

**Cultivating Purpose, Virtue, and Wisdom: An Action Research Study of Classical
Christian Education in a High School Business Classroom**

Vasti Arias-Montero

An Action Research Project
submitted in partial fulfillment of the
requirements for the degree of

Masters of Arts in Teaching

Western Oregon University

2026

Reading Committee:

Marcus Wenzel, Chair

David Fox

Program Authorized to Offer Degree:

College of Education

MASTER'S DEGREE FINAL EVALUATION REPORT

Completion Term: Spring 2026

Type of exit requirement: Action Research Project

The supervisory committee met with the candidate for a final evaluation in which all aspects of the candidate's program were reviewed. The committee's assessment and recommendations are:

Recommendations:

- ✓ Degree should be awarded

Recommendations:

- ✓ Exit Requirement has been approved
-

ACKNOWLEDGMENTS

This study was completed in partial fulfillment of the requirements for the Masters of Arts in Education. While this project represents my individual research, it would not have been possible without the support, encouragement, and guidance of many people.

First, I would like to express my sincere gratitude to my faculty advisor and committee members. Thank you for your expertise, thoughtful feedback, and encouragement throughout this exhaustive process. Your guidance challenged me to think more deeply about teaching, learning, and educational research, and strengthened both this study and my growth as an educator.

I would also like to thank the students who participated in this research. Their willingness to engage in the learning activities, provide brutally honest feedback, and share their experiences made this study possible. Their insight helped shape the findings and reinforced my commitment to create meaningful learning experiences for all students.

To my colleagues, mentors, and fellow educators, thank you for your support, collaboration, and encouragement throughout this journey. The conversations, shared ideas, and professional guidance you provided helped me refine my thinking and remain focused on the purpose of this work.

I am especially grateful to my family. Thank you for your patience, understanding, and unwavering support during the many hours spent researching, writing, revising, and reflecting. Your encouragement sustained me through challenges.

Finally, I thank *Yeshua* (יֵשׁוּעַ) for the opportunity to pursue this work and for providing the strength, perseverance, and wisdom necessary to complete it. This project reflects my belief

that education should develop academic knowledge, critical thinking, character and the capacity for meaningful participation in society— that is, the holistic development of a person.

To everyone who contributed to this endeavor, whether through guidance, encouragement, feedback, or prayer, this work belongs as much to you as it does to me.

Imago Dei. Soli Deo gloria.

Many Blessings,

Vasti

“Cultivate the habit of being grateful for every good thing that comes to you, and to give thanks continuously. And because all things have contributed to your advancement, you should include

all things in your gratitude.”

~Ralph Waldo Emerson

Table of Contents

Acknowledgments.....	ii
Table of Contents.....	4
Chapter 1. Introduction.....	1
Guiding Pedagogical Framework.....	5
Connection to InTASC standards.....	8
Summary.....	9
Chapter 2. Review of Relevant Research & Scholarship.....	10
Chapter 3. Methods.....	28
Context of Study.....	30
Data Collection and Analysis.....	33
Researcher Worldview.....	38
Chapter 4. Findings.....	42
Engagement: Foundation to Knowledge and Academic Language Through Purpose.....	42
Critical Thinking: Analytical Reasoning Through Trivium-Based Instruction.....	49
Social-Spiritual Development: Growth in Confidence, Identity, and Purpose.....	56
Chapter 5. Discussion, Limitations, and Conclusion.....	65
Limitations.....	67
Conclusion.....	69
References.....	73
Appendix A.....	80

Appendix B.....	82
Appendix C.....	83
Appendix D.....	87

Chapter 1. Introduction

The trajectory of my educational history has been one marked by the disciplined pursuit of purpose, virtue, and wisdom. In my early years, texts were treated with reverence. They were conversations had across time. Knowledge, specifically *scriptural* knowledge, was to be humbly received, wrestled with, and allowed to shape the soul before being questioned. However, as my schooling progressed so too did this formative humility only to be replaced by strict performative standards and self-righteousness. Deep thinking through readings and discussions were soon replaced by tempting external frameworks that centered around self-assertion and ideological expression. What had once been a simple invitation to accept Christ propitiation (John 3:16) became what increasingly felt like compliance to a system that demanded ideological performance rather than true transformative faith through grace (i.e. free undeserved favor of God manifested salvation) *of the things hoped for, the evidence of things not seen* (Hebrews 1:11).

In elementary school, I remember when stories explored *Biblical* and historical accounts on moral questions for their enduring account on meaning. We were invited to share our own lived experiences anchored within the moral lesson of the text. We read primary source letters, speeches, and texts that revealed lessons on the nature of leadership, responsibility, human desire, and the will of God. Why did the *Good Samaritan* act in a way others did not? What does the story say about mercy, love, and justice beyond social and cultural boundaries? What does this say about the nature of God? These moments cultivated a genuine love for learning.

