts they make to protect students' personal data and thereby protect the students themselves can be considered as if they were doing it for Jesus (Matthew 25:40). It will take an entire educational village (administrators, teachers, technology and legal experts, parents and students) to create a sustainable student privacy culture. If public or business-oriented online services are invited to stay within this educational village, they must be required to demonstrate that they meet ethical and regulatory standards of security and privacy.

This article has been peer reviewed.



Annette Melgosa, EdD, is the Strategic Planning and Research Analyst for Information Technology Services of the General Conference of Seventh-day Adventists in Silver Spring, Maryland, U.S.A.



Ernest Staats, MSIA, is Technical Data Protection Officer for the General Conference of Seventh-day Adventists, and Director of Information Technology Security for Global Clients at Network Paladin, LLC in Atlanta, Georgia, U.S.A.

Recommended citation:

Annette Melgosa and Ernest Staats, "Protecting Student Privacy: Learning From COVID-19," The Journal of Adventist Education 82:2 (April-June 2020): 9-15.

NOTES AND REFERENCES

- 1. Charles Hodges, et al., "The Difference Between Emergency Remote Teaching and Online Learning," Educause Review (March 27, 2020): https://er.educause.edu/articles/2020/3/the-difference-betweenemergency-remote-teaching-and-online-learning.
- 2. Shadi A. Aljawarneh, "Reviewing and Exploring Innovative Ubiquitous Learning Tools in Higher Education," Journal of Computing in Higher Education 32 (2020): 61: https://doi.org/10.1007/s12528-019-09207-0.
- 3. Jessica Ruf, "'Spirit-Murdering' Comes to Zoom: Racist Attacks Plague Online Learning," Diverse: Issues in Higher Education 37:4 (April 16, 2020): https://diverseeducation.com/article/171746/.
- 4. Gerrit De Vynck and Mark Bergen, "Google Classroom Users Doubled as Quarantines Spread," Bloomberg/Quint (Updated April 10, 2020): https://www.bloombergquint.com/business/google-widenslead-in-education-market-as-students-rush-online.
- 5. UNESCO, Keystones to Foster Inclusive Knowledge Societies: Access to Information and Knowledge, Freedom of Expression, Privacy, and Ethics on a Global Internet (Paris: UNESCO, 2015), 60: https://unesdoc. unesco.org/ark:/48223/pf0000232563?posInSet = 3&queryId = 281fd075 -9301-40eb-8bce-75ce81ab21e6.
 - 6. Ibid., 56.
 - 7. Ibid., 57.
- 8. Examples used in Table 1 come from the personal experiences of the authors of this article and from the following two works: Bridge Corp, "PII vs. non-PII Data: What the Heck Is the Difference?": https:// www.thebridgecorp.com/pii-vs-non-pii-data/; Michael Sweeney and Karolina Lubowicka, "What Is PII, Non-PII, and Personal Data?" (Last updated April 2, 2020): https://piwik.pro/blog/what-is-pii-personaldata/.
- 9. Michael Durand, "To Better Protect Student Data, Know the Difference Between Security and Privacy," EdTech: Focus on Higher Education (February 20, 2020): https://edtechmagazine.com/higher/article/ 2020/02/better-protect-student-data-know-difference-between-securityand-privacy.
 - 10. UNESCO, Keystones, 56.
- 11. Access 4 Learning Community, "Global Education Privacy Standard (GEPS)": https://privacy.a4l.org/geps.

- 12. These articles provide examples of some of the online applications that schools turned to during COVID-19 as well as examples of how some of these products ran into privacy issues: De Vynck and Bergen, "Google Classroom Users Doubled as Quarantines Spread"; Ruf, 'Spirit-murdering' Comes to Zoom; Alex Konrad, "All Eyes on Zoom: How the At-Home Era's Breakout Tool Is Coping With Surging Demand—And Scrutiny," Forbes (May 30, 2020): https://www.forbes. com/sites/alexkonrad/2020/04/03/all-eyes-on-zoom-how-the-at-home-erasbreakout-tool-is-coping-with-surging-demand-and-scrutiny/#48e3f28e57f3.
- 13. PR Newswire, "VPNoverview.com: People Working From Home Often Concerned With Privacy Aspects of Video Conferencing Software" (April 2, 2020): https://www.prnewswire.com/news-releases/vpnover viewcom-people-working-from-home-often-concerned-with-privacy-aspectsof-video-conferencing-software-301033982.html.
- 14. Aljawarneh, "Reviewing and Exploring Innovative Ubiquitous Learning Tools in Higher Education," 58.
- 15. Vanessa P. Dennen, "Technology Transience and Learner Data: Shifting Notions of Privacy in Online Learning." The Quarterly Review of Distance Education 16:2 (2015): 45, 49, 51.
- 16. In Table 2, we synthesize key points related to FERPA, COPPA, and GDPR. While the actual regulations may easily be found online, these sources provide good summaries of each: Alexander R. Schrameyer et al., "Online Student Collaboration and FERPA Considerations," TechTrends 60 (2020): 543-544. https://doi.org/10.1007/s11528-016-0117 -5; "Understanding Child Data Privacy for Distance Learning," IEEE Innovation at Work: https://innovationatwork.ieee.org/understandingchild-data-privacy-for-distance-learning/; Renata Mekovec and Dijana Peras, "Implementation of the General Data Protection Regulation: Case of Higher Education Institution," International Journal of e-Education, e-Business, e-Management and e-Learning 10:1 (2020): 104, 105: http:// www.ijeeee.org/vol10/524-CN010.pdf; Lisa W. Schifferle, "COPPA Guidance for ED Tech Companies and Schools During the Coronavirus" (April 9, 2020): https://www.ftc.gov/news-events/blogs/business blog/2020/04/coppa-guidance-ed-tech-companies-schools-during-cor onavirus; "Understand What Is Personal Information Under COPPA," Amelia Vance (November 10, 2017), YouTube. https://youtu.be/JbU0b Nzqi-4.
- 17. The ideas presented in the bulleted list were gleaned from these articles, which present a good overview of how educational institutions can protect teachers' and students' privacy: Matthew J. Bietz et al., "Privacy Perceptions and Norms in Youth and Adults," Clinical Practice in Pediatric Psychology 7:1 (2019): 9; Dennen, "Technology Transience and Learner Data," 56; Megan Mann, "Coronavirus (COVID-19) Guidance for Schools," National Association of Independent Schools (May 1, 2020): https://www.nais.org/articles/pages/additional-covid-19-guid ance-for-schools/#remote; Schifferle, "COPPA Guidance for ED Tech Companies and Schools"; Rachel L. Finn, David Wright, and Michael Friedewald, "Seven Types of Privacy," in European Data Protection: Coming of Age, Serge Gutwirth, Ronald Leenes, Paul de Hert, and Yves Poullet, eds. (Netherlands: Springer, 2013), 3-32.
- 18. The ideas presented in the bulleted list were gleaned from these articles, which together contain a number of helpful tips on how teachers and professors can protect their own and students' privacy: Patrick L. Austin, "'We Learned a Lesson.' Zoom's CEO Wants You to Trust the Company Again," Time (April 8, 2020): https://time.com/5816075/zoomprivacy; Dennen, "Technology Transience and Learner Data," 52-55; Mann, "Coronavirus (COVID-19) Guidance;" Ruf, "'Spirit-murdering' Comes to Zoom."
- 19. Together, these three studies present a cohesive view of student attitudes toward online privacy. They also provide insights into how teachers might engage them in discussions about privacy: Bietz et al., "Privacy Perceptions and Norms in Youth and Adults," 93, 99, 100: doi.org/10.1037/cpp0000 270; Margaret S. Crocco, et al., "'It's Not Like They're Selling Your Data to Dangerous People': Internet Privacy, Teens, and (Non-) Controversial Public Issues," The Journal of Social Studies Research 44 (2020): 25, 26: https://www.sciencedirect.com/science/ar ticle/pii/S0885985X1930172X; Dennen, "Technology Transience and Learner Data," 46, 54-56.
 - 20. Ibid.

Cost-Effective Collection Development in the Digital Age:

010111010100100

Considerations for Academic Libraries

re print or electronic books the most economical option for academic libraries? A major challenge for academic libraries in the digital age is how to conduct cost-effective collection development when the prices of information resources are high and rising, and the size of library budgets are flat and shrinking. Merriam-Webster Dictionary defines cost-effective as "producing good results without costing a lot of money."1 The college or university librarian frequently encounters the question of cost-effectiveness when attempting to identify and purchase as many high-quality books as possible to adequately support the academic programs at his or her institution. Inevitably, the question dis-

solves into the practical dilemma of whether the library should acquire the print or electronic version of a certain book to satisfy the needs of students and faculty.

On one hand, a print book provides the reader with visual and tactile engagement with its content and often can be purchased at a discounted price through online retailers like Amazon. Nevertheless, the same print book must be physically ordered, prepared, and stored on a library bookshelf before a reader can use it. On the other hand, an electronic book provides the reader with visual and audible engagement with its content, and it can be remotely accessed by one or more readers simultaneously through online databases

such as ProQuest. Moreover, the same electronic book can be digitally ordered and stored online and consequently made available to a reader in a relatively short time.²

Given the different qualities associated with print and electronic books and the varied processes involved in making them available to readers, it would appear that electronic books have an advantage over print books, and academic librarians would favor them in acquiring high-quality books to support academic programs at their institutions. However, as this article will demonstrate, there are two significant issues in collection development-price and availability-that continue to make print books the most cost-effective option for many academic libraries in the digital age.

BY DON ESSEX

Defining Collection Development

Collection development is the process used by academic libraries to identify, select, and acquire information resources to support their institutions. These resources include books, journals, videos, music, and other content that are purchased, licensed, or otherwise obtained to support their academic programs.3 The process involves reviewing and evaluating various information resources to consider whether they meet the teaching and research needs of the fields, degrees, majors, faculty, and students of a particular institution. In this sense, collection development is concerned with what subjects (e.g., art, sociology, biology) should be acquired by the library.4

However, collection development is also concerned with what formats (e.g., books, DVDs, databases) a library acquires. This process often involves considering several content mediums and determining which enable the library to best support the curriculum and ensure that information is readily accessible to students and faculty.⁵ Typically, this requires the library to weigh many factors, including the following: 6

Audience - Who at the educational institution are expected to use and be supported by the information resources? Are they students, teachers, administrators, others? For example, it would not be particularly helpful to subscribe to print nursing journals to support an exclusively online nursing program.

Preference - What kind of format is preferred by the audience? For instance, English majors may prefer to borrow and read print literature books and selections rather than accessing them online or reading them on their computers.

Features – Are special features available with one format that are not included with a companion or different format? For example, many online encyclopedias have citation tools that are not available with their printed

Affordability - Which type of format will be most affordable for the library? For instance, it might be cheaper to purchase a print copy of a nonfiction book that is a New York *Times* bestseller than to purchase an electronic copy.

Availability - Are the information resources available in the preferred format? For example, some educational films may not be available for purchase through a library's streaming video service, but only as DVDs.

As suggested by the factors above, academic libraries in the digital age are frequently confronted with the critical and unavoidable question of

> With the advent of the Internet and the development of online shopping within the past 25 years, libraries in the United States increasingly began to purchase p-books online.

whether they should acquire physical or digital information resources to effectively support their institution. For many, nowhere is this question more apparently and commonly manifested than in their dilemma about whether to acquire print books or electronic books.

Acquiring Print Books

Libraries in the United States have been buying and otherwise acquiring print books (hereafter called "pbooks") for their patrons for nearly 200 years. During this time, the quality and availability of p-books has improved substantially along with the development of modern printing and retail methods. However, the manner of acquisition has remained essentially the same. In most cases, the pbooks were donated to or purchased by the libraries.7 When p-books were purchased, libraries usually acquired them directly from book publishers, book retailers, or book jobbers wholesalers who purchased p-books on behalf of many libraries for a fee while offering the libraries discounts and other incentives.

With the advent of the Internet and the development of online shopping within the past 25 years, libraries in the United States increasingly began to purchase p-books online. What incentivized them to do so besides the efficiency of e-commerce were the prices and availability offered by giant online bookstores such as Amazon. Budget-conscious libraries received competitive discounts on p-books, free shipping on minimal orders, and faster and more reliable order fulfillment, compared with traditional sources.8 During this period, libraries continued to purchase p-books from publishers and jobbers, but a transformation occurred in the nature of these transactions. Due to the pervasive force of ecommerce, the publishers and jobbers were also compelled to sell their products and services online. And because of the market dominance and discounted pricing of Amazon, they were often required to reduce their pbook prices to satisfy the giant or compete and retain customers.9 The result of these developments—"the Amazon effect"10—is that many academic libraries are acquiring p-books at significantly lower costs than in the past.

Acquiring Electronic Books

In contrast to p-books, libraries in the United States have been buying and otherwise acquiring electronic books (hereafter called "e-books") for only about 20 years. Although the concept of an e-book had been in exisAlthough the concept of an e-book had been in existence since the early 20th century and the first e-book was created by Project Gutenberg in 1971, libraries did not begin to provide access to this format until nearly the close of the century.

tence since the early 20th century and the first e-book was created by Project Gutenberg in 1971, libraries did not begin to provide access to this format until nearly the close of the century.11 A pioneer in this effort was netLibrary, a private company that was eventually acquired by OCLC, the nonprofit library cooperative. netLibrary was an online database of full-text e-books that included works in the public domain and for sale by major publishers. With its content available to libraries by subscription and inclusion of special features like an integrated dictionary, netLibrary had many of the qualities that are now standard with e-book databases.12

Despite such efforts, the use of e-books by libraries, especially academic libraries, remained low or stagnant at the start of the 21st century. A major factor that changed this circumstance was the rapid development of information technology that promoted and popularized e-books.

These included the Sony Reader, Amazon Kindle, and Barnes & Noble Nook, which enabled anyone to easily download e-books for free or for a fee.14 Consequently, the demand for e-books at public, school, and academic libraries grew as these devices permeated society and were adopted for education and entertainment. This encouraged book publishers and retailers large and small to partner with online database vendors like Over-Drive and EBSCO to sell or license their content to libraries and enable e-book lending by libraries.15 In recent years, many book publishers have also bypassed online retailers and database vendors and sold their e-books directly to libraries.

E-Book Acquisition Methods

For academic libraries, there are typically three ways to acquire ebooks from vendors and publishers. The first is á la carte. As with p-books, this method simply involves selecting and buying one or more desired titles from the online catalog of e-books offered by the content provider. The ebooks are then activated and made accessible to library patrons through the associated online database. An advantage of this approach is that libraries can purchase only the titles they need. A disadvantage is that often libraries have limited funds and need more than they can afford to support their institutions.16

The second method is bundled collections. With this approach, publishers and vendors package hundreds or thousands of titles into collections by subject, theme, or other categories and then provide libraries access to the e-books by subscription through an online database. The e-books are not actually owned by the libraries, but are essentially leased for a time, usually a year. One advantage of the bundled collection over the á la carte method is that a library can lease a much greater quantity of e-books for a set price than it could otherwise buy. However, a drawback is once the subscription ends, the library loses access to those e-books.17

Finally, the third way is demand or

patron driven. With this approach, the publisher or vendor provides the library with complete access to a large pool of e-books, and the library is obligated to purchase only the titles that are in high demand by its patrons, based on their requests for or usage of the titles. Demand-driven acquisition is the newest of the three methods, and the jury is still out regarding its long-term effectiveness. It has appeal because libraries pay only for what their patrons use. The downside is this approach can transfer a degree of control over collection development decisions from librarians to patrons.18

E-Book Issues and Challenges

While the growth and development of e-book technology and markets has created a wealth of collection development options for libraries, the changes have brought their own unique issues and challenges. Those of particular note are e-book availability, terms, and prices.