In later grades, however, strict dogmatic “correct” social and religious positionings supplanted shared human experiences of God’s goodness to prescribed political interpretations

detached from the deeper purpose of education— a cultivation of humanity in search for the ultimate truth in love (John 14:6; 1 John 4:8) and our position in the world. Discussions with classmates felt constrained. To mention the name of Jesus or references to Christian philosophy was met with shunned antipathy. I disengaged as my contributions were frequently filtered through an imposed oppressor-oppressed *worldview* that framed my identity primarily in terms of presumed wound arising from poverty, systemic privilege, and discrimination rather than acknowledging my identity as a new creation in Christ (2 Corinthians 5:17). Faith was treated as something private, disconnected from learning, disconnected from knowledge, and disconnected from truth. Within this climate, I wondered: How could I integrate my faith and reason for living into a secularized environment? Wasn't knowledge the pursuit of truth, and ultimately, of the ultimate good (Plato, Republic, Book 7).

It was not until I transferred from Oregon State University to Willamette University, then to Chemeketa Community College, and finally to Corban College, changing majors from political science and pre-law to a practical trade, accounting, that I encountered what education was meant to cultivate. In contrast to my earlier experience with increasingly formulaic and ideologically constrained instruction, this transition introduced me to learning as a formative and humanizing endeavor. Through the exposure of Christian apologetics, classical texts, guided discussions, and emphasis on objective truth and moral formation, I rediscovered education as a human endeavor that seeks to cultivate the intellect, will, and character across culture and history. Classical Christian Education (CCE) affirms students are not merely products of social forces, but rational beings capable of wisdom, virtue, and responsibility.

Modern schooling had replaced conviction with relativism, isolated disciplines from any unifying purpose, and taught students what to think rather than how to think. The result, as

Dorothy Sayers (1947) warned, was students who have learned subjects but forgotten how to learn. CCE recovered the Trivium— Grammar, Dialectic, Rhetoric— to restore disciplined reasoning, moral formation, and the pursuit of what is true, good, and beautiful.

In America, pragmatism, as an extension to empiricism and led by John Dewey, shaped the progressive education movement (Diehl, 2006). Dewey argued that because human experience is fluid, truth itself must be subject to change, a position closely tied to cultural relativism (Diener, 2015, p. 77). However, any view that makes truth relative, according to Mortimer Adler and Robert Hutchins, father of the Great Books program focusing on literature from Western civilization, creates “moral and intellectual chaos” (Barcalow, 2001, p. 23). The study of Western history addresses the “fundamental yearning for dignity, moral uprightness, order, freedom, purpose, and transcendent value” (Hicks, 1999, p. 138). Plato explains in the *Laws*, that education is not training for an occupation or trade but to cultivate virtue to nurture the holistic flourishing of human persons. This philosophical idea of man is expounded on by Perrin (2004) who claimed that the progressive model reduced student expectations for work and achievement through more entertaining and fun methods resulting in softer grading and reduced discipline for misbehavior to protect student self-esteem (p. 17). These critiques underscore the enduring value of CCE in restoring education towards the flourishing of the whole person as grounded in objective truth, moral formation, and cultivation of virtue.

Relativism leaves students adrift— their minds, as Chesterton wrote, disconnected from things. The trivium pushes back on that drift by treating reasoning as something that can be named, practiced, and defended: that things are real, that truth and error differ, and that what a student knows, and says and makes matters. As John Senior put it, students are made "for the stars but rooted in the soil" (Bethel, 2016, p. 8). This study sought to discover what happens

when rooting comes first, and whether a Trivium-based approach could sustain those gains across a term was the question this work pointed towards next.

My journey as an educator has led to the conviction that students learn best when education connects to purpose. Above content methods, technology, and environment, education should cultivate the transformative qualities associated with *Basileia*, or Kingdom consciousness, particularly hope, meaning, and human flourishing (Estep et al., 2008, pp. 265, 253). When learning becomes a living endeavor grounded in spiritual, logical, and critical forms of awareness, students are better positioned to engage both the realities they inhabit and the responsibilities they bear with them.

Kingdom consciousness calls individuals to discern the deeper moral and spiritual dimensions of reality and to participate in God's redemptive work within the world. Similarly, Paulo Freire's concept of *conscientização* describes the process of awareness of the social, political, cultural, economic, and institutional forces that shape human experience and the capacity to transform those realities through reflection and action (p. 36). Although recognized as two distinct intellectual traditions, they can be reconciled in a socio-spiritual lens that understands liberation from sin and oppression as both social (i.e. economic and cultural) and spiritual.

From this perspective, conscientization extends beyond awareness of "white" oppressive structures to a discernment of deeper moral and spiritual realities that sustain or challenge those structures. Together, they suggest that education should cultivate learners who are capable of recognizing injustice, pursue truth, exercise wisdom, and participate in the ongoing redemption and restoration narrative within their communities.

Guiding Pedagogical Framework

Classical Christian Education (CCE) is a time-tested educational system which establishes a *Biblical* worldview (called *Paideia*), cultivates the seven Christian virtues, trains students in reasoning through the *Trivium* (grammar, logic, and rhetoric) and *Quadrivium* (geometry, arithmetic, astronomy, and music), and engages children in “the great conversations” through the historical *Great Books* (Anthony & Benson, 2003, p. 55). This diverse classical methodology moves beyond the conception of ‘traditional’ classical schools founded after the Enlightenment and stem from a development of the Middle Ages birthed from Greco-Roman thought and Christianity (i.e. the *Western* tradition) (Harken, p. 31).