Many titles that are available as pbooks are simply not available as ebooks. In some cases, the titles may be produced by small publishers that do not have the capacity to create ebook versions of their p-books. In other cases, the publication of an ebook version of a title might be embargoed or postponed by a publisher to encourage its p-book sales.19 This is a strategy that some major publishers have used because they fear that enabling the public to have access to new releases through e-book databases at local libraries will undermine their p-book sales.20

A related issue is the terms that publishers and vendors often place on the use of e-books by libraries. Usually, an e-book—whether purchased or licensed—has restrictions regarding how many library patrons can simultaneously open and view it. The restrictions typically range from one to three to an unlimited number of users and are technologically enforced. If a library buys an e-book from a vendor, it can expect the price

to be tiered based on the number of concurrent or simultaneous users desired. In a more draconian twist, some major publishers limit the number of e-books a library can own, cap the number of times they can be used, and program them to expire when their usage limits have been reached.21

Price is one of the most significant issues that libraries must consider with regard to purchasing e-books. This is because as a rule they can expect to pay more to acquire titles as e-books than as p-books.²² While there are many and complex factors involved in pricing books, the practice of pricing e-books higher is partly driven by publishers' fears of losing revenue due to cutthroat competition. Thus, they continue to exercise tight controls over what entities can sell their e-books and at what prices to prevent a repetition of the "Amazon

effect" that forced them to lower their p-book prices.²³ This means the prices vendors set for e-books are often dictated by publishers.

Cost-Effective Collection Development

For an academic library in the digital age, decisions about whether to purchase p-books or e-books must consider the processes and concerns of collection development and the methods and issues associated with acquiring each format. However, for many budget-conscious libraries, it is a decision that all too often hinges more on what is practical than on what is preferred. In other words, they of necessity choose the format that is most cost-effective as defined above: "producing good results without costing a lot of money."24 In terms of their goal of supporting the academic programs at their institutions, cost-effectiveness can mean

purchasing as many high-quality books on a subject as possible while remaining within budget. In fact, this article will demonstrate that because of the price and availability issues associated with e-books, p-books continue to be the most cost-effective collection development option for many academic libraries.

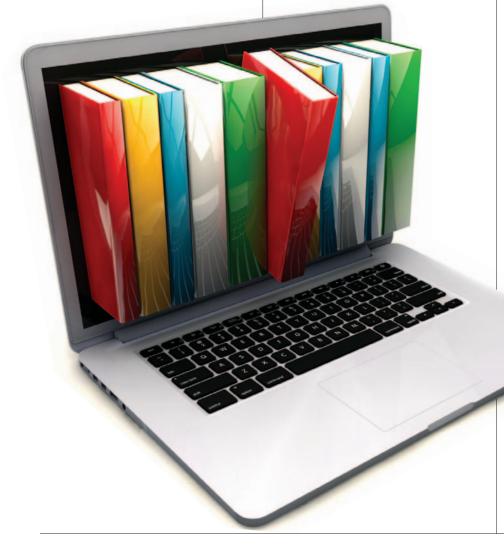
Research Method and Findings

To illustrate this point, I compared the prices of the print and electronic versions of more than 300 Englishlanguage titles that were purchased as p-books for the Weis Library on the campus of Washington Adventist University (WAU) in Takoma Park, Maryland, U.S.A., from Fiscal Year 2018 to Fiscal Year 2020. Specifically, I selected 321 titles that were published between 2016 and 2018 and were actually purchased by the library—either as hardcover or paperback books. For each title, I recorded the price the library paid for the pbook version and the price the library would have paid had it purchased the e-book version. The p-book prices were obtained from Amazon, an online retailer, and Pacific Press, a publisher owned and operated by the Seventh-day Adventist Church. The ebook prices were obtained from EB-SCOHost Collection Manager, the online store for the EBSCO e-book databases held by the library. For each e-book, the price recorded was for access by one user at a time.

The price comparisons revealed three important findings about costeffectively acquiring books: First,

there is a great disparity between the prices academic libraries can expect to pay for

p-books and ebooks. Second, a notable number of titles that are available as p-books are simply not available as e-books. And third, a library that purchases e-books exclusively can expect to pay substantially more money for significantly fewer titles than if it purchases p-books ex-



clusively.

Book Prices and Availability

As Table 1 shows, the total amount the Weis Library administration paid for the 321 p-books was US\$10,254.-32. Of the 321 titles purchased as pbooks, 205 titles were also available as e-books. In other words, 116 titles were not available as e-books. Nevertheless, the total amount needed to purchase the 205 e-books was US\$17,138.80—which is US\$6,884.48 or 67 percent more than the cost of the 321 p-books. Thus, the library

would have paid 67 percent more money for 36 percent fewer titles had it exclusively acquired e-books rather p-books.

Moreover, of the 205 titles available in both formats, the e-book was more expensive than the p-book 193 times. The p-book was more expensive than the e-book only five times. And the price for both formats was identical only seven times. On average, the price of the e-book was US\$54.01 more expensive than the

price of the p-book for the 193 titles. Meanwhile, the price of the p-book was US\$11.40 more expensive than the price of the e-book on average for the seven titles.

The above findings apply not merely to the total quantity of titles analyzed by the author. They also apply to subsets of the 321 titles that were classified and analyzed by academic discipline. As also shown in Table 1, these include English, healthcare administration, history, nursing,

Book and E-Book Prices and	TOTAL	ENGL	HCAD	HIST	NURS	PSYC	RELG	SDAV
Availability	TOTAL	LNGL	IIGAD	11131	Nons	7310	need	SUA
Number of titles that were available as p-books	321	65	17	75	30	45	55	34
Number of titles that were available as e-books	205	45	13	52	16	35	43	
Number of titles that were not available as e-books	116	20	4	23	14	10	12	33
Total cost of titles that were available as p-books	\$10,254.32	\$1,446.09	\$896.37	\$1,808.39	\$2,191.86	\$1,909.33	\$1,307.84	\$694.44
Total cost of titles that were available as e-books	\$17,138.80	\$3,301.40	\$1,425.79	\$3,796.22	\$2,194.56	\$3,751.82	\$2,584.01	\$85.00
Difference in total cost of e- book and p-book titles	\$6,884.48	\$1,855.31	\$529.42	\$1,987.83	\$2.70	\$1,842.49	\$1,276.17	-\$609.44
Greater cost incurred when ourchasing only e-books	67%	128%	59%	101%	0%	96%	98%	0%
Fewer titles available when ourchasing only e-books	36%	31%	23%	31%	47%	22%	22%	97%
Number of e-books more ex- pensive than p-books	193	43	11	50	16	29	43	
Number of p-books more ex- pensive than e-books	5	1	1	2	0	1	0	(
Number of p-books and e- books with identical prices	7	1	1	0	0	5	0	(
Average higher cost of e-book titles over p-book titles	\$54.01	\$52.98	\$58.07	\$51.21	\$66.22	\$77.83	\$36.45	\$63.03
Average higher cost of p-book titles over e-book titles	\$11.40	\$1.00	\$5.00	\$20.49	\$0.00	\$10.01	\$0.00	\$0.00

English (ENGL), Healthcare Administration (HCAD), History (HIST), Nursing (NURS), Psychology (PSYC), Religion (RELG), Adventist (SDAV)

psychology, religion, and Adventist books.

Washington Adventist University library administration purchased 65 p-books to support the English department between FY2018 and FY2020, including both fiction and nonfiction titles. Those p-books cost the library US\$1,446.09. Of the 65 English titles purchased, 45 were available as e-books, while 20 were not available as e-books. However, the total amount that was needed to purchase the 45 e-books was US\$3,301.40—which is US\$1,855.31 or 128 percent more than was needed to purchase the 65 p-books. In other words, had the library chose to exclusively acquire e-books, it would have paid 128 percent more money for 31 percent fewer titles.

Further, of the 45 English titles available in both formats, the e-book was more expensive than the p-book 43 times. The p-book was more expensive than the e-book only once. Likewise, the price of both formats was identical only once. On average, the price of the e-book was US\$52.98 more expensive than the p-book for the 43 titles. By contrast, the average price of the print book was US\$1.00 more than its e-book counterpart. The single more expensive print book cost US\$1.00 more than its e-book version.

Adventist Books and Availability

While Weis Library's administration could choose between acquiring the p-book or e-book version of nearly two-thirds of the 321 titles that were eventually purchased, there was one subset of titles that was overwhelming available only as p-books. That category is Adventist books. Adventist books are publications by and about Seventh-day Adventists and include works published by entities of the church itself as well as other religious and secular publishers.

Of the 321 titles acquired by the library between FY2018 and FY2020, 34 were Adventist books. However, 33 of these titles were available exclusively as p-books, and only one of the Adventist titles was available in both

COVID-19 and Collection Development

The COVID-19 pandemic has compelled educational institutions to prioritize the well-being of their students and employees by adhering to official guidance and orders that require social distancing, closing businesses, and staying home. Therefore, most academic libraries have completely closed or drastically reduced in-person services like loaning books to patrons. In response to these circumstances, they also have had to promote and depend on electronic information resources like e-books rather than p-books to support the academic programs at their institutions. What impact are these developments having on collection development?

First, it is helpful to remember that the pandemic is a transitory phenomenon and that eventually college campuses and their libraries will reopen. Thus, it would not be advisable for a library to totally jettison its long-term collection development strategy in response to a short-term crisis by, for example, purchasing exclusively e-books. While some short-term adjustment to the strategy may be warranted, it is important to weigh the educational and financial impacts of any sudden change of course before acting.

Second, the decision whether to acquire a p-book, e-book, or any other information resource should be guided ultimately by the factors (i.e. audience, preference, affordability, availability) and values (i.e. quality, quantity, accessibility) described in this article rather than dogmatic adherence to an aspiration such as purchasing the cheapest format or going completely electronic.

Third, some factors in collection development are simply beyond the control of the library. No matter how advantageous it might be for students or faculty to have remote access to certain works of literature or scholarship during the pandemic, a library cannot provide access to those works if their publishers have not made them available as e-books.

formats. Interestingly, the 33 titles that were available exclusively as pbooks were published by entities of the Seventh-day Adventist Church. The one title that was available in both formats was published by Pantheon Books, an imprint of Knopf Doubleday. For this title, the p-book price was US\$21.97 and the e-book price was US\$85.00.

Discussion and Conclusion

The data presented in the foregoing section demonstrates that exclusively purchasing e-books is not a cost-effective collection development option for many academic libraries. As defined by this article, cost-effective means "producing good results without costing a lot of money."25 But an analysis of the comparative price

and availability data for p-books and e-books reveals that any academic library that exclusively purchases the electronic versions of book titles to support its institution will pay "a lot of money." Further, it will acquire far less content for much greater cost by exclusively purchasing e-books.

However, as important as they are, price and availability are not the only factors that academic librarians must consider when deciding whether to acquire p-books or e-books. They must also consider factors such as quantity, quality, accessibility, and usage, and in practice any of these alone or combined with the others could constitute a rationale for purchasing either format. For an academic institution that places value on the quantity of books its students and faculty can access, the library might

naturally prefer to license e-books through subscription packages and not purchase either p-books or e-books individually. This choice would represent a trade-off of *quality* for *quantity* since e-book packages usually do not include newly released, best-selling, or award-winning titles. Whereas at an institution that values *quality* and *affordability*, the library might prefer to purchase p-books because it can thus obtain high-quality content at a discount.

Weis Library has adopted a collection-development strategy that balances quantity, quality, and affordability. On the one hand, the library licenses several e-book packages that contain thousands of multidisciplinary titles to adequately support the broad array of academic disciplines and research characteristic of highereducation institutions. On the other hand, the library purchases select pbooks that are both highly recommended and support the specific academic programs of the university but are not available in its e-book databases. Regardless of what strategy an academic library ultimately decides to use, the author of this article has concluded that the issues of price and availability continue to make p-books the most cost-effective collection development option for many academic libraries in the digital age.

This article has been peer reviewed.



Don Essex, MLS, is Director of the Library at Washington Adventist University in Takoma Park, Maryland, U.S.A. Before joining the

faculty of WAU, he served as Legislative Information Specialist for the Washington Office of the American Library Association in the District of Columbia. Mr. Essex also formerly held the position of Circulation Librarian for Columbia Union College, and has more than 20 years of experience working in academic and special libraries in the metropolitan area. Mr. Essex's job responsibilities include reference services, library instruction, and collection development. His research interests include legislative affairs and public policy affecting American libraries. Mr. Essex received a BA in Liberal Studies from Pacific Union College in Angwin, California and an MLS from the University of Maryland at College Park.

Recommended citation:

Don Essex, "Cost-Effective Collection Development in the Digital Age: Considerations for Academic Libraries," *The Journal of Adventist Education* 82:2 (April-June 2020): 10-22.

NOTES AND REFERENCES

- 1. "Cost-Effective," *Merriam-Webster Dictionary*: https://www.merriam-webster.com/dictionary/cost-effective.
- 2. For additional differences between print and electronic books, see Stanley M. Besen and Sheila Nataraj Kirby, "Library Demand for E-Books and E-Book Pricing: An Economic Analysis," *Journal of Scholarly Publishing* 45:2 (January 2014): 129. doi:10. 3138/jsp.45.2.002.
- 3. Peggy Johnson, Fundamentals of Collection Development and Management, 4th ed. (Chicago: ALA Editions, 2018), 1.
 - 4. Ibid., 120.
 - 5. Ibid.
- 6. Ibid., pages 126 to 138 provides an exhaustive discussion of factors libraries consider when "evaluating and assessing potential selections."
- 7. Patrick M. Valentine, "American Libraries" in *A Social History of Books and Libraries from Cuneiform to Bytes* (Lanham, Md.: Scarecrow Press, 2012), 142-148.
- 8. Paul Orkiszewski, "A Comparative Study of Amazon.com as a Library Book and Media Vendor," *Library Resources & Technical Services* 49:3 (July 2005): 204–209: http://www.ala.org/alcts/sites/ala.org.alcts/ files/content/resources/lrts/archive/49n3.pdf.
- 9. Colin Robinson, "The Trouble With Amazon," *The Nation* (August 2, 2010): 29-32.

- 10. Barbara Hoffert, "Book Report 2002: The Amazon Effect," *Library Journal* 127:3 (February 15, 2002): 38, 39: https://www.libraryjournal.com/?detailStory = book-re port-2002-the-amazon-effect.
- 11. Stephanie Ardito, "Electronic Books: To 'E' or Not to 'E'; That Is the Question," Searcher 8:4 (April 2000), http://www.infotoday.com/searcher/apr00/ardito.htm.
- 12. Vincent Kiernan, "An Ambitious Plan to Sell Electronic Books," *The Chronicle of Higher Education* 45:32 (April 16, 1999): https://www.chronicle.com/article/An-Ambitious-Plan-to-Sell/23897.
- 13. Robert Slater, "Why Aren't E-Books Gaining More Ground in Academic Libraries? E-Book Use and Perceptions: A Review of Published Literature and Research," *Journal of Web Librarianship* 4:4 (October 2010): 305-331): doi:1080/19322909. 2010.525419.
- 14. Jason Griffey, "Electronic Book Readers" in *Library Technology Reports* 46:3 (April 2010): 7-19): https://journals.ala.org/index.php/ltr/article/view/4769/5698.
- 15. Julie Bosman, "Kindle Users to Be Able to Borrow Library E-Books," *New York Times* (April 21, 2011): B4: https://www.nytimes.com/2011/04/21/technology/21amazon.html.
- 16. Sue Polanka, "Purchasing E-Books in Libraries: A Maze of Opportunities and Challenges" in *Library Technology Reports* 47:8 (November/December 2011): 4-6: https://journals.ala.org/index.php/ltr/article/view/4 425/5140.
 - 17. Ibid.
- 18. Johnson, Fundamentals of Collection Development and Management, 133-136.
- 19. Polanka, "Purchasing E-Books in Libraries," 5, 6.
- 20. Besen and Kirby, "Library Demand for E-Books and E-Book Pricing: An Economic Analysis," 134-136.
 - 21. Ibid., 131-134.
- 22. Polanka, "Purchasing E-Books in Libraries," 4.
- 23. Robinson, "The Trouble With Amazon," 30.
- 24. "Cost-Effective," *Merriam-Webster Dictionary*.
 - 25. Ibid.

Supporting the Learning, Growth, and Success of Our Students in the Face of

ost researchers describe trauma as "the response to a deeply distressing or disturbing event that overwhelms an individual's ability to cope."1 The inability to cope can cause the individual to feel helpless, lose his or her sense of self, and be unable to experience a full range of emotional states.2 The word trauma, when applied to children, is defined by Levine and Kline³ as an intense experience that suddenly shocks and overwhelms a child, taking away his or her sense of security and control. It is also characterized as an invisible factor affecting a child's ability to learn.4 Trauma is further defined as an acute form of suffering—and, indeed, the issue of suffering is at the very heart of Christianity.⁵

Educators are adept at meeting the academic, socialemotional, and spiritual needs of the students they serve. However, teachers and administrators need to also be concerned about the impact of trauma on children and their ability to perform and thrive in the educational setting. In the United States alone, more than 46 million children are impacted by trauma each year, with one in 10 facing five or more violent incidents, according to the U.S. Department of Justice's Defending Childhood Initiative. 6 Children exposed to repetitive trauma are at risk for a variety of physical and mental-health issues—anxiety, depression, high blood pressure, substance abuse—that also affect their ability to learn.⁷

Understanding the importance of trauma-informed education is imperative because a stressed brain can't learn. This assertion is backed by compelling brain research, which reveals how sensing danger affects the cognitive functioning of human beings.8 The neuroregulatory systems that help humans to manage stress throughout their lives are extremely impressionable during early childhood. "Toxic levels of stress during this period can affect the development of the neuroregulatory systems in ways that cause those systems to become overly responsive to shut down in response to a wide range of stressors in later life."9 Childhood trauma can affect different parts of the brain as noted below:10

- Reduced activity in Broca's area can make it difficult for people to talk about trauma and describe it with detail.
- The interruption to the growth of the hippocampus can affect attention, learning, and memory.
- When the corpus collosum, which connects the left and right sides of the brain, is reduced due to trauma, the ability of the two sides of the brain to work in a coordinated way is compromised.
- Changes to amygdala function can make people more likely to react to triggers, especially emotional ones, causing them to experience emotional extremes and making it more difficult for them to regulate their emotions.

DAVENIA

- Reduced activity in different parts of the frontal lobes of the cerebral cortex can mean that survival responses are triggered even in the absence of danger.
- Changes in "reward pathways" can mean that survivors anticipate less pleasure from life and may appear less moti-

Understanding the impact that trauma can have on brain development magnifies the importance for educators to examine, understand, and use effective approaches to support children during as well as after experiencing trauma. While there is no simple approach to support children who are experiencing/have experienced trauma, several techniques can create and sustain a learning environment in which educators are more closely in touch with their students' needs and have the attitudes and skills necessary to intervene and support self-regulation and coping skills that support student success.

However, before we examine these strategies and approaches, we must first understand God's thoughts about and approaches to handling trauma. Despite what we think or feel, we must know that God is present during and in control of human suffering. Sometimes it is difficult to recognize the His presence in the midst of suffering. Think about David when he cried out, "Will you forget me forever? How long will you hide your face from me? How long must I wrestle with my thoughts and every day have sorrow in my heart? How long will my enemy triumph over me?" (Psalm 13:1, NIV).11 Or what about Jeremiah, who felt his heartfelt prayers were going unanswered (Lamentations 3:8)? And how could we possibly forget Job, who experienced loss after loss and was sure that God was not listening to his pleas for answers, or his cry for relief (Job 9:16). Even our Savior, the one who can empathize with our pain, at the height of His pain cried out, "'My God, my God, why have you forsaken me?" (Matthew 27:46).

Yet God tells us over and over that He is there for us (Isaiah 41:10). He is in the midst of our suffering (Isaiah 43:2), and He will never leave us nor forsake us (Deuteronomy 31:6). The lyrics to When I Cry by Marshall Hall and Benjamin Gaither sum it up for me perfectly:

> When I cry, You cry When I hurt. You hurt When I've lost someone It takes a piece of You, too And when I fall on my face You fill me with grace 'Cause nothin' breaks Your heart Or tears You apart Like when I cry¹²

God cares for us. He is there for us in the midst of our suffering, even in the midst of the COVID-19 pandemic.

Buoying students who have experienced trauma, developing their resiliency, and helping parents to become agents of change are some of the approaches we as educators can take¹³ to champion our students through challenging times. According to Withers, trauma-informed care means treating the whole person and taking into account past or current trauma as well as the resulting coping mechanisms when attempting to meet the needs of students.

We may never know the full extent of what our students have experienced or are experiencing, as their scars may not be visible. Caring educators know that understanding and responding to what's causing stress in our students is part of keeping them healthy, safe, engaged, and challenged.¹⁴ Here are areas of the trauma-informed care movement that can shape and guide educational practices that support students experiencing trauma.

Take care of yourself first.

"But those who hope in the Lord will renew their strength; they will soar on wings like eagles; they will run and not grow weary; they will walk and not be faint" (Isaiah 40:31).

Starting with my very first teaching assignment, I bought into the myth, the legend, that teaching was my superpower; that real heroes weren't those who wore capes but were those who taught. I believed that, for the sake of my children and their families, I must do more, sacrifice more, give more, achieve more—all without complaint—because I was making a difference. I was saving the world. I had limitless energy, immense compassion, and a hug and a bandage that could heal all wounds. My motto was "Don't give up or in. Just do and be more."15

But there comes a time when the energy runs dry, the answers don't come as easily—or at all—and you can't figure out how to help students grasp the concept of decomposing numbers, let alone how to help them become resilient in the face of tragedy.

Because I've heard it so often, I can rattle off commercial flight attendants' pre-takeoff spiel like a pro: "In the event of a decrease in cabin pressure, oxygen masks will drop down. Please secure your own mask first, and then aid those in need of assistance." The U.S. Federal Aviation Administration (FAA) knows if you can't breathe, you'll be useless to others. If you're fighting for oxygen, you'll jeopardize your own safety as well as the safety of those depending on you. How useful will you be to your students and colleagues if you're worn down and in a constant state of stress? Find ways to connect with Christ each day, to get enough rest and exercise, to eat well, to enjoy hobbies, and to take moments each day to simply exhale.

Create a safe environment.

As educators and educational leaders, it is our responsibility to create an atmosphere that communicates that our schools are safe places, that they are welcoming, accepting, secure, 16 and filled with the love of Christ. Teachers can help

Types of Trauma Exposure

Trauma exposure can come in many forms:*

- · Severe physical or emotional abuse;
- · Sexual abuse:
- Severe emotional or physical neglect;
- Living in a household impacted by the incarceration of a parent or family member, or with a household member who is mentally ill or a substance abuser;
- Living in a home impacted by domestic violence;
- · Parental separation/divorce;
- · Bullying;
- Witnessing violence;
- · Being threatened with violence;
- · Loss of a loved one;
- Living through a natural disaster, pandemic, or national/ worldwide traumatic event.

*Centers for Disease Control and Prevention (2019): https://www.cdc.gov/injury/features/prevent-child-abuse/index.html.

students feel safe by creating consistent schedules and routines, minimizing the number of transitions throughout the day and, whenever possible, telling students in advance about any upcoming changes in their schedule. To Routine is an important source of comfort for children in riding out the emotional turmoil connected with the aftermath of trauma. Educators should also consistently communicate to students that it is their job as teachers and educational administrators to plan and implement procedures that will keep them safe throughout the day, and that they can be counted on as a consistent source of comfort and safety.

Foster communication and dialogue.

Just because children are not talking about a tragic event does not mean they are not thinking about it. Without factual information, children may speculate to try to explain or make sense of the trauma. Unfortunately, in many cases, the conjectured fears and fantasies are much more frightening than the truth itself.²⁰

Never underestimate the difference you can make by genuinely inquiring about children's wellbeing by asking questions such as these: "How do you feel about what's going on?" or "What do your friends think about what is happening?" Asking questions will help you understand the child's perception about the trauma and can provide you an opportunity to correct misconceptions and provide reassurance. Be sure to share facts in age-appropriate ways using simple, clear, and direct words in a caring way. For example, you can reassure your students about the safety precautions that you are putting into place.²¹ Also, listen intently without

judging or minimizing what the child is saying. By listening calmly, even to concerns which might seem unrealistic, you communicate that their fears are not too frightening to handle.²² When appropriate, help children put their emotions into words. Also facilitate peer-to-peer communication through group discussions focused on a given topic or a book.

Identify what the behavior may be telling you.

It will be important to separate the behavior from the child and to intentionally observe and analyze what specific behaviors mean. Teachers should stay alert for the fight, flight, or freeze behaviors that children display when they are impacted by trauma, and work to reduce any triggering experiences in the classroom. Young children may find it particularly hard to adjust to change and loss. They have incompletely developed coping skills, so they must depend on the caregivers in their lives to help them through difficult times. They may regress to an earlier behavioral stage after a traumatic event such as thumb-sucking or bedwetting, or become afraid of strangers, animals, darkness, or "monsters." They may cling to a parent or teacher or become very attached to a place where they feel safe.

Changes in eating and sleeping habits are common, as are unexplainable aches and pains. Other symptoms to watch for are disobedience, hyperactivity, speech difficulties, and aggressive or withdrawn behavior. Children suffering from trauma may also withdraw from playgroups and friends, compete more for the attention of parents, fear going to school, feel unable to function academically, become aggressive, or find it hard to concentrate.²³

As soon as educators consider behavior as a form of communication, a new reality emerges. Students who refuse to do schoolwork are often classified as "disrespectful" or "disobedient," but this may be a hint that they feel unable to communicate their inability to cope with the trauma. This inability may be expressed by feelings of inadequacy, fear of failure, an overwhelming sense of overload, or demonstrated by struggles with negative thoughts and internal voices, or the need to take frequent breaks.²⁴

Empower your students through voice and choice.

Recognizing your students' areas of strength is a powerful way to combat the negative thinking that may often be associated with trauma.²⁵ When a student thinks negatively, the negative moments tend to outweigh the positive moments. Educators need to counter this effect with positive experiences by asking daily, "Did the student have the opportunity to feel competent today?"²⁶ Ways to help students feel empowered include providing many opportunities for them to make choices, as children who have experienced a traumatic event often feel as if they lack control over their lives. Provide safe ways for students to exercise choice and control within various activities and within their environment (i.e., choice of seats, choice of a book to read, etc.).²⁷ Additionally, providing students an opportunity to take action and to be a part of the solution may prove help-

ful. For example, students could be provided the opportunity to work at a food distribution center or make care packages.28

We may never fully understand what our students are experiencing or how they are processing the events around them. However, if we continue to respond with love and compassion, we will be better positioned to partner with families to ensure that every child knows, believes, and experiences God's care and protection. As we grasp God's hand and the hands of our students, we can face whatever tragedy may come, united together for our common good.

This article has been peer reviewed.



Davenia J. Lea, PhD, is the Elementary Education Program Coordinator at Bowie State University, Bowie, Maryland, U.S.A. A graduate of the University of Maryland who earned her doctorate in early childhood and special education, Dr. Lea served as an early interventionist for 10 years in a public school system.

Thereafter, she served as Chair of the Education Department at Towson University in Towson, Maryland, Dean of the School of Graduate and Professional Studies at Washington Adventist University in Takoma Park, Maryland, and Director of Early Childhood Education for the North American Division of the Seventh-day Adventist Church in Columbia, Maryland.

Recommended citation:

Davenia J. Lea, "Supporting the Learning, Growth, and Success of Our Students in the Face of Trauma," The Journal of Adventist Education 82:2 (April-June 2020): 23-26.