Greek culture realized the power of building culture in responsible contributing citizens, *intentionally*, through *Paideia* (pp. 16-18). It assumes that education is not a standard of living or way of life, but a civilization that deliberately pursuits a common idea for human character, for if an ideal is no longer commonly held, it signals a disintegrating civilization whereby ideals are no longer commonly held, clearly understood, or deliberately pursued (The Classical Difference). The *Paideia* (Παιδεία) was the purpose of nearly all Western education as parents were called to raise their children in the *Paideia of the Lord* (Ephesians 6). It not only involves merit, education, training, or good character, but is a way of viewing the world passed down from teacher to students that describes the values we love, the truth we actually believe, and what we assume about the nature of the world all within terms of a child's desire, passions, and loves.

To pursue these tenets in my own teaching, I must create an environment that integrates the seven virtues (Justice, Prudence, Temperance, Fortitude, Faith, Hope, and Love) as employed through story, habit, recitation, and community standards within a framework of

mastery for learning. Of course, district mandates will require that secular standards be implemented; however by using a CCE framework that incorporates these virtues common to *all* human experience, I will be able to frame, align, and diversify these mandatory assessment standards to align with these central tenants. As a community of learners, good teachers are scholars and learners who discipline students while older students promote the pursuit of joyful learning among younger students and because you don't really know something until you can teach it. This will help to cultivate love and generosity in strong students, who should share their gifts and insights. Because few worthwhile things come easily, I will promote joyful rigor, *Soli Deo gloria*, connotatively meaning engagement in sustained attention.

Primarily, socratic discussions created a community where students can find their own voice through training in the art of reason and argument via dialogs from the greatest literary sources. It gives students the opportunity to rephrase, summarize, and explain the most important concepts of the study. A beautiful and purposeful environment conveys artistic distinction within the classroom decor by pulling children up rather than appealing to a base desire for sensation and entertainment. As students learn to cultivate restful learning, *scholé*, or undistracted time to focus on what is most worthwhile usually among friends, a beautiful place, and with good food and drink, they are given space for deeper intellectual and personal formation. By intentionally creating space during class for thoughtful discussions, collaborative inquiry, and reflective synthesis, the classroom becomes an environment that supports both cognitive depth and emotional calm. In this manner, students are better able to engage in complex ideas, articulate understanding, and develop a genuine appreciation for *Truth, Goodness, and Beauty*. This disciplined form of rest and sustained attention encourages wonder that feels focused, peaceful, and hospitable.

Moreover, modern educational routines tend to rush through content. The liberal arts are skills that free a person to learn for themselves, direct themselves, and lead others well. Cassiodorus and Isidore of Seville organized the liberal arts by identifying seven arts and dividing them into the trivium (grammar, logic, and rhetoric via discipline, skills, and habits of mind) and quadrivium (arithmetic, geometry, astronomy, and music). Christ consciousness liberates a person from the world because it frames the truth of human nature, God's harmony in all subjects, and the redemption of Christ sacrifice and salvation in our lives (Johns 3:16). CCE removes barriers between areas of study to make connections among subjects as it relates to God. Students learn to use all their skills in every class and develop habits of considering everything in life from a Christian worldview. The goal is to teach deep rather than broad in all areas of life and academics by thinking carefully whenever they encounter a new idea— not just when preparing for a test.

Looking back at my educational experience, I have found that the teachers who implemented aspects of these tenets in their classroom are highly successful and what they taught me remains with me to this day. When I consider what teacher I want to be, I think about Mrs. Aguilar (Dual Language Spanish), Mrs. Alfaro (Hispanic Southern Baptist Sunday School), Mr. Garrett (High School Orchestra), Mrs. Horsely (Elementary/Middle School Orchestra), Mrs. Jones (Seventh and Eighth Grade Latin/English), Mrs. Solis (Bilingual Second Grade), and Mr. Wisner (Bilingual Third Grade)— the seven main teachers in my life who shifted my perspective and changed my professional trajectory. They may not have all been practitioners of CCE, but they certainly kept me engaged and active, developed my critical thinking repertoires, and empowered me to change the status quo through the *True, the Good, and the Beautiful*. Without them, I may not be sitting here writing this today. They challenged me to find the truth and

inspired me to teach business. Using the framework of CCE, I plan to do the same for my students during and beyond this project.

Connection to InTASC standards

The goal of this action research project was to examine how purpose-center pedagogy rooted in faith (as limited to the dictates of secular spaces), hope, and authentic connection can enhance student motivation and engagement using daily work and assessment to determine the effect of student learning as measured by quantitative and qualitative data. I noticed students turning in Shark Tank notes more frequently than they do simulations. Pascall (2022) states that one of the biggest complaints they have had from vocational business pupils is that there is too much lengthy report writing that is not reflective of the workplace environment (p. 72). Shark Tank notes address this problem. Shark Tank videos are played every Monday given the restricted 30-40 min time frame. The assignment is composed of two parts: the video and the reflection that includes valuation calculations for two instructional videos.

The project aligned with InTASC standard 1: Learner Development and 6: Assessment by employing these two methods of assessing learner development and asking students to reflect on their learning experience. The first method consisted of daily work students can take home as homework if students are not able to complete it in class. This type of work was worth thirty percent of the total grade in the class. The remaining seventy percent were allocated to assessments. Written responses gave students the opportunity to demonstrate critical thinking and served as a social emotional tool whereby students could reflect on their experience as a learner within a 150 word summary. The goal was to get students to start writing, get thoughts on

paper, and slowly move into a critical thinking reflection process as they continue to write. I think this was an effective activity as it gave students structural consistency.