NOTES AND REFERENCES

- 1. Megan R. Gerber, ed., Trauma-informed Healthcare Approaches: A Guide for Primary Care (New York: Springer International Publishing, 2019); Karen Onderko, "What is Trauma?: Trauma Defined" (2020): https://integratedlistening.com/what-is-trauma/.
 - 2. Ibid.
- 3. Peter A. Levine and Maggie Kline, Trauma Through a Child's Eyes: Awakening the Ordinary Miracle of Healing (Berkeley, Calif.: North Atlantic Books, 2018).
- 4. Jason A. Haap, "The Private Logic Behind a Trauma-informed Mindset," Trauma-Informed Teaching and Leading in Action 15:15 (April 9, 2020): para. 11.
- 5. Larry Shallenberger, "Four Focus Areas for Creating a Trauma-informed Ministry" (2019): https://childrensministry.com/trauma-in formed-ministry/.
- 6. U.S. Department of Justice, "Defending Childhood Initiative" (2010): https://www.justice.gov/archives/defendingchildhood.
- 7. Michael Dubois and Catherine Guaspare, "From Cellular Memory to the Memory of Trauma: Social Epigenetics and Its Public Circulation," Social Science Information 59:1 (January 2020): 144-183.
 - 8. Nadine Burke Harris, How Childhood Trauma Affects Health

- Across a Lifetime (September 15, 2014): Video: https://www.ted.com/ talks/nadine_burke_harris_how_childhood_trauma_affects_health_acro ss_a_lifetime?language = en.
- 9. Stephen Grcevich, "Effective Treatment of PTSD in Children" (2015): https://church4everychild.org/2015/10/29/effective-treatmentof-ptsd-in-children/.
- 10. Child Welfare Information Gateway, Understanding the Effects of Maltreatment on Brain Development (Washington, D.C.: U.S. Department of Health and Human Services, Children's Bureau, 2015).
- 11. Unless otherwise specified, all Scripture quotations in this article are taken from the New International Version Holy Bible, New International Version®, NIV® Copyright © 1973, 1978, 1984, 2011 by Biblica, Inc.® Used by permission. All rights reserved worldwide.
- 12. Marshall Hall and Benjamin Gaither, "When I Cry" (CMG Song# 100878) Copyright © 2000 Hook Line and Music Publishing (ASCAP) (adm. at CapitolCMGPublishing.com) All rights reserved. Used by permission.
 - 13. Greevich, Effective Treatment of PTSD in Children.
- 14. Kristin Souers, "Responding With Care to Students Facing Trauma," Educational Leadership 75:4 (December 2017/January 2018): 32-36.
- 15. Lory Walker Peroff, "Teachers, If You're Not OK Right Now, You're Not Alone," Education Week (April 14, 2020): https://www.ed week.org/tm/articles/2020/04/14/teachers-if-youre-not-ok-right-now. html?cmp = eml-enl-tu-news1&M = 59441258&U = &UUID = 064c009c38ba7bb2eeb6be8163b58b16.
- 16. Mellissa Withers, "Trauma-Informed Care and Why It Matters," Psychology Today (July 6, 2017): https://www.psychologytoday.com/ us/blog/modern-day-slavery/201707/trauma-informed-care-and-whyit-matters.
- 17. Vanessa Sacks, David Murphey, and Kristin Moore, Adverse Childhood Experiences: National and State-level Prevalence (Research Brief) (Bethesda, Md.: Child Trends, July 2014): https://www.childtrends.org/ wp-content/uploads/2014/07/Brief-adverse-childhood-experiences_FINAL.
- 18. Arianna Prothero, "Helping Students Grieve From a Distance," Education Week (May 19, 2020): https://www.edweek.org/ew/articles/ 2020/05/19/helping-students-grieve-from-a-distance.html?cmp = emlenl eu-news1&M = 59578737&U = &UUID = 064c009c38ba7bb2eeb6be8163
- 19. Jack P. Shonkoff and Andrew S. Garner, "The Lifelong Effects of Early Childhood Adversity and Toxic Stress," Pediatrics 129:1 (January 2012): 232-246.
- 20. Kira Newman, "Nine Tips for Talking to Kids About Trauma," Parenting and Family (November 30, 2015): https://greatergood.berke $ley.edu/article/item/nine_tips_for_talking_to_kids_about_trauma.$
 - 21. Haap, "The Private Logic Behind a Trauma-informed Mindset."
 - 22. Newman, "Nine Tips for Talking to Kids About Trauma."
- 23. The National Child Traumatic Stress Network: https://www. nctsn.org/what-is-child-trauma/trauma-types/early-childhood-trauma.
 - 24. Haap, "The Private Logic Behind a Trauma-informed Mindset."
- 25. Patricia A. Jennings, The Trauma-sensitive Classroom: Building Resilience With Compassionate Teaching (New York: W. W. Norton & Company, 2018).
- 26. Robert Brooks, Self-worth, Resilience, and Hope: The Search for Islands of Competence (Metairie, La.: The Center for Development and Learning, 2003).
- 27. Margaret Blaustein and Kristine Kinniburgh, Treating Traumatic Stress in Children and Adolescents, Second Edition: How to Foster Resilience Through Attachment, Self-Regulation, and Competency (New York: Guilford Publications, 2018).
- 28. Miranda Field, "Empowering Students in the Trauma-informed Classroom Through Expressive Arts Therapy," IN Education 22:2 (Autumn 2016): 55-71.



hat was Ellen G. White's view of research? This is a relevant question for Adventist education as a whole, and for Adventist students and teachers engaged in research in all areas of study. In nearly every discipline, research extends the frontiers of knowledge. Teachers are expected to be familiar with research methods and approaches, while students are to conduct research, often as an academic requirement. Accordingly, Seventh-day Adventist schools at various levels have incorporated research competencies as integral components of instructional programs and as requirements for continuous appointment or advancement in rank for tertiary professors.

At the same time, the Adventist

educational system operates within a distinctive framework, one that maintains that biblical truth is central to the pursuit of knowledge and that espouses a special relationship to the writings of Ellen G. White. These writing delineate a paradigm for Adventist education, described in such works as Education and Fundamentals of Christian Education, among others.

In Ellen White's writings, we encounter repeated references to research—in all, 319 instances of the word research or its derivatives.1 Of these, 123 are textually distinct statements, of which 92 are conceptually unique.2 As one examines these references, certain statements by Ellen White may appear to be contradictory, at least at first glance. To illustrate, the following statements seem to place research in a negative light:

- "To many, scientific research has become a curse."3
- "Scientific research in which God is not acknowledged [is] making skeptics of thousands."4
- "Very little of the study and research which is so wearying to the mind furnishes anything that will make one a successful laborer for souls."5

On the other hand, there are also statements that clearly favor research, such as these:

- "In order to understand the truth of God, there is need of deep research."6
- "The word of God must be studied, and this requires thought and prayerful research."7
- "Scientific research opens to the mind vast fields of thought and infor-

JOHN WESLEY TAYLOR

mation, enabling us to see God in His created works."8

Such statements create a dilemma. While one could simply reject one view and embrace the other, a better approach may be to integrate these statements into a more comprehensive understanding, taking into consideration source and context. It is this approach that we will endeavor to develop, particularly regarding the role of research in the purpose and practice of Adventist education.

Use of the Term Research

Of the 92 conceptually unique statements in the writings of Ellen White that address research, 58 are positive while 21 could be categorized as negative references, with the remainder being neutral. Thus, Ellen White referred favorably to research nearly three times as frequently as she warned about it. Many, although not all, of the negative quotations deal with certain approaches in scientific or literary research. On the other hand, many of the positive references focus on biblical research, although favorable statements describe other types of research, as well.

In Ellen White's writings, certain phrases paralleled the term *research*. These included expressions such as: "painstaking effort," "persevering inquiry," "vigorous thought," "earnest study," "fervent prayer," and "patient reflection." The word *research* itself was often accompanied by modifiers such as: *deep, careful, extensive, vigorous*, and *honest*.

Individuals Involved in Research

Ellen White associated biblical persons with research. She noted that Adam was to develop his mental faculties through research of "the mysteries of the visible universe." Solomon also engaged in diligent research, focusing primarily on the natural world. From this study, Solomon's knowledge and love for God increased. Nevertheless, a flaw arose in Solomon's approach as he began to cultivate a sense of superiority and

self-importance.¹¹ When Solomon finally recognized his condition, he assessed the results of this research as "altogether vanity."¹²

In the New Testament, Christ admonished a lawyer to engage in "clearer and more critical research" in order to discover truth.¹³ The disciple Peter was reproved for not researching his own heart and, in consequence, denying his Master.¹⁴ Writing to the Corinthian believers, Paul declared that he had fed them with milk rather than solid spiritual food (1 Corinthians 3:2). Ellen White noted that these

In ... personal letters, Ellen White counseled individuals regarding research. In 1879, she encouraged her son Edson to study the Bible deeply, advising that his ability to understand the Scriptures would be limited by a lack of biblical research.

believers "were living on a low level, dwelling on the surface truth which call for . . . no deep research." ¹⁵

After the Great Disappointment in 1844, Adventist pioneers carefully reviewed the assumptions and conclusions of their prophetic research to uncover any errors of interpretation. ¹⁶ Ellen White stated that through this same careful inquiry, early Adventists derived the doctrines they held as truths, and thus the beliefs of the Seventh-day Adventist Church were established with clarity and harmony. ¹⁷

In two personal letters, Ellen White counseled individuals regarding re-

search. In 1879, she encouraged her son Edson to study the Bible deeply, advising that his ability to understand the Scriptures would be limited by a lack of biblical research.18 In 1904, confronting the heresy of pantheism promoted by Dr. John H. Kellogg, the denomination's leading health reformer, she wrote, "Your putting your mind to research of science is dangerous business, and there is not any warning too strong to be given to withhold you from this field you have entered. I tell you the truth, that if you keep on in the course you have been pursuing for years in research in so-called science, you will lose your soul."19

Overall, in each instance in which Ellen White associated individuals with research, save for two—Solomon and Kellogg, the context is positive. Yet even in the negative cases, Ellen White noted that the result of research could be constructive if properly focused and conducted. Writing to Kellogg regarding his pantheistic views, for example, she stated: "Let your scientific researches be turned into a wholesome channel."²⁰

Biblical Research

Many of Ellen White's most positive statements occur in the context of biblical research.

Importance. The Bible was given, Ellen White asserted, that it might be researched, with deep study of Scripture being required to attain an understanding of God's truth.²¹ Neglecting biblical research would come "at the peril of our souls."²²

Ellen White also warned that it was not enough to rely on the thoughts and discoveries of others, trusting in their interpretation of God's Word. Each must investigate for himself or herself.²³ She described "a most wonderful laziness" wherein some were willing that "others should search the Scriptures for them; and they take the truth from their lips as a positive fact, but they do not know it to be Bible truth through their own individual research."²⁴

Biblical research is also indispen-

sable to educate others.²⁵ Ellen White counseled teachers, "Open the Bible to our youth, draw their attention to its hidden treasures, teach them to search for its jewels of truth, and they will gain from their research such strength of intellect as the study of science and of philosophy could not impart."26 She noted that many students "have been sadly disappointed in our college. They expected to find help in their research of the Scriptures that they have not had."27

Researcher traits. Biblical researchers are to bring various traits to their study. They must be diligent, honest, and humble, recognizing that there is always "an infinity beyond."28 They are to be careful, thoughtful, and patient,29 and to lay aside prejudices and preconceived ideas before commencing their research, proceeding in the spirit of Christ.³⁰

Ellen White mentioned frequently that the researcher should be a person of prayer.31 "By earnest prayer and diligent research," she declared, "God's workers may become giants in an understanding of Bible doctrine, and [gain] an appreciation of the practical lessons of Christ."32 Students were also to obtain a Bible education "through prayer and close, deep research."33

Methods. The methodology to be employed is key. One approach is to read through Scripture to develop an understanding of the whole, particularly in terms of integrating themes.34 Another method is to compare passages relating to a given topic and clarify interrelationships.35

A further approach is to focus on a specific portion of Scripture, digging deeply beneath the surface. While "some portions of the Scriptures are indeed too plain to be misunderstood," Ellen White observed that "there are others whose meaning does not lie on the surface, to be seen at a glance."36 These vital principles can be "obtained only by diligent research."37

Topics. While any portion of the Bible may be profitably studied,38 particularly fertile topics include the origin of the earth, the introduction and consequences of sin, and the origin of the nations.³⁹ Another fruitful topic is the law of God, especially the fourth commandment.40 Indeed, Ellen White highlighted "the great Teacher's wisdom in limiting the measure of our researches in earthly directions," that He might call "the attention of all to His legislation from the very foundation of our world,—to a code of morals, pure, simple, and practical."41

Research of the teachings of Jesus will also yield new insights.42 The researcher is invited to trace "the grand theme of redemption," particularly in relation to the question, "What shall I do to be saved?"43 It is impossible to deplete the topics for biblical research, for "a thousand years of research would not exhaust the hidden treasure it contains."44 Throughout life and eternity, there will always be knowledge as yet undiscovered.45

Results. Biblical research "will be richly repaid."46 The mind of the researcher will be strengthened with a correct knowledge of the truth.⁴⁷ Such deep and earnest biblical research, Ellen White maintained, combined with fervent prayer, will enable persons to become "rooted and grounded in the faith."48

Overall, biblical research has yielded "the science of the theology of truth" that has formed the bedrock of belief.49 This careful, earnest study has enabled researchers to "become lights in the world, shining amid the moral darkness."50 And there is an effect on the researcher. "The better [the Bible] is known by research, the more highly it is prized."51

Negative cases. On a few occasions, Ellen White wrote negatively about biblical research. She observed, for example, that it was "easy to put a false interpretation on Scripture, placing stress on passages and assigning to them a meaning, which, at first investigation, may appear true, but which by further search, will be seen to be false."52

She also expressed concern that some might research the Bible in order to promote themselves, endeavoring "to find a new position and to advance new views in opposition to the established faith of the body."53 In a letter to A. F. Ballenger, for example, she wrote,



"There is with you, my brother, a desire to bring in something new and to take the minds captive, and yourself be supposed to be a deep man in research of the Word, when the facts are that you are not rightly interpreting the Word."54

On the other hand, Ellen White did not advocate avoiding controversial issues. When some maintained that the "controverted question" of the interpretation of the two laws should be avoided, she stated, "If we have held as truth some points in doctrine that will not bear close criticism and investigation, it is our duty . . . [to] patiently to come to the Word of God in an humble, prayerful, inquiring mind."55 She then added, "The truth will lose nothing of its force or beauty or power through research, testing every point which we have considered as truth, if we preserve the meekness of Christ in our research."

Scientific Research

At a cursory glance, it might seem that Ellen White regarded scientific research as misleading and detrimental. That view, however, is far removed from her intent.

Support. We should first note that Ellen White made very positive statements regarding scientific research. She wrote, for example, that "God has permitted a flood of light to be poured upon the world in discoveries in science."56 She affirmed that "God is the author of science" and that vast fields of knowledge are open before the researcher where he or she may behold God in His created works.57 She asserted that through the study of science, a researcher may obtain a knowledge of the Creator and discover facets "of the wise and beneficent laws through which He works."58

Ellen White also recommended that the church's educational programs incorporate research in the sciences. She advocated, for instance, that "instead of confining their study to that which men have said or written," students are to be directed "to the sources of truth, to the vast fields opened for research in nature and revelation."59 To such a student, "scientific research will open vast fields of thought and information. As he contemplates the things of nature, a new perception of truth comes to him."60

Concerns. Nevertheless, her endorsements of scientific research were not without qualification. Fundamentally, Ellen White did not elevate science above the Bible, but maintained that Scripture occupied the higher order.61 She warned that there is imminent danger in a scientific study

> Ellen White advocated ... that "instead of confining their study to that which men have said or written," students are to be directed "to the sources of truth, to the vast fields opened for research in nature and revelation."

wherein God is not acknowledged.62 "Those who prate about science and casting God's Word in the shade . . . cannot understand or read nature without the Bible to interpret and explain it." She then affirmed, "The Bible is not only the revealer of God to man, but his grand interpreter as the God of nature. The Bible . . . has given us the key which unlocks the mysteries of creation."63

Ellen White expressed her greatest concern about situations where the Bible and the findings of science seem to be in conflict. She was troubled when researchers attempted to test the veracity of the Bible by

"their standard of 'science falsely so called."64 She maintained that scientific research is detrimental if it concludes that the Bible is in error, with such an approach ultimately resulting in skepticism and infidelity, particularly among the youth.65 Rather, human ideas of science are to be examined from the vantage of Scripture as the infallible standard.66 She observed that "even the greatest minds, if not guided by the Word of God in their research, become bewildered in the attempts to investigate the relations of science and revelation."67

Risks. Ellen White viewed several factors as significant dangers in scientific research. The first related to the fallacy of assuming that all facts pertinent to a given case have been gathered or that the evidence presented is overpowering.68 As a result, the deductions of science are taught as if they are indisputable. Ellen White reminded her readers that Scripture calls such men "fools." Such people profess to have incontrovertible data when they have only a "smattering of knowledge."69 Even if one were to research a scientific topic throughout eternity, there would still be relevant information yet to be discovered.70

A second factor is the potential for the misinterpretation of findings.71 As a result, the Bible is made to appear uncertain and untrustworthy when it contradicts scientific data, with doubts soon becoming seen as facts by those who entertain them. Faith in the Bible is destroyed as Scripture first appears questionable, then objectionable. When science is exalted above its Author, both the researcher and those who study the research, particularly young people, are led astray. It is in this context that scientific research becomes a curse.72

A further scenario arises when the researcher bases his or her premise upon a secular point of view that denies the supernatural or that seeks to limit the power of God.73 If assumptions purposefully exclude God from the basis of study, the researcher "will assuredly come to wrong conclusions."74 It is such "scientific research in which God is not acknowledged" that is "a positive injury."75 Ellen White warned that when people endeavor to base their study solely upon natural principles, they will soon doubt the reliability of biblical history, then question the existence of God, and without the anchor of Scripture, will finally shipwreck on the rocks of agnosticism or atheism.76

A combined approach. Notwithstanding, Ellen White maintained that because "the book of nature and the book of revelation bear the impress of the same master mind," they cannot but be in harmony.⁷⁷ True science, she added, while employing different methods and terminology, will bring from its research "nothing that, rightly understood, conflicts with divine revelation."78 Furthermore, as true scientific research and the Bible are not at variance, each will lead to a deeper understanding of the other.79 Particularly, combined research of the natural world and the written Word will lead to a deeper understanding of God's character and His laws, resulting in a more intimate acquaintance with God.80

Other Types of Research

Ellen White also addressed other types of research, such as historical research, documentary analysis, and ethnographic studies, although not extensively. She noted, for example, that Jacques Lefevre, through his research into ancient literature, discovered the Bible for himself and, in so doing, helped usher in the Reformation.81 She also stated that the missionary Joseph Wolff, who traveled extensively in Africa, Asia, and the Middle East, was able to witness effectively on his return by presenting lectures based on his research.82

We should also note that Ellen White, on several occasions, incorporated in her writings excerpts from works that included in their title the word research or a derivative. For example, in her book The Great Controversy, she quoted Researches and Missionary Labors by Joseph Wolff and Ecclesiastical Researches by Robert Robinson.83

While Ellen White held that "it is

perfectly right to gather ideas from other minds," she also warned against taking those ideas and merely reiterating them. "Make these ideas your own," she advised, "frame the arguments yourselves, from your own study and research."84

Ellen White believed, for example, that the process of education was to train students "to be thinkers, and not mere reflectors of other people's thought."85 She cautioned about students spending many years in school studying the results of research while at the same time neglecting the Bible.86 She warned that such reliance on the research of scholars, apart from the Word of

God, can lead to erroneous conclusions to the point that one can "become enthused with theories that are of satanic origin."87

Similarly, Ellen White warned that those who share knowledge with others "must not be content to depend upon the researches of other minds," but must conduct careful research for themselves.88 She further cautioned

that relying solely on research into what others have written could promote intellectual pride and limit one's usefulness.89 "Very little of the money invested in piling up volumes for study and research," she wrote, "furnishes anything that will make one a successful laborer for souls."90

Guidance for Researchers

Sources of guidance. We are not left alone in the research endeavor. Ellen White affirmed that "Jesus has promised us a guide in our research"91 and that the Holy Spirit will "enlighten the mind and guide the research" of those who search for truth.92 "We must not only search," she clarified, "we must ask God for wisdom to aid us in searching. The truths essential for us to know are too deeply buried to be discovered by unaided human research."93

The Bible, in turn, should illuminate research into the natural world. Ellen White warned that even the greatest minds, "if not guided by the word of God in their research, be-



come bewildered; they cannot comprehend the Creator or His works."94

If these divine resources are ignored or rejected, Satan, pretending to be a messenger of light, will present intriguing topics for study, and the researcher will be led to accept error as truth and "unite with seducing spirits in the work of propounding new theories which lead away from the truth." Only through prayer and communion with God can a researcher escape this fatal trap.

Specific counsel. Ellen White also gave explicit guidance to various types of individuals. Professionals, for example, were admonished to critically evaluate articles in their academic journals. Ellen White saw peril, for example, when physicians would simply read and accept approaches to the treatment of disease "without sifting every statement." As a result, they might weave these ideas into their practice, "experiment upon human lives, and sacrifice not a few." 97

Ellen White advised that students obtain in as short a time as possible a personal knowledge of Christ and Scripture through prayer and deep research.98 The opposite situation, however, could also occur. Students could spend long years in research without ever gaining a knowledge of God.99 Absorbed in their study of "books containing the results of human research," they might neglect the Bible. More perilous, they might read material that casts doubt on the Word of God. In the minds of such youth, faith would ultimately perish as they accepted infidel statements as truth.100 To avoid these pitfalls, students should be trained to think for themselves, developing the habit of reflective reading.¹⁰¹

Recognition of limitations. While Ellen White recognized the value of research, she was also aware of its limitations. One constraint was that of partial knowledge. She noted that given the reality of a brief lifespan, limited sphere, and restricted vision, the researcher may not grasp all relevant facts. 102 This limitation is evi-

Ellen White held
that there are matters
which even the most
careful research
cannot adequately
explain. The "ways and
works of the Creator,"
for example, present
mysteries which
even the most scholarly research cannot
interpret.

denced in the way conclusions are frequently revised or discarded. It may also be seen in the conflicting theories promoted by various researchers. Ignoring this constraint is particularly detrimental when researchers "attempt to judge the Creator and His works by their own imperfect knowledge." ¹⁰³

Another limitation is that of restricted scope. Ellen White held that there are matters which even the most careful research cannot adequately explain. The "ways and works of the Creator," for example, present mysteries which even the most scholarly research cannot interpret. ¹⁰⁴ Similarly, the human mind has insufficient capability to comprehend the existence of God and the entrance of sin. ¹⁰⁵ Neither can one explain by scientific principles the Holy Spirit's influence upon the heart nor the mystery of godliness. ¹⁰⁶

Given that research is powerless to fully explain certain phenomena in human life or in the natural world, how foolish, then, to attempt to controvert God's existence, character, or law, or to conclude that some portions of Scripture are inspired while others are not. ¹⁰⁷ It is this speculative research into God's nature, attributes, or prerogatives that "will yield no

valuable results and can be pursued only at the peril of the soul." ¹⁰⁸

Consequently, researchers must not only believe what they can understand. ¹⁰⁹ They are to recognize that, beneath the simple truths of the plan of salvation, there lie mysteries "that overpower the mind in its research, yet inspire the sincere seeker for truth with reverence and faith." ¹¹⁰ Here reason must bow before divine revelation. Even a "lifetime of prayer and research will leave much unexplored and unexplained." ¹¹¹

The spirit of research. Ellen White advocated that researchers bring to their study a spirit of inquiry, both open-mindedness and determination. She noted that while prior study gathered "very much of the treasure that lies near the surface," research properly conducted, with a mind "kept open and constantly searching, . . . will find hidden treasures of truth—some revealed in new aspect, others they had overlooked." 12

Ellen White also encouraged humility. While observing that God does not want us "to be less acute, less inquiring, or less intelligent," she recommended that "in all our researches, we should remember that arrogance is not greatness, nor is conceit knowledge. Human pride is an evidence, not of strength, but of weakness. It reveals not wisdom, but folly. To exalt reason unduly is to abase it. To place the human in rivalry with the divine, is to make it contemptible." 113

In sum, while certainly recognizing its limitations and potential pitfalls, Ellen White was a strong advocate of research. She asserted that deep research is required in order to understand God's truth. 114 She affirmed that research is essential for the Christian life, if researchers "look to God at every step, the creature directed by the Creator." 115

Consequently, as Christian educators, we are to welcome research and incorporate research activities throughout the educational experience, ¹¹⁶ provided that we likewise recognize that there is One who stands above all. ¹¹⁷

This article has been peer reviewed.



John Wesley Taylor V. PhD. EdD, is an Associate Director of the General Conference Department of Education in Silver Spring,

Maryland, U.S.A. He has directed research studies, taught research courses, and chaired theses and dissertations. He may be contacted at taylorjw@gc.adventist.org.

Recommended citation:

John Wesley Taylor V, "Ellen White and the Role of Research," The Journal of Adventist Education 82:2 (April-June 2020): 27-34.

NOTES AND REFERENCES

- 1. Additionally, there are there are 72 instances of the term research or its derivatives in editor remarks or in references. Results are from searches conducted at http://www. egwwritings.org, a comprehensive database of the writings of Ellen White, published and unpublished, provided by the Ellen G. White Estate.
- 2. Textually similar statements utilize the same wording. Conceptually, similar statements may use synonyms, or the arrangement of wording may vary, while conveying the same thought. A compilation of the *research* statements in the writings of Ellen White may be found at http://circle.adventist.org/files/ jae.egwresearch.pdf.
- 3. Ellen G. White, The Great Controversy (Mountain View, Calif.: Pacific Press, 1888), 522. (Hereafter abbreviated GC.)
- 4. _____, Counsels to Parents, Teachers, and Students (Mountain View, Calif., Pacific Press, 1913), 377. (Hereafter abbreviated CT.) In a similar statement, Ellen White avowed: "Cold philosophical speculations, and scientific research in which God is not acknowledged, are a positive injury" (ibid., 423).
- 5. _____, Testimonies for the Church (Mountain View, Calif.: 1947), 8:307. (Hereafter abbreviated [Volume Number] plus T e.g., 4T.)
- ___, "Imperative Necessity of Searching for Truth," The Advent Review and Sabbath Herald 69:45 (November 15, 1892): 706. (Hereafter abbreviated RH.)
- _____, "Timothy," The Youth's Instructor 46:18 (May 5, 1898): para. 1.

(Hereafter abbreviated YI.) Ellen White expanded this concept: "Many of [the Bible's] treasures lie far beneath the surface and can be obtained only by diligent research and continuous effort" (Education [Mountain View, Calif.: Pacific Press, 1903], 123). (Hereafter abbreviated Ed.)

- 8. CT 426.
- 9. Ed 15.
- _, Prophets and Kings 10. ___ (Mountain View, Calif.: Pacific Press, 1917), 33. (Hereafter abbreviated PK.)
- 11. _____, "The Word Made Flesh," RH 83:14 (April 5, 1906): 8.
- 12. _____, Christ Triumphant (Hagerstown, Md.: Review and Herald, 1999), 33. (Hereafter abbreviated CTr.)
- 13. _____, Christ's Object Lessons (Washington, D.C.: Review and Herald, 1900), 378. (Hereafter abbreviated COL.)
- 14. _____, "Peter's Fall," Signs of the Times 23:43 (November 4, 1879): 675, 676. (Hereafter abbreviated ST.)
- 15. _____, Manuscript Release, vol. 20, No. 1490 (July 30, 1901), 335.3. (Hereafter abbreviated as the volume number plus MR, i.e., 20MR.) In the current context, the term Manuscript Releases refers to various types of documents written by Ellen White, that between 1981 and 1993 were collected and published in 21 volumes by the Ellen G. White Estate and are available online at http://m.egwwritings.org/en/folders/9.
- 16. GC 411; _____, Spirit of Prophecy (Battle Creek, Mich.: Seventh-day Adventist Publ. Assn., 1884), vol. 4, 260. (Hereafter abbreviated 4SP.)
- 17. _____, In Heavenly Places (Washington, D.C.: Review and Herald, 1967), 349 (Hereafter abbreviated HP); 3T 327.
- 18. _____, Letter 23 to son J. E. White and his wife, Emma (August 5, 1879). (Hereafter abbreviated Lt plus number and date.) These are letters by Ellen White to a variety of people that are available online at http://egwwritings.org in the pull-down menu under Letters & Manuscripts.
 - 19. Lt 385, 1904 to J. H. Kellogg.
 - 20. 20MR No. 1492 (April 22, 1905), 349.
- 21. _____, "Sparta Camp-Meeting," RH 47:21 (May 25, 1876): 162; __ "Imperative Necessity of Searching for Truth," ibid. (November 15, 1892): 706.
- 22. _____, "In Demonstration of the Spirit," RH 65:36 (September 4, 1888): 561, 562.
- 23. _ __, "The Law of God," ibid. 35:12 (March 8, 1870): 91.
- 24. Lt 20a, 1888 to Brethren Who Assemble in the Week of Prayer, par. 5.
- 25. _____, This Day With God (Washington, D.C.: Review and Herald, 1979), 43 (Hereafter abbreviated TDG); _____, That I May Know Him (Washington, D.C.: Review and Herald, 1964), 194.