The project is also aligned with InTASC standard 8: Instructional Strategies as my research aimed to employ a variety of instructional strategies to determine the effect upon students development of deep understanding and their connections to meaning making. I specifically aimed to investigate how teacher language and scaffolded learning experiences can help students see academic work as a pathway to personal and spiritual growth. These standards were in line with CCE and the scope of my project. In using these standards to support my research, I hope to show that CCE can maximize students' submission success for both assessment and daily work assignments in secular business CTE learning environments where secular faith based practices can foster multiple perspectives, academic competency, and a *kingdom* consciousness that move past societal beliefs on student limitations.

Summary

My educational journey has been shaped by language, faith, and purposeful instruction that integrates classical foundations. I learned that teachers possess the power to awaken purpose. All these experiences form the foundation of my action research in engagement, motivation, and learning or purpose, guided by frameworks of Classical Christian Education (CCE). This model unites the seven virtues and the Trivium to cultivate reasoning, reflection, and love of truth, beauty, and goodness. Although they may not have realized it, many of my teachers embodied these virtues and inspired my purpose-center pedagogy. I strive to integrate faith, hope, and authentic connection to help students see academic work as both personal and transformational in the hopes that they will serve something greater than themselves.

Chapter 2. Review of Relevant Research & Scholarship

The purpose of this action research is to examine how classical educational practices, specifically, low stakes assessments, socratic seminars (i.e. Shark Tank), and writing (i.e. commonplace journals) align with knowledge rich instruction to promote critical thinking, engagement, and long-term retention in a high school business classroom. Business education often prioritizes technical competencies at the expense of a more holistic approach that cultivates habits of mind, persistence, and ethical reasoning. Building on this concern, E.D Hirsch (2016) argues that a knowledge-rich, systematic curriculum is essential for developing grounded shared cultural knowledge that provide students from disadvantaged backgrounds with access to knowledge and skills necessary for social mobility. Similarly, W.E.B Du Bois challenged purely vocational models in favor of a classical liberal education that prepares them for leadership. These perspectives serve as a foundation for deep learning essential for cultivating “wise men and women skilled in speaking” (Baxter, 2008, p. 25). Dialogue and reflective writing aim to move students beyond surface level learning towards critical thinking and long-term retention whereby students are able to participate meaningfully in their future endeavors in academic and professional settings.

Arjomandi et al. (2018) studies the use of active teaching methods to motivate students in non-traditional and traditional students and how psychosocial factors influence successful self-reported achievement using *Kahu’s Conceptual Framework for Student Engagement*. The model emphasized the multifaceted sum influences that surround a student life. Structural influences are student background, support, family and lifeload (the sum pressure to a student's life), as compared to the school's culture, politics, curriculum, assessments and discipline. This psychosocial influences can further between the schools teaching, support, and workload and the

students motivation, skills, identity and efficacy. This comprehensive research study compared engagement between traditional and non-traditional students using a self-report survey method which incorporates antecedents (structural and psychosocial) and consequences (proximate and distant) active teaching strategies. The study found that Non-Australian and non-English speaking background students, those identified as being from a minority or working greater than 30 hours per week, display statistically significant higher motivation, higher academic achievements, and also reported greater gains in personal and professional skills compared to traditional students. Additionally, traditional and non-traditional students had different learning needs and preferences since student engagement defined in terms of skill acquisition is a stronger appeal for non-traditional students but not necessarily correlated to higher academic grades. The use of active teaching methods to encourage participation like a call for a show of hands, powerpoints, probing questions, graphics and cartoons, annotations, formal or informal collaborative groups, and simulations did not differ in student engagement for both traditional and non-traditional students.

This research meaningfully shaped how I understand CCE due to its emphasis on understanding a student's holistic environment and its relation to student affect on their learning process. The study demonstrates CCE's intentional structure by emphasizing a variety of applicable teaching practices that emphasize the formation of virtues through moral vision, teaching modeling, collaborations, and reflective habits. In reflecting on the methodological efficacy of the article, the study could have benefited from direct observation since reliance on self-assessment may not always yield reliable or comprehensive data. Moreover, additional research could have explored how structural and psychosocial influences, such as student background, family supports, school culture, curriculum, and workload, interact with CCE's

virtue oriented pedagogy to affect student engagement and identity formation. Further inquiry into these dynamics would help clarify the specific teaching strategies, such as active learning techniques (e.g., song, proverbs, guided journaling, peer discipleship, discipline workshops on focus, time-management, and mindfulness) feedback cycles, and collaborative group studies that most powerfully shape students' moral and academic development within CCE.

Baxter (2008) thesis argues that classical rhetorical exercise known as the *progymnasmata* should be fully integrated into the modern secondary school classrooms as a comprehensive model for developing students' reading, writing, thinking, and speaking skills as a form of civic readiness. Baxter uses a qualitative comparative textual analysis method to examine competing epistemological theories (e.g., expressivist, process, and social), and draws heavily on historical sources and scholarship. The analysis is grounded in the concept of *progymnasmata*, or holistic education through the imitation and incremental skill building to promote social engagement. The author concludes that the pedagogy of *progymnasmata* offers a pedagogical model that improves modern educational instructional fragmentation, lack of purpose, and limited audience awareness by having students participate in exercises that develop students' expressive capacity.