- (Hereafter abbreviated TMK.)
- 26. _____, "The Importance of Searching the Scriptures," The Watchman (December 18, 1906): para. 3.
- 27. _____, Manuscript 78, "Nearing the Judgment" (1886), par. 5. (Hereafter abbreviated Ms plus number and year. These are documents written by Ellen White that are available online at http://egwwritings.org in the pull-down menu under Letters & Manuscripts.
- 28. 2MR No. 147 (1886), 245; 9MR No. 65 (July 27, 1891), 68; TMK 194; COL 129; _____, "The True, or the False," RH 75:32 (August 9, 1898): 501, 502; _____, "Importance of Bible Study," YI 32:19 (May 7, 1884): 75.
- 29. 4T 499; The Upward Look, 54 (Hereafter abbreviated UL); _____, "Timothy," YI 46 (May 5, 1898): para. 1 and 12. 30. _____, "The True, or the False," RH; 4T 499.
- 31. ______, "Sparta Camp-Meeting," RH; _____, "The True, or the False," RH.
 - 32. 9MR No. 65, 68.
- 33. _____, "The True Object of Education—No. 2," YI 46:14 (April 7, 1898): para. 1.
- 34. Lt 2, 1898, To the Leading Men in Our Churches, par. 1-17; UL 54.
- 35. ______, "Imperative Necessity of Searching for Truth," RH 69:45 (November 15, 1892): 706-708; TDG 43.
- 36. _____, "Our Great Treasure-House," ST 32:38 (October 3, 1906): 6; see also, Ed 123; _____, Our High Calling (Washington, D.C.: Review and Herald, 1961), 205. (Hereafter abbreviated OHC.)
- 37. Ed 123. Ellen White utilized the analogy of a miner (see 8T 157); "The Divine Teacher," ST 27:18 [May 1, 1901]: par. 1), and noted that one simply cannot skim over the surface and hope to discover deep truth ("Imperative Necessity of Searching for Truth," RH 69:45 [November 15, 1892]: 706-708); "My People Have Committed Two Evils," ST 19:47 (October 2, 1893): 741, 742.
- 38. Lt 3, February 2, 1898, To Brethren,
- 39. CT 52; _____ ____, From Eternity Past (Nampa, Idaho: Pacific Press, 1983), 434 (Hereafter abbreviated EP); _ Healthful Living (Battle Creek, Mich.: Medical Missionary Board, 1898), 297. (Hereafter abbreviated HL.) Regarding these topics, Ellen White wrote, "All may now begin their research" (Messages to Young People [Washington, D.C.: Review and Herald, 1930], 255). (Hereafter abbreviated MYP.)
- 40. Ellen G. White, "The Law of God," RH 35:12 (March 8, 1870): 90, 91; ___,"The True, or the False," ibid.
- 75:32. __, "The Lord's Supper and the Ordinance of Feet-Washing-No. 4," RH 75:25 (June 21, 1898): 389,390.
- _____, "Imperative Necessity of Searching for Truth," ibid. 69:45 (November

15, 1892): 706. 67. GC 522. Herald 1:12 (December 1, 1899): 102, 103. , "The Truth as It Is in 91. Ms 106, 1893, "Will a Man Rob God?" 43. ___ 68. , Selected Messages Jesus," ST 24 (June 16, 1898); Ms 61b, 1895, (Washington, D.C.: Review and Herald, par. 7. 1980), Book 3, 306. (Hereafter abbreviated "Diary, November-December 1895"; Ms 69a, 92. Lt 3, 1898. See also _____ People Have Committed Two Evils," ST 1896, "Diary/Duties of Faithful Parenting; SM3.) Loyalty to God's Law" (1896-1897). 69. __ 19:47 (October 2, 1893): 741, 742; and Ms ___, From the Heart (FH), 44. CT 443. Also, _____ _, "The Truth 155. 33, 1897. 93. __ _, "The Divine Teacher," as It Is in Jesus," ST (ibid.) 70. CT 66. _____, Fundamentals of 71. COL 41; ___ 45. Ms 41, 1900, 10-12; MYP 253; TMK 194. ST 27:18 (May 1, 1901): para. 1. Christian Education (Nashville: Southern 94. FE 84. Also, similarly, in GC 522. 46. OHC 205. 47. Ms 41, 1900, par. 31; Ms 61b, 1895; Publ. Assn., 1923), 328. (Hereafter abbrevi-95. 2MCP 699. MYP 253; TDG 43; 9MR 753, 310. ated FE.) 96. Ibid., 712. 72. GC 522. 48. _____, "In Demonstration of the 97. _____ _, Medical Ministry (Moun-Spirit," RH 65:36 (September 4, 1888): 561, 73. Lt 18, 1892, "Letter to J. H. Kellogg," tain View, Calif.: Pacific Press, 1932), 139. 562. In this line, one of the results frequently 98. Lt 76, 1897, "Letter to George A. delineated was a clearer understanding of 74. PP 113. See also COL 41. Ellen White Irwin," par. 1-19. 99. CT 423. the plan of salvation and of its conditions noted that their research is, in reality, "con-(Ms 69a, 1896; Ms 33, 1897, "We Would See ducted by the father of lies" (Ms 17, 1902, 100. COL 41. Jesus," par. 1-33. Ellen White stated that "Parents' Work," par. 5). 101. Ellen White wrote: "Those who have indulged the habit of racing through exciting when one engages in personal research with 75. CT 423. "humility of heart," the theme of redemption 76. EP 66; FH 155. stories, are crippling their mental strength, and disqualifying themselves for vigorous thought will open before the researcher and he or 77. Ed 128. and research" (FE 163). See also CT 135. she will more clearly comprehend the path 78. Regarding geology, for example, Ellen White stated, "Moses wrote under the guidto heaven (COL 129; UL 54). 102. Ed 130. 49. Ms 200, 1898, "Sermons/Thoughts on ance of the Spirit of God, and a correct the-103. MH 427. Colossians 2," par. 1-15. ory of geology will never claim discoveries 104. Ms 4, 1882, "God in Nature," par. 1-15. 50. Ms 33, 1900, "Unfaithful Shepherds," that cannot be reconciled with his state-105. _____, Sermons and Talks (Silments. The idea that many stumble over, that ver Spring, Md.: Ellen G. White Estate, Inc., par 17. 1980), vol. 1, 65. (Hereafter abbreviated 51. Ms 78, 1886. God did not create matter when He brought 52. TDG 43. the world into existence, limits the power of 1SAT.) 106. MYP 190. the Holy One of Israel" ("Science and Revela-53. 3T 438. tion," ST 10:11 [March 13, 1884]: 161). 54. Lt 366, 1905, "Letter to A. F. Bal-107. HL 295; 1SAT 65. lenger," par. 12. She further noted that 79. PP 115; EP 68. 108. MH 427. "bringing in subjects of controversy and rais-80. MH 462. 109. 2MCP 569. ing all manner of questions" absorbs the 81. GC 212. _, A Call to Stand Apart time of other ministers to assess these mat-82. GC 360. (Hagerstown, Md.: Review and Herald, 83. Ibid., 359, 385. ters and "creates strife and misunderstand-2002); ibid.; Ed 170 (5T 700). _____, "Diligence a Necessary ings." A. F. Ballenger (1861-1921) was a Sev-111. 5T 301. Some of these mysteries enth-day Adventist minister who advocated Qualification in the Minister," RH 63:14 Christ will reveal throughout eternity, while Universalism and founded the "Receive Ye (April 6, 1886): 209, 210. others may remain forever inscrutable (4SP the Holy Ghost" movement, precursor to the 85. Ellen G. White, True Education: An 345). In these matters, unbridled curiosity Holy Flesh movement, an approach to wor-Adaptation of Education by Ellen G. White can lead a researcher astray. This parallels the ship that Ellen White strongly condemned (Nampa, Idaho: Pacific Press, 2000), 12. circumstance of Eve and the tree of knowl-__, Selected Messages [Washing-86. CT 423. edge (CTr 33), where the researchers are certon, D.C.: Review and Herald, 1958], Book 2, _, Mind, Character, and Pertain that the understanding they are about to sonality (Nashville: Southern Publ. Assn., 36-38). (Hereafter abbreviated SM2.) grasp is essential, and their ambition anx-55. Ellen G. White, The Ellen G. White 1977), vol. 2, 699. (Hereafter abbreviated iously seeks that knowledge that will enhance 2MCP.) Ellen White then added, "Satan, 1888 Materials (Silver Spring, Md.: Ellen G. their sense of self-importance and supremacy. White Estate, Inc., October 1987), 825. Availclothed in the garb of an angel of light, pres-112. Ms 75a, 1897, "Sermon," par. 1-16. able at https://egwwritings-a.akamaihd.net/ ents for the study of the human mind subjects _____, "Workers With Christ," pdf/en_1888.pdf. (Hereafter abbreviated 1888.) which seem very interesting and which are full RH 63:3 (January 19, 1886): 33, 34; see also 56. GC 522. of scientific mystery. In the investigation of 1888, 825. 57. CT 426. these subjects, men are led to accept erroneous 114. ____ _, "Imperative Necessity conclusions and to unite with seducing spirits of Searching for Truth," RH 69:45 (Novem-____, Patriarchs and Prophets (Mountain View, Calif.: Pacific Press, 1890), in the work of propounding new theories ber 15, 1892): 706, 707. 599. (Hereafter abbreviated PP.) which lead away from the truth" (ibid., 699). 115. 1888, 981. 59. Ed 17. 88. _____, "Preach the Word," RH 116. For example, Ed 17; MH 462; Lt 76, _, The Ministry of Healing 65:17 (April 24, 1888): 257, 258. See also 1897; _____, "The Importance of 60. _ (Mountain View, Calif.: Pacific Press, 1905), _____, "In Demonstration of the Spirit," Searching the Scriptures," The Watchman 462. (Hereafter abbreviated MH.) RH 65:36 (September 4, 1888): 561, 562; (December 18, 1906): para. 3; _ "The True Object of Education—No. 2," YI 61. MYP 257; MH 462. _, "The Law of God," RH; and Ms 33, 1897. Ministers, for instance, were warned 46 (April 7, 1898): para. 1. 62. CT 377. 63. Ms 78, 1886. about relying on information researched by 117. _____, The Desire of Ages others. Rather, they must gain knowledge for (Mountain View, Calif.: Pacific Press, 1898), 64. 4SP 345. 65. CT 377. themselves in order to be successful in min-464. 66. MH 462. istry ("Wanted, Laborers for the Harvest," ST 2 [September 7, 1876]: par. 13). 89. CT 381. _____, "Spiritual Food," Gospel



Join a community of Adventist teachers and collaborate with colleagues and classrooms around the world!



Connect with teachers



Interact with classrooms



Participate in projects



Engage students

Join at: adventistlearningcommunity.com







Suellen Timm



Tools for Combating Disinformation and Fake News

he great increase in consumption and sharing of news on social networks without previous analysis made possible what McIntyre calls "fertile ground"1 for fake news. What is fake news? Fake news is "fabricated information that mimics news media content in form but not in organizational process or intent."2 It is news that is created without taking into consideration the journalistic and editorial processes that safeguard key concepts such as accuracy and credibility. Fake news can be information that is misleading, incorrect, or false (misinformation), and it can be false information that is purposefully disseminated (disinformation).3 Hunt points out that in the case of fake news, the user's difficulty in analyzing the content occurs because fake news is often manipulated to look like credible content in order to maximize circulation.4

Most students are unaware of

these forms of manipulation of information. In a survey of more than 1,500 primary and secondary teachers conducted by the National Association of Schoolmasters Union of Women Teachers⁵ in the United Kingdom, 35 percent of teachers claimed that their students, either in homework submitted or during classes, had quoted fake news or misinformation they found online. Thus, there is an urgent need to build students' literacy skills by teaching them not only how to read and write, but also how to think critically about how they interact with media.

In a report published by the *Commission on Fake News and the Teaching of Critical Literacy Skills* based on a survey of 388 primary students, 1,832 secondary students, and 414 teachers within the UK, 61 percent of teachers expressed concern that fake news affects student behavior. In addition, 54 percent of educators believed that the curriculum does not prepare students to identify misinformation.⁶ Among students, only two

percent of children had the necessary skills to detect fake news.⁷ According to Polizzi, this research points to the urgent need to teach media analysis not only to schoolchildren, but also to their teachers and families.⁸ This type of training should be part of teacher-education programs, and can also be done through professional-development training.

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) and several other NGOs and media companies have supported initiatives that study the use and critical analysis of media in the classroom. One key question guiding these initiatives is as follows: How can media education prevent the spread of false news?

Disinformation in Education

While in the past students previously used more books and encyclopedias to conduct their research and complete their schoolwork, most now used online search engines such as

Google. On this, sociologist Zygmunt Bauman, emphasizes that "we are in the information age without reflection where our main obstacle is the excess of information."10 Bauman says that we are flooded with information, but hungry for wisdom. "I learned from Google that I will never know what I should already know,"11 he said. The sociologist mentions that the amount of information produced daily is a thousand times greater than the capacity of the human brain to assimilate.

Santaella warns that without the necessary support provided by formal education, the student may find it difficult to assess the reliability and relevance of a source. For the researcher: "The network universe is a dispersive and unsystematic space, constantly changing. What is positive about it, the overwhelming supply of information that can enhance learning, is counterbalanced, at the other extreme, by the lack of guidance, whose negative effects reach particularly immature learners. Finding content on networks is becoming more and more refined. However, localization does not dispense selective and evaluative capacity, and effective use of content."12

In addition to Santaella, other scholars such as Hobbs and Mazzaro and Duarte have proposed that media literacy should be taught in schools since this is where teachers can best guide students in how to critically analyze news and online content to combat misinformation.¹³

An essential aspect of combating misinformation is knowing how to identify and distinguish the different types of fake news in order to properly evaluate the online content.¹⁴ One proposed approach for addressing this issue comes from Wardle and Derakhshan, who provide a means of classifying the idea of "information disorder." The model classifies "information disorder" into three types (see Figure 1):

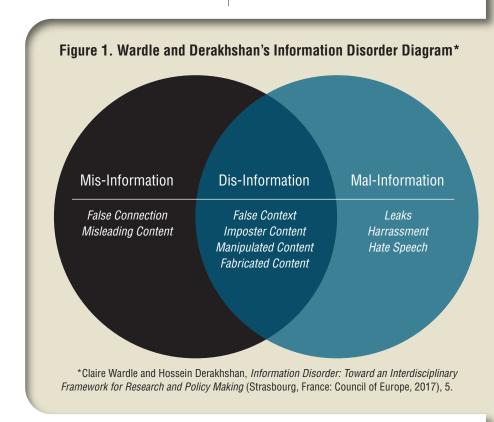
1. **Mis-information:** it presents false content, but is shared with no intention of harm:

- 2. **Dis-information**: false information disseminated with the intent to cause harm:
- 3. **Mal-information**: accurate content that is shared to cause harm to a person or institution.¹⁵

Tools for Media Literacy in the Fight **Against Fake News**

Media education, media literacy, education for media, or "educommunication" are processes of critically analyzing media production in an educational way. Although the theory became popeducational purposes.16 In 2013, UN-ESCO launched the Global Alliance for Partnerships on Media and Information Literacy (GAPMIL) to articulate partnerships, unify the speech of the MIL community and further develop strategies, providing a common global platform. Since the launch, nearly 500 organizations have joined GAPMIL.17

The 2018 Media Literacy Index survey, produced by the Open Society Institute, listed and evaluated the most successful countries' methods in



ular in the 1980s, more recent initiatives of Media and Information Literacy (MIL) have included a specific attempt to help students to verify the legitimacy of the news and, thus, to understand how misinformation is used to shape attitudes and opinions.

According to UNESCO, by 2016, more than 70 countries were implementing media analysis activities for preparing students to detect fake news. Finland ranked first, followed by other northern European countries.18 One of the reasons mentioned by experts for this result is that in these nations, media studies and combating disinformation are taught to school-age children, regardless of the discipline. For Timsit, this is one of the secrets to success in the work of literacy and combating disinformation. It is necessary to help each student develop the necessary skills to

detect and combat misinformation in any subject, since fake news affects all areas of knowledge.19

Currently, there are several support initiatives for teachers to conduct Media and Information Literacy campaigns in the classroom, with an emphasis on combating disinformation. Here are some useful tools:

Resources from the Better Internet Conference - In 2019, at the Better Internet Conference held in Singapore, several resources were launched to help teach students how to analyze online sources. The News and Media Literacy Toolkit²⁰ is a handout available online in which experts teach high school students how to detect fake news, in addition to distinguishing what it is fact and what is opinion. Another tool announced was the fact-checking kit called Get Smart With Sherlock.21 Based on the well-known fictional character Sherlock Holmes, the kit shows a detective trying to "unravel the crime" from fake news, which includes questions about the potential consequences and how to identify misinformation.