Baxter's scholarship deepens by understanding of rhetoric within the CCE rhetorical tradition by explaining how these methods cultivate intellect and character. Frank D'Angelo, modern rhetoric author of *Composition in the Classical Tradition* (2000), provides examples as to how ancient rhetoric can simultaneously provide both moral instruction "by encouraging speakers and writers to discuss political, social, and domestic ethical issues and to debate them in speech in writing" (Baxter, 2008, p. 20 as cited in Composition 2) and prepared students for many professions (p. 24). The inclusion of additional texts such as Sharon Crowley and Debra

Hawhee's *Ancient Rhetorics for Contemporary Students* (2004), Richard Lanham's *Analyzing Prose* (2003), and Edward P. J. Corbett and Robert Connors's *Classical Rhetoric for the Modern Student* (1999) provide methodological parallels that translate classical rhetorical training into modern business classroom practices while fostering interdisciplinary development. While the research lacks in qualitative classroom based data, it is among the few that attempt to validate the effectiveness of progymnasmata and its historical precedent in shaping students who can be effective communicators, leaders, and citizens. Evidence from Isocrates' (a.k.a. The Father of Humanism) educational model (i.e. the belief that training in language and judgment would produce a genuinely cultivated man who would be able to resolve complex human affairs) demonstrated that it was effective in "produc[ing] not only leading politicians, but also historians and educators" (Baxter, 2008, p. 24 as cited in Murphy A Short History, p. 33). This aligns with the CCE pedagogy of cultivating wisdom, virtue, and eloquence so students can pursue truth and goodness while being responsible for their academic and personal lives as engaged critical thinkers and communicators.

Beverson (2023) examined the relationship between low-stakes testing and course performance through a literature review of existing scholarship on active retrieval from memory and assessment strategies. The purpose of the study sought to find the optimal way to utilize the testing effect (i.e. frequent and low-weight assessments) to enhance student learning and academic course persistence. The author used a review methodology to synthesize strategies from education and psychology studies that examined quizzing, quick response, and low stakes assignments. The analysis was especially informed by cognitive theory that suggests that active retrieval of information strengthens long term memory retention (as cited in Yang et al., 2021). The author provided a table of tools strategies that could practically help students prepare for

tests and the level of perceived effectiveness as stated by students (e.g., Kahoot, notes, reviews, quizzes, powerpoints, study guides, videos, lectures, discussions, labs, and textbooks).

Specifically, Kahoot showed to be the most effective tool in improving engagement, motivation, and academic performance (as cited in Iwamoto et al., 2017; Mdlalose et al., 2021). Additionally, the study found that low stakes writing helped students involve themselves more in the ideas or subject matter of the course as cited in Stewart-Mailhiot, 2014; Elbow, 1997). This is especially important since the author references Burton and Chadwick (2000) who found that “94% of students surveyed had an assignment that required locating information in “sources beyond the course textbook, “with 66% of respondents being assigned a research paper” (p. 5). The author concluded that low stakes testing is an effective pedagogical tool that strengthens knowledge retention and retrieval, promotes metacognitive awareness for productive study habits, enhances research skills, and increases the likelihood of passing a course through persistence (p. 1).

The article influences my understanding of assessment practices as a learning tool to steer students towards virtue, specifically, persistence. By giving frequent opportunities to strengthen long term learning in a supportive learning environment, I can use the synthesized research provided by the study to create assessments with quizzes, rapid response activities, and low stakes writing assignments designed to improve retention through spacing, intervaling, and feedback (Beverson, 2023 as cited in Rausch & McKenna, 2020). The major limitation of the study is that the research mentioned focused on undergraduate students. Despite the limitation on younger brain development that need greater scaffolds, the study meaningfully applies to a classical business education as frequent low stakes assessment can reinforce the dialectic stage of learning whereby students are encouraged to retrieve, analyze, and apply knowledge repeatedly. As Dorothy Sayer emphasizes, critical thinking and inference are essential for understanding the

world; facts alone do not reveal ultimate truth but require interpretation and context to produce meaning (Higham as cited in Sawyer, 1948, p. 15). This perspective suggests that educators should aim to cultivate deeper understanding rather than merely present information and assessments. By structuring repeated low stakes tasks that allow students to *revisit* information across multiple contexts, educators can provide students with opportunities to *hone the research skills* necessary for *significant course projects* (p. 6). This practice is embedded within the concept *Schol *, in which learning occurs through thoughtful reflection, disciplined practice, and sustained intellectual engagement.