BBC - This media company has invested in many initiatives such as the *iReporter* game. The *BBC Academy* through the BBC Young Reporter also runs an initiative to help students filter media content and identify fake news. The proposal targets secondary schools and includes materials to be used in the classroom, tutorial videos, and interactive games. BBC News Brasil has the project Critical News Reading Workshop, which, through video lessons and exercises available on the official channel, aims to develop students' curiosity and suspicion about the content they find as they conduct research in the digital environment.22

Google - Google's Be Internet Awesome project offers a variety of resources to help build media literacy. The Smart, Alert, Strong, Kind, Brave Digital Safety and Citizenship Curricu-

T FAKE NEWS



CONSIDER THE SOURCE

Click away from the story to investigate the site, its mission and its contact info.



CHECK THE AUTHOR

Do a quick search on the authors. Are they credible? Are they real?



CHECK THE DATE

Reposting old news stories doesn't mean they're relevant to current events.



CHECK YOUR BIASES

Consider if your own beliefs could affect your judgement.



Headlines can be outrageous in an effort to get clicks. What's the whole story?



SUPPORTING SOURCES?

Click on those links. Determine if the info given actually supports the story.



IS IT A JOKE?

If it is too outlandish, it might be satire. Research the sight and author to be sure.



ASK THE EXPERTS

Ask a librarian or consult a fact-checking site.

Used with permission from the International Federation of Library Associations and Institutions (IFLA). For more information, see https:// www.ifla.org/publications/node/11174 and https://www.fastcheck.org/ 2016/11/how-to-spot-fake-news/.

lum is one of several media literacy curricula that include activities on how to fight fake news.23 The resource helps teachers develop activities and also includes a letter of introduction to be sent to parents. The Be Internet Awesome project for children (in Portuguese, Seja Incrível na Internet) explains what bots are, how to analyze a URL, how to select a source, how to detect false information online, and how to check the credibility of information vehicles, among other skills. The tool includes

gamification techniques (with the online game *Interland*)²⁴ that help users develop skills and share what they learn online with friends.

National Literacy Trust - In 2018, a series of resources for parents and teachers on the subject was launched by the Commission on Fake News and the Teaching of Critical Literacy Skills in Schools.25 The content was prepared specifically for K-12 teachers as a way to enable students to survive

the digital world and help them to use available content in a positive way. Additional free resources are available on the National Literacy Trust Website.26

Steps to Use in Identifying Disinformation **Online**

Social networks make it difficult for users to judge the credibility of a message because mainstream publications such as the New York Times and fake news sites use platforms that look virtually identical.27 Another factor to consider is that some publications purposefully use satirical humor to convey specific perspectives on current events. A reader unfamiliar with such styles of writing might share it as actual news. Social media users are often guided to these sites by friends and family who may unwittingly share posts and or tag the user when an interesting article pops up on their social media pages.

Thus, it is important to teach the student to evaluate content online before sharing it or even using it for information. To do so, it is important to remember seven ways to help identify disinformation or fake news:

- 1. Analyze the Website URL -Many fake news Websites have names very similar to those of traditional communication vehicles. Enter the official Website of the media channel and compare the URLs.
- 2. **Analyze the text** Fake news often contains a variety of grammatical errors, uses manipulative adjectives, alarmist texts, or exaggerated punctuation (especially excessive use of exclamation marks).
- 3. Title Check if the title and the content discuss the same subject. Some news may have an alarming headline, whereas the article has only a vague connection to the head-
- 4. **Author** Check if the report has a byline (indicating that it was authored by a specific journalist or a group of reporters) or is credited to a news agency.

- 5. Other content Websites -Search other Websites and sources for news on the same topic.
- 6. Compare truthful news, too -This is important to have a balance of opinions on the same subject. For this, it can be used applications from a news aggregator such as AP News (from the Associated Press), Reuters, Smart News, and Google News.
- 7. Check sites Check information before sharing it. For this, information checking sites can be used. Usually, government institutions and media companies make these services available for free.

Conclusion

In recent years, media literacy has received attention from government initiatives, private companies, and educational institutions. There are several resources available online to support teachers to include media study in the classroom, regardless of the subject.

Experts like Mazzaro and Duarte, Rubin, Chen and Conroy, Timsit, and Wardle and Derakhshan are unanimous in stating that these resources are power tools against disinformation, and that work in the school environment is the most effective for the prevention and development of students' critical thinking skills. Experts also highlight the importance of the teacher being the center of the process and that MIL activities should involve the entire teaching-learning process and not be restricted to a specific subject.

This article has been peer reviewed.

Suellen Timm, BA, is Managing Editor for Adventist Educators Blog. Ms. Timm earned her undergraduate degree in Journalism, English, and Portuguese Letters, and is currently pursuing a Master's degree in Information Science at the Universidade Estadual Paulista Júlio de Mesquita

Filho (Unesp) in Marília, Brazil. She has worked for more than 10 years as a journalist and communication advisor at the Seventh-day Adventist headquarters in São Paulo, Brazil.

Recommended citation:

Suellen Timm, "Classroom Media Literacy Tools for Combatting Disinformation and Fake News," The Journal of Adventist Education 82:2 (April-June 2020): 36-40.

NOTES AND REFERENCES

- 1. Lee C. McIntyre, Post-truth (Cambridge, Mass.: MIT Press, 2018).
- 2. David M. J. Lazer, et al., "The Science of Fake News," Science 359:6380 (March 9, 2018): 1,094-1,096.
 - 3. Ibid.
- 4. Elle Hunt, "What Is Fake News? How to Spot It and What You Can Do to Stop It," The Guardian (December 17, 2016): https:// www.theguardian.com/media/2016/dec/ 18/what-is-fake-news-pizzagate.
- 5. The National Association of Schoolmasters Union of Women Teachers (NA-SUWT) Report (2017): https://www.na suwt.org.uk/uploads/assets/uploaded/c69c6 5df-ce7c-403b-8414d8e93af2f72c.pdf, 157.
- 6. National Literacy Trust, "Fake News and Critical Literacy: The Final Report of the Commission on Fake News and the Teaching of Critical Literacy in Schools" (June 2018): https://cdn.literacytrust.org.uk/media/docu ments/Fake_news_and_critical_literacyfinal_report.pdf, 4.
- 7. National Literacy Trust, "Commission on Fake News and the Teaching of Critical Literacy Skills in Schools" (June 11, 2018): https://literacytrust.org.uk/policy-and-cam paigns/all-party-parliamentary-group-liter acy/fakenews/. See also "Fake News and Critical Literacy Resources" (June 2018): https://literacytrust.org.uk/resources/fakenews-and-critical-literacy-resources.
- 8. Gianfranco Polizzi, "Fake News and Critical Literacy: New Findings, New Questions" (July 2018): https://blogs.lse.ac.uk/ mediapolicyproject/2018/07/09/fake-newsand-critical-literacy-new-findings-new-ques tions/.
- 9. UNESCO, Challenge of Media Education (The Grunwald Document). Paper presented on the International Symposium on Media Education, Grunwald, Germany, 1982: https://www.medialit.org/reading-room/ challenge-media-education-grunwalddocument.

- 10. Carlos Castilho, "Zygmunt Bauman Talks About Google and the Avalanche of Information," Observatório da Imprensa 872 (October 10, 2015): http://observatoriodaimprensa.com.br/programa-do-oi-na-televisao/zygmunt-bauman-fala-sobre-o-googlee-a-avalanche-informativa/; Alberto Dines interviews Zygmunt Bauman: https://www. youtube.com/watch?time_continue = 81&v = $CFdqsE3fjAo\&feature = emb_title.$
 - 11. Ibid.
- 12. Lucia Santaella, "Ubiquitous Challenges in Education," Higher Education Magazine (Special: New Media and Higher Education), (2013), 27: https://www.revis taensinosuperior.gr.unicamp.br/edicoes/ edicoes/ed09_abril2013/NMES_1.pdf.
- 13. Renée Hobbs, "The Seven Great Debates in the Media Literacy Movement," Journal of Communication 48:1 (Winter 1998): 16-32; Hingryd Mazzaro and Diogo Duarte, "The Role of Media and Information Literacy in Education" (2018). Paper presented at the Brazilian Congress of Communication Sciences, Joinvile, SC, Brazil.
- 14. Victoria L. Rubin, Yimin Chen, and Naill J. Conroy, "Deception Detection for News: Three Types of Fakes." Paper presented in Association for Information Science and Technology, 2015, St. Louis, Missouri, U.S.A.

- 15. Claire Wardle and Hossein Derakhshan, Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making (Strasbourg, France: Council of Europe, 2017), 5: https://edoc.coe.int/ en/media/7495-information-disorder-towardan-interdisciplinary-framework-for-researchand-policy-making.html.
- 16. Alton Grizzle and Maria Carme Torras Calvo, eds., Media and Information Literacy: Guidelines for Formulating Policies and Strategies (Paris: UNESCO, 2013): https://un esdoc.unesco.org/ark:/48223/pf0000225606.
- 17. Global Alliance for Partnerships on Media and Information Literacy: https://en. unesco.org/themes/media-and-informationliteracy/gapmil/about.
- 18. Marin Lessenski, Common Sense Wanted: Resilience to 'Post-Truth' and Its Predicators in the New Media Literacy Index (March 2018): https://osis.bg/wp-content/ uploads/2018/04/MediaLiteracyIndex2018_ publishENG.pdf.
- 19. Annabelle Timsit, "In the Age of Fake News, Here's How Schools Are Teaching Kids to Think Like Fact-checkers," Quartz (February 12, 2019): https://qz.com/153 3747/in-the-age-of-fake-news-heres-howschools-are-teaching-kids-to-think-like-factcheckers/
- 20. Common Sense Education and Media Literacy Council, News and Media Literacy Toolkit (2019): https://www.betterinternet.

- sg/2019BIC/Resources/media/F3151EB87FF9 497AA81459D14EFB4ADA.ashx.
- 21. Get Smart with Sherlock (2019): https://www.betterinternet.sg/2019-BIC/ CommunityProjects//media/15BEC8CCC36 442F9BE5159076DFD388E.ashx.
- 22. British Broadcasting Company (BBC) Young Reporter (2017): https://www.bbc. co.uk/academy/en/collections/youngreport er; BBC iReporter (2018):https://www.bbc. co.uk/news/resources/idt-8760dd58-84f9-4c98-ade2-590562670096.
- 23. Be Internet Awesome Curriculum (June 2019): https://storage.googleapis. com/gweb-interland.appspot.com/enus/hub/pdfs/Google_BeInternetAwesome_ DigitalCitizenshipSafety_2019Curriculum.pdf.
- 24. Be Internet Awesome Resources (2019): https://beinternetawesome.with google.com/en_us/.
- 25. Commission on Fake News and the Teaching of Critical Literacy in Schools.
- 26. National Literacy Trust, "Commission on Fake News and the Teaching of Critical Literacy Skills in Schools."
- 27. Wardle and Derakhshan, Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making.

THE ADVENTIST EDUCATORS BLOG Read, Connect. **Share!**



The Adventist Educators Blog serves as a globally inclusive online community with practical professional-development and personal-growth articles representing the diversity of Adventist education contexts. Posts are shared three times a week, and a translation tool makes all posts accessible in the language of your choice. Articles are invited from Adventist educators working in

> Adventist and other schools, at any level. See Writer's Guidelines at https://educators.adventist.org/submission-guidelines/.

Visit us on the Web at https://educators.adventist.org/ Facebook: https://www.facebook.com/educationdialogue/ Twitter: http:/twitter.com/advcircle

To receive our monthly e-newsletter, simply subscribe: https://educators.adventist.org/subscribe/

LOOK FOR ADVENTIST EDUCATION DIALOGUE ON FACEBOOK



Other ways of accessing issues of **College and University Dialogue**

in English, French, Italian, Portuguese, and Spanish!



Search for Adventist Dialogue to download the App



Visit dialogue.adventist.org



Write to: dialogue@gc.adventist.org for a printed version



Bonnie Iversen

Transitioning to Online School During THE COVID-19 PANDEMIC

San Gabriel Academy Educators Share Recommendations for Good Practice

lanning for any school year is a challenge, but planning for a pandemic year was not on the minds of the administration and faculty at San Gabriel Academy (SGA) in San Gabriel, California, U.S.A. Christian educators in particular have an enormous responsibility, not only to provide quality education, but also to point their students to Christ in all situations. The call to "'Feed my lambs'" is extended to all who profess to love Jesus Christ (John 21:15-17).1 During a pandemic, the challenge of "feeding Christ's lambs" at a time in which schools are closed requires creativity and innovation based on clear curricular goals. The question is: "How can we be most effective in continuing to provide the highest quality of Christ-centered education possible through distance learning?" Over the next several months, SGA, along with many other Adventist schools, would continue to evolve in its understanding of how to feed Christ's sheep during this pandemic.

In the past 10 weeks, as of the writing of this article, many parents have commented on the seemingly seamless transition from in-person to distance learning in just two days.

However, the fact is that the platform for this transition began three years prior to the emergence of COVID-19. At that time, SGA began transitioning to a Standards-based Referenced (SBR) curriculum. Working with Marie Alcock,² the faculty began organizing, aligning, and articulating their curriculum to ensure that students had clearly defined goals and objectives. A key component to SBR is the prioritization of standards. Prioritized standards are the fundamental learning goals students need to master.

In addition, SGA began looking at how technology might be best utilized as a tool across the curriculum and not just in a technology class. Teachers had been using tech platforms that support, enhance, and organize learning. The implementation of the SBR system, with its prioritized standards, guaranteed that teachers and students knew exactly what was essential for learning, and the integration of technology ensured an organized delivery system. This set the stage not only for a smooth transition, but also ensured there would be minimal gaps in learning despite the disruption to the program.

Another blessing came in the form of anticipating the possible need to move to a distance-learning model.

God is always directing His people in the best path they should follow. Officially, in-person classes ended on March 19, but school administration had been meeting since late January to discuss the probability of transitioning to distance learning before the end of the school year. Faculty meetings in February dedicated time to discussing the possible upcoming change and encouraging teachers to prepare for this new learning paradigm. These sessions provided participants with an opportunity to identify appropriate computer applications, share possible teaching strategies, and encourage colleagues through this uncharted territory. Faculty meetings in March offered springboards for teachers to make final refinements and adjustments to their distance-learning plans.

Clearly, it would be impossible to plan for every detail of what would come. Since no manual on navigating a classroom through a pandemic exists, prayerful preparation continued, and adjustments were continually implemented. Different grades and age levels would require different levels of support. Younger students would need help logging on to classes and finding resources for the first several uses. After a while, they would become experts and not require parental assistance.

No matter how well distance learning is executed, certain aspects of an in-person class can never be replaced. There is a beauty in the connection that occurs when engaging with students in person. While this fact may seem obvious, it became even more poignant under the recent conditions. Participating in a mission trip and music tour, making memo-

ries at the end-of-year beach vespers, playing a game of basketball with students, enjoying lunch outdoors together on a beautiful spring day, and praying with students are some of the aspects of Adventist schools that make the denomination's system unique. These types of interactions cannot be replaced but can be addressed in this engagement vacuum through Zoom or other platforms.³

SGA teachers began to use the Zoom app to meet with students in real time. Class schedules were modified for the lower grades to reduce screen time for younger students. At the high school level, class schedules remained the same. Attendance was almost perfect that first day (March 23) and has continued so since. If any student lags in checking in to class, the parent receives a call from the front office, and more often than not, the tardy student quickly appears on screen. This is the routine followed at the start of every class period, everyday.

To ensure classroom engagement, students are required to keep their cameras on and show their faces. The curriculum did not change, and students readily adapted to their new locations. All classes meet virtually, including chorale, orchestra, art, and physical education.

The final step was to ensure that the parents' needs were also met. Parental participation and support are essential in the successful transition and implementation of distance learning. Some parents were still working and could not be with students to either support them with technical issues or to encourage them to be present in class during scheduled times. A stressed-out parent equals a stressed-out student. Helping to mitigate parental stress is critical to preserving a positive school image and influencing students' perceptions of the program.

Unknown territory has a way of producing challenges, often unanticipated, for which solutions must be created. SGA's administration and faculty faced a number of those challenges and creatively designed solutions.

Challenges and Solutions

One challenge experienced by every teacher was finding assessment instruments that could replace in-person tests. Peter Chung, 4 SGA's history teacher, integrated the College Board model of open-book testing. This type of assessment has an application base with a time limit that still requires students to prepare and study for the exam in order to do well. Today's

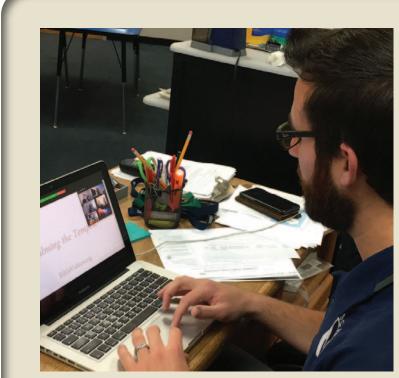
generation of young people are visually focused, Chung says, and social media occupies a large portion of their time. Because he has always taught history with the daily use of PowerPoint, complete with visuals and embedded videos, he believes his transition to distance learning was accomplished more easily. He approaches each class as a YouTuber would, studying how various people



Chorale meets with Director Sheen Sanchez to practice their music.



Anna Aitken, 1stgrade teacher, holds a parent/teacher conference through Zoom.



Junior high religion and history teacher Sean Lehnhoff shares a Bible video with his students.

make their presentations, and then integrating some of those styles into his presentations.

Michele Choi, an English teacher at SGA, agrees that distance learning has forced her to pursue creative options for classroom instruction. "Fortunately," she says, "I have been able to learn about different strategies from my tech-savvy colleagues. I would recommend providing chunks of time for different activities in order to break up the monotony of class time." It can be difficult for students to listen to a lecture while staring at a screen, so using informational videos that incorporate a variety of images and sounds brings positive results. Choi encourages teachers to experiment with the multitude of resources available to find online tools that fit well for them and for their students.

Teaching technology to students

who are using such a wide variety of devices adds complexity and can be difficult. The devices available to each student at home differ significantly. They include smartphones, iPads, and desktop computers, some PCs, others Apple products. Not all computer apps work well with all devices, and discovering which ones work better with specific devices was a challenge that needed to be quickly solved by the head of SGA's technology department, Faith Yeaton. Her advice is, "Don't get upset if some great intended plan doesn't work. Just keep trying until you find the desired connection."

Students are eager to share what they know, including their screens at certain times, and they are more than willing to help one another. "Let the students do some of the teaching," suggests Yeaton. Her students are discovering how to work with various technologies to make presentations in their virtual classroom. They are also creating media that can be viewed during video conferencing.

Teaching music is primarily performance based. Performing in sync within the environment of distance learning can be difficult to impossible, due to varying bandwidth capabilities. This problem has allowed Sheen Sanchez, SGA's choral music instructor, and Melvir Ausente, orchestra director, to adjust their teaching to focus more on the standards that each student is required to meet. Sanchez explains, "In music, our primary standards include creating, performing, responding, and connecting. Students had already learned and performed substantial amounts of music during the previous three quarters of the school year."

In both music realms, this period of quarantine has been devoted to the prioritized standards that have not yet been met. During in-person performance-based classes, more time is spent learning a repertoire for scheduled performances, resulting in a minimization of other aspects of the curriculum. Learning from home has provided the time to focus more on music literacy—music theory, sightreading, dictation, and score analysis.

Physical education presents other unique distance-learning hurdles. Students no longer have access to the conventional equipment in the gymnasium and weight room. Kevin Mc-Closkey, SGA's athletic director, explains that he and Mario Negrete, another physical-education teacher, have had to utilize skill development and bodyweight fitness activities that require household items, such as chairs, books, and exercise mats, rather than high-tech sports and conditioning equipment. Physical-education teachers have also been instructing their students using the MyFitnessPal app to log and record caloric input (diet), caloric output (exercise), and the BodySpace app to

build custom individualized workout routines using only space and equipment that are available at students' homes. Coach McCloskey has also found it beneficial to have his students lead the activities. He often places a student in charge of each portion of fitness and of each part of a skill,⁵ resulting in a higher degree of interaction. This physical-education forum has enhanced students' desire to participate in class and gives each student an opportunity to lead.

Approaching distance learning on the elementary level presents issues different than those faced in dealing with high school students. One primary obstacle in the lower grades is limiting students' required screen time. Research has shown that there is damage to cognitive functions with excessive screen usage.6 Thom Harder, SGA's Grade 5 teacher, suggests that, "In order to minimize and prevent the negative impact inherent in too much computer time, teachers of grades TK (transitional kindergarten)-8 maximize the use of handson activities for their students at home." Another solution to this challenge has been to construct assignments that students can work on away from the screen and have them to come back later to present the completed project to the class.

"Even before determining how students would log into their classes and navigate our digital platforms, I needed to find a way to find a balance between structure and flexibility for the sake of my young TK and kindergarten students and their families," states Rose Gorospe, TK-K teacher. COVID-19 has had a significant effect on households with multiple children who are sharing devices or working around the schedules of working parents or caregivers whose first language is one other than English. "What has helped me tremendously as a kindergarten teacher," Gorospe continues, "is to record videos of myself explaining topics and then post them for parents to refer to when they are working on a

particular subject with their child."

Young children are better able to stay engaged when movement is integrated into learning. "The general rule of thumb for those little eyes," Gorospe states, "was to have live screen sessions no longer than a fulllength movie and plenty of movement breaks in between." These breaks require students to stand up, look away from their screens, and complete certain assigned tasks, such as going on a scavenger hunt around the house, drinking two glasses of water, or mimicking their favorite animal as they walk to the front door and back.

Teachers in the mid-pandemic virtual classroom must realize that parents of students of all ages are having to create their own "new normal" schedule at home. That presents a very different picture for each family, especially those with younger students. One household may rise and shine at 8:30 a.m. and are able to have their children fed and ready to learn. Others may take advantage of a few extra hours of sleep. Still others may need to help their students after



Liam Guadiz checks in with his 4th-grade class with a "thumbs up."

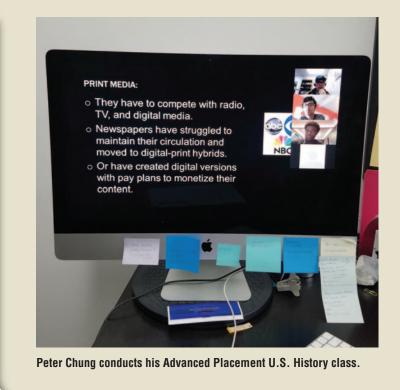


Sophomore Luis Jabla takes a break from his Computer Applications class.

a full day of work. The flexibility of a video that is accessible at the parents' discretion has proven helpful during this time. It gives a certain amount of control back to families who have lost control of so many things already, such as job security, the ability to shop for basic needs, or simply going out with friends.

SGA's faculty is learning and implementing new information in a way that is making them even better teachers. Although the challenges are great, and it may be too early to accurately assess the success of virtual classrooms, there are many positive indicators that students are receiving a quality education. They have shown more confidence and willingness to share their thoughts in a discussion during online classes, perhaps because they have the advantage of being shielded by a computer screen in the comfort and security of their own homes.

"One of my most rewarding moments," says history and Bible teacher Rychelle Lehnhoff, "was watching my students present a World War II history project on Zoom. As an extra challenge, I gave them the quest to research personal stories of individuals from the war. I shared about my grandfather and encouraged them to look into their own history and heritage." Many of her students thus learned about their own family history as they took time while at home to call their grandparents and ask them about their experiences. Others read a biography and learned about someone who intrigued them. Lehnhoff's students created stories, podcasts, videos, and paintings. Then they shared with their classmates on Zoom what they had discovered. "I was unsure how a project like this would go when the students were developing these things for online presentation without me being there to check in on their



progress. I was so impressed by all they did and actually got the most participation from any challenge I've given the students this year." They were excited about what they had learned.

The Takeaway

The feedback from parents has been positive and supportive. One high school parent said, "As a parent of two children enrolled at SGA, I can say unequivocally that this program has just as much depth and direct instruction as before, and it drives real learning. I'm very proud of what SGA has been able to accomplish in these difficult times." Another said, "SGA has put student learning first. Rather than using e-mail as the primary means of communicating assignments and lessons, our teachers are helping students learn, answering their questions, and creating real-time virtual classrooms and collaboration." An elementary parent expressed relief that her children were excited to log in to their virtual classrooms and to interact with their classmates and teachers.

Teachers miss seeing their students

in person. They miss interacting with them and chatting with them on breaks. The students have shared those same sentiments. SGA continues to plan for the most special graduation weekend possible for the Class of 2020. SGA's teachers personally delivered lawn signs to every graduate in honor of each one's accomplishments. The students were enthusiastic and told those who delivered them how much they missed school and all the teachers. Yet, they have remained determined and resilient as they contemplate the next step in their educational journey.

Despite the challenges, essential elements such as beginning classes with prayer, talking with students about how they are navigating the pandemic, and providing opportunities for students to share God's leading in their own lives and that of their families, are all still possible online, and are regularly incorporated throughout the class period. On the second day of distance learning, Kristi Huynh asked her 4th-grade students to share how they felt by giving

a thumbs up, thumbs sideways, or thumbs down. One student gave a thumbs up, and Huynh asked why. "My day is going well because I get to see all of you guys," came the reply. "It was a simple answer, but it spoke volumes," Huynh said.

Human interaction is at the core of education, which is all about relationships. For the Christian educator, this interaction is essential, since it is the teacher who will often be the person who leads students to the feet of Jesus. The essence of what we have learned from this experiment is that regardless of whether we are conducting in-person or distance-learning school, the teacher makes a difference. He or she plans for the instruction to be engaging and meaningful and sets the culture of the classroom. In addition to developing creative and innovative curricular adaptations designed to maintain meaningful connections with students. Christian educators must also maintain their own personal connection to the Shepherd, Jesus Christ, especially during this socially distanced time.

This article has been peer reviewed.

Bonnie Iversen, BA, has served for the past six years as Director of Advancement at San Gabriel Academy, a TK-12 educational facility in southern California, U.S.A. She received her Bachelor of Arts degree in English at Southern Adventist University in Collegedale, Tennessee, and has completed postgraduate studies at Louisiana State University and Southwestern Law School. Prior to joining SGA's administrative team, she was Chair of the Department of History at SGA for 20 years.

Recommended citation:

Bonnie Iversen, "Transitioning to Online School During the COVID-19 Pandemic: San Gabriel Academy Educators Share Recommendations for Good Practice," The Journal of Adventist Education 82:2 (April-June 2020): 42-47.

NOTES AND REFERENCES

- 1. John 21:15-17. New International Version (NIV) Holy Bible, New International Version®, NIV® Copyright © 1973, 1978, 1984, 2011 by Biblica, Inc.® Used by permission. All rights reserved worldwide.
- 2. Dr. Marie Alcock is President of Learning Systems Associates (LSA), an education consulting agency. She serves as an education consultant, and in collaboration with the American Education Research Association (AERA), People to People, and the Association for Supervision and Curriculum Development (ASCD), she has worked nationally and internationally to effect educational change. For more information see: https://www.lsalearning.com/about/.
- 3. Protecting students engaged in the online environment requires careful planning. For more on this topic see "Protecting Student Privacy: Learning From COVID-19" by Annette Melgosa and Ernest Staats on page 9 of this issue.
- 4. Names in this article are used with permission.
- 5. Student safety is of utmost concern and plans should be in place to ensure that safety measures, supervision guidelines, and instructions on how to prevent sports/physical education are clearly conveyed to students and parents.
- 6. Victoria L. Dunckley, "Gray Matters: Too Much Screen Time Damages the Brain," Psychology Today (2014): https://www.psy chologytoday.com/us/blog/mental-wealth/ 201402/gray-matters-too-much-screen-timedamages-the-brain.

Editorial Continued from page 3

within two years' time, we have received all sorts of interpretations. This is only normal and expected from diverse populations with access to extensive information and with a great deal of extra time. The problem is when we are lured by and accept radical positions just because they come packed in a little virtual message. As useful as the Internet has become, how misleading it can be! Long gone are the times when you only could share information if you were willing to take time to think, reflect, write, and distribute with the moderation that previous methods allowed. Today, through social media and electronic mail, we may freely use Copy & Paste, Forward to All, Share, Reshare, and so on. In an instant, you may have sent nonsensical, confusing, distracting, or even truly harmful content.

In conclusion, parents, teachers, and students must exert their unwavering commitment to develop their ideas, examining multiple and reliable sources and being critical of all. Most importantly, they must constantly inform and shape those ideas with Scripture. Never before has the message that true education is to "train young people to be thinkers, and not mere reflectors of other people's thought"4 been as relevant as it is today.

Julián Melgosa, PhD, is Associate Director of Education for the General Conference of Seventh-day Adventists in Silver Spring, Maryland, U.S.A. He serves as Liaison for Higher Education and Advisor for the North American, South American, and Trans-European divisions. Dr. Melgosa also serves as the Associate Editor for The Journal of Adventist Education (International Editions).

Recommended citation:

Julián Melgosa, "Seeking Balance in a World of Extremes," The Journal of Adventist Education 82:2 (April-June 2020): 3, 47.

NOTES AND REFERENCES

- 1. Ellen G. White, Counsels to Parents, Teachers, and Students (Mountain View, Calif.: Pacific Press, 1913), 74.
 - 2. Ibid., 74.
- 3. Ecclesiastes 7:16. New King James Version (NKJV). Scripture taken from the New King James Version®. Copyright © 1982 by Thomas Nelson. Used by permission. All rights reserved.
 - 4. Ellen G. White, True Education (Nampa, Idaho: Pacific Press, 2000), 12.