Boa, Wattanatron, & Tagong (2018) investigated the critical thinking skills of 371 undergraduate business students at Naresuan University International College and developed and validated the Blended Socratic Method of Teaching (BSMT) model to address deficiencies in students' higher-order thinking, grounded in the Persons Education, Inc. *RED Model of Critical Thinking* (i.e. recognizing assumptions, evaluating arguments, and drawing conclusions), the student used the Watson-Glaser Critical Thinking Appraisal to determine students' proficiency levels. The BSMT model combined face-to-face Socratic dialogue with information and communication technology (ICT), specifically integrating Facebook as a supplementary discussion platform in a blended learning format. Using the six instructional components of a teaching model identified by Groccia (1997) and Joyce et al. (2009), focus, syntax, principles of reaction, the social system, the support system, and application, the authors designed a five step syntax that include case analysis, group presentations, in class Socratic questions, and online dialogue. Expert reviewers unanimously rated the model as "highly appropriate," concluding that the integration of structured Socratic questioning, collaborative case analysis, and technology created an authentic and comprehensive framework for improving business students' critical

thinking skills (p. 87). The inclusion of real-world business case studies grounded learning in practical workplace contexts, while Facebook discussions extended dialog beyond the classroom and aligned instruction with the habits and learning preference of today's digital native students.

The study furthered my understanding of CCE because the BSMT model offers strong application through structured Socratic dialogue around Shark Tank style case studies, encouraging students to discern underlying assumptions, evaluate entrepreneurial claims, and draw ethical and strategic conclusions. The study's strength lies in its clear theoretical grounding, validated instructional framework, and practical application to business case pedagogy. The integration of socratic questioning with structured case studies mirrors real-world decision making environments where recognizing assumptions and evaluating arguments are essential for competitive success, exactly the skills employers identify as high priorities in workforce surveys (American Management Association, 2010). However, the study's weaknesses include its short ten week duration, lack of control group, reliance on a single institutional collegiate context, and possible language barrier affecting *Watson-Glaser* scores for English language learners.

Hocking (2010) investigated the importance of writing journal reflections as a holistic approach (cognitive, affective, spiritual, multiple intelligences, and inclusive education) by using symbols, film, quotations, and open ended questions in an introduction to a cost accounting class that align with AICPA core competencies. The study used multidimensional and multidisciplinary service— learning experience enhanced by holistic approaches and analyzed how students developed the ability to listen more deeply to multiple perspectives of the diverse population, solved problems more effectively, communicated better, and deepened their understanding of business, accounting, and diversity issues. These writing practices allowed for self-expression and fosters deeper empathy. The researcher concluded that deeper self-reflection

occurs when students are able to freely integrate feelings, metaphors and quotations, poetry, and symbols as evidence of affective and spiritual dimensions of learning. Moreover, the author posited that the integration of epistemological (cognitive), interpersonal (sense of self), and relationship with others, within service learning, enabled students to develop an empathic connection that led students to engage more deeply both inside and outside the classroom as cumulatively integrated through drawings, storytelling, and dance. When teachers created an environment that is spiritually grounded and culturally relevant, both teacher and students were empowered to be authentic and make changes occur.

This article influenced the way I see CCE because it provided me with direct business resources that address how to incorporate reflective practice in a classroom that can benefit students spiritually. Many of my students have a strong belief in God or come from families with religious backgrounds that reflect pious practices; therefore, this knowledge can be implemented and studied immediately for my own classroom. The strength of the article is that it provides specific journal writing guidelines such as possible formats, planned time for writing, a variety of styles and content, and questions to consider that can be integrated into the classroom with applicable eases. It examined the way teachers can incorporate cultural sensitivity through trust and community based projects in tax preparation, management, and marketing assistance to marginalized groups. By looking at the effectiveness of these studies, it becomes clear that students of religious backgrounds could benefit from a curriculum and classroom environment that reflect their own culture and experiences through an authentic environment that allows for contestation. I would suggest that the author provide a more quantitative study to enhance validity and replicability. While the author examined current culturally relevant practices as expressed within a need for authenticity in the classroom through "integrity of being" (Hocking

p. 16 as cited in hooks, 2003, p. 164), Hocking leaves gaps in the study related to measurable impact of journaling on students' cognitive development and transferability of reflective practices across diverse business related contexts. By conducting qualitative research that measures rhetoric as a higher-level thinking skill, the researcher would have provided teachers with clear grounded evidence on how journal reflection fosters critical analysis, ethical reasoning, and cultural sensitivity. Furthermore, the data would give educators concrete benchmarks to assess student growth, albeit informally to maintain the feeling of not being judged, and thus make the reflective practice both spiritually meaningful and academically rigorous via constructive feedforward feedback resembling the natural progression of a rhetorical dialectic.

Johnson and Jahan (2021) examined whether the classical pedagogical practice of commonplacing improves students' critical reading and critical thinking in a first year composition college course. The purpose of the study was to address the gap between renewed theoretical interest in commonplace books and the lack of empirical evidence demonstrating their effectiveness in modern classrooms. The authors frame contemporary digital reading habits as a return to nonlinear annotation-based practices in which reading and writing functioned as inseparable meaning-making activities. They also drew upon Ellen C. Carillo's argument in *Teaching Readers in a Post-Truth America* that integrates reading instruction and information literacy as essential for sustaining democracy alongside John C. Bean's advocacy for writing as a vehicle for critical thinking. Methodologically, the primary investigator taught three sections of a first year writing course and assigned each to one of three groups: no commonplace book (No_CP), quotations-only commonplace book (CP), and quotation-plus-reflection commonplace book (CP+). Students read diverse texts on the First Amendment and freedom of speech,

endangered in structured small-group discussions, wrote group rhetorical analysis, and completed pre and post-unit timed writing samples. Using AAC&U VALUE rubrics for Reading, Critical Thinking, and Written Communication, with blind scoring and statistical analysis (i.e., Kruskal-Wallis), the teachers compared performances across groups. Although no statically significant differences emerged, the findings suggest that quotations-only commonplacing is not necessarily superior to other instructional strategies. However, participation in “commonplace book culture” (i.e., integrated readings, reflective writings, and collaborative dialogues) supported students’ ability to consider multiple perspectives and evaluate varied information sources.

Johnson and Jahan’s article strengthens the scholarship on classical pedagogy by attempting the only known replicable, data-informed study rather than offering a purely descriptive account. Its use of blind scoring, multiple rubrics, and statistical comparisons enhances credibility, and its attention to civic formation situates reading instruction within broader democratic aims. This article benefits my research of CCE as it affirms the unity of reading, writing, and reflection and its emphasis on imitation, meditation, and moral formation. Specifically, as described by the study's reference to Michele de Montaigne's fragmented reading practices, the integration of quotation and written reflection mirror practices historically used to cultivate wisdom and discernment (p. 278). In my high school business classroom, commonplace books could be applied in conjunction with foundational texts, ethical case studies, and financial literacy readings. However, several significant weaknesses temper its conclusion. Environmental inconsistencies across class sections, reliance on a single rater, rubric subjectivity, varying student motivation, and attendance difference complicated the findings. The absence of statistically significant differences suggest that the effectiveness of commonplacing may depend

less on the specific format used and more on classroom culture and the level of student engagement. Although the study cautions against assuming that commonplace books automatically produce critical thinking, it nonetheless supports the implementation of dialogical and reflective reading practices that encourage students to engage multiple perspectives (p. 291). This intentional process of reading, revisiting, and reflecting cultivates habits of document that are essential for both democratic citizenship and principled entrepreneurship.

Marcus, S. (2018) examined how digital games and simulation can help students build the skills needed for the 21st century workplace and its effect on student motivation through digital apps such as *MoneyU*, *Hot Shots for Business*, *EVOKE*, *Monster Command* and *Key Commando*, the *Stock Market Game*, and the *Virtual Enterprises Simulation*. The author states that “[s]imulations help students stay motivated because they keep building on material they already know and give them the experiences they can relate to real-world situations” (p. 22). This means simulations are best employed as low-stakes assessments as opposed to independent learning models. The authors pursued this graduate research through a literature review of theoretical frameworks within digital literacies. This data led the author to conclude that in order for simulation to be part of a school daily practice, students need to be held responsible to properly care for and appropriately use the technology, schools will need to determine if standardized tests are the best way to test the students' knowledge, and the departments at the state and national level need to determine if they will test for knowledge or for skills.

This study enhanced my understanding of CEE because it highlighted the importance of integrating simulation to prepare students with job market skills. With an ever-changing job market, teachers are preparing students for jobs that do not yet exist. The strength of this article is that it provides a plethora of peer-reviewed journal references teachers can read to further

understanding. A practice I found useful for my classroom is the technique called leveling-up where students focus more on learning than on performing and focus on positive stress instead of negative based on a clear hierarchical assessment measure. The main pitfall of the article is the lack of a direct methodological examination based on testable variables.

Porter (2024) seeks to answer how a Classical Christian Education (CCE) can help break generational poverty in urban students. The researcher used quantitative (i.e., high school graduation rates, chronic absenteeism rates, and standardized test scores) and qualitative markers (an assessment of virtues and habits) in assessing a correlation to demonstrate a closing disparity gap between urban students' more wealthier counterparts. In order to break generational poverty, students just obtain a high school diploma or GED (Porter, 2024 as cited in Privette-Black, 2021), get a full time job, and get married before having children, in that order, and "richer language, better nutrition, better health care, and wider experiences" (Porter, 2024 as cited in Hirsch, 2016, p. 91). The study analyzed three CCE schools to analyze how CCE data benefited diverse populations. The survey collected by *Notre Dame* in collaboration with the *Cardus Educational Society* quantified school sector influence on academic, spiritual, cultural, civic, and relational outcomes through seven areas: academic preparation, outlook on life, Christian commitment, Christian life, conservative and traditional, independent thought, and influence through their *Good Soil Study*. They argued that integrating parents through parent involvement day, Saturday school, house communities, and parent contracts helps cultivate the parent-student-teacher triad that recognizes the important role of parent involvement in the education of students as the first step in escaping generational poverty. In addition, they concluded that cross cultural parenting classes covered topics such as financial management, sleep and nutrition, relationship building, habit development, and the effects of technology on

child development. In addition, they concluded that CCE students outscore all other students in every life outcome in the individual profiles and in the composite profile. Moreover, student self-concept was higher than their state counterparts in terms of academic, spiritual, and relational preparedness. This suggests the social emotional stress of chronic poverty diminishes the capacity to pursue goodness and virtue (i.e. morality) since according to *Maslow* the needs in the first four levels have not been met.

Porter's article furthers my understanding of CCE because it directly informed me on the nature of poverty and its relation to modern pedagogies of education for occupation rather than for life. More than half of my students fall into ACE's classification of poverty; therefore, this knowledge can be implemented immediately into my classroom. By focusing on the main question, whether a classical Christian education can help break generational poverty in urban schools, the article centers its purpose with clarity by reminding the reader that the article is not meant to solely study the current movement of diversity, equity, and inclusion, but to focus on purposeful education centered on the formation of a mature, moral, and rational adult—to think critically, to converse meaningfully, and to live virtuously (Porter, 2024, p. 30 as cited in Caldecott, 2017; Leithart, 2008). The article benefits my research as it mentions key strategies and partnerships to create *kingdom agents* for the glory of God, thus providing a practical guide to implement in my classroom. When observing how the schools examined within the study create a community of camaraderie through parent contracts and house communities, it broadened my understanding on how familial influence results in higher qualitative markers of academic and life success. When reflecting on the article, I find this article could expand on the "Thrive Rubric" for healthy flourishing and how teachers determined which student behavior fits within each as a qualitative marker for success. This study could also benefit from

qualitative data from a parent teacher conference since it would solidify our understanding of how teachers see the student is gaining in virtue and how the parents experience growth or setbacks at home. While the conclusions made in this article are strong, they fall short in fully explaining how the link between morality and poverty since only a small space is reserved at the bottom of the report card for teacher remarks on the students' character and fails to discuss what steps are taken if the child or family does not or cannot uphold such standards. Additional research is warranted to determine whether a synergy of a biblical world view and classical education give students the best chance of escaping generational poverty.

Poucher, D. R. (2017) discusses the need for personal finance literacy (PF), the current approaches of higher education institutions, the path for adaptation as a general education (GE) course offering, and the integration of Christian faith topics (i.e. pedagogical approaches and resources for a semester-long class). The paper used a Christian education liberal arts pedagogy that emphasizes the global realities and complexities of local, national, and international issues that promote global responsibility and uphold the dignity of all people. It uses a multi-faceted approach to PE issues to broaden the appeal of PE as a GE offering visibility and awareness. The article examines the personal finance literacy historical problems as a result of delayed gratification involving saving and spending, and deterioration via saturations of household, school, and credit debt. Since the number one reason for dropping out of college is financial and 60% of students have not had a personal financial course in high school, the findings suggest higher educational models can be useful in widespread higher education. The article found that successful higher education models include Interactive Online Programs (IOP), Classroom-based Programs, Game-based Education, Event-based Programs, and Individual Counseling (Poucher as cited in Financial Literacy, 2014) in a flipped-based classroom. The article concluded by (1)

identifying the criteria that include various disciplines (macroeconomics, political sciences, sociology/social work, psychology, and theology) under the assumption that students' motivation determines, directs, and sustains what students do to learn, and (2) identifying faith based themes in personal finance literacy.

This article changed my understanding of CCE as a central responsibility of educators by highlighting the monetary trends presented in the study. With this focus I am able to test these five successful models to support my instruction in finance. The author provides clear guidance in integrating Christian principles into education after first establishing a comprehensive understanding of literacy components across multiple disciplines. A strength of the article is its recognition of the risk inherent in programs that frame tithing or stewardship as another obligation or debt, particularly when tied to local church initiatives that may appear self-serving, such as Dave Ramsey's Crown Financial Ministries. While such programs create opportunities for parental involvement, they may also alienate families with secular perspectives. I suggest further research focus on systemically testing these successful models to evaluate their effectiveness in higher education and secondary school settings, with particular attention to comparing the five modalities within Christianity and examining their adaptations to secular contexts.

Smith et al. (2016) examine the relevance of Great Books pedagogy within contemporary business education, particularly in response to growing concerns about business students' low ethical standards, weak soft skills, and limited integrative thinking. The paper defines the Great Books program as a curriculum built around primary texts (i.e. articles or books and articles regarded as widely influential customarily of the western tradition) (p. 49) and student-directed discussions, illustrating how such programs promote active learning, cognitive complexity, and

ethical awareness (p. 51). The authors argue that through peer-led dialogue engagement with interdisciplinary classics, students develop emotional intelligence, civic discourse skills, and leadership capacities. Additionally, when the Bible is incorporated among the primary text, the program can support the formation of a robust biblical worldview.

The article impacted my understanding of CCE as it acknowledged the limitations of existing business modes and its aligned with student-center pedagogical principles similar to the classical Christian concept of *paideia*. It offers a practical interpretation of how Great Books methods might cultivate deeper moral and intellectual development in business students. However, the study is constrained by its reliance on personal impressions from professors and students rather than quantitative and empirical evidence. It also lacked a detailed, research-based account of thoughtful conceptual arguments of Great Books pedagogy while signaling the need for more rigorous research.

Vintinner et al. (2015) examined the efficacy of interactive word walls with older adolescent learners. The purpose of the study was to analyze five secondary English teachers' perceptions of interactive word walls, in both urban and suburban districts of North Carolina and Texas, and to explore how the tools presented in the study might be adapted for high school classrooms. The article used a qualitative descriptive content analysis approach that collected coded data from pre and post-intervention interviews, professional reflective journals, and student-created artifacts. Through comparative analysis, the authors identified emergent themes regarding teachers' evolving views before and after implementing the strategy. The theoretical and analytical lens was grounded in literacy research emphasizing meaningful, contextualized vocabulary instruction based on self-selection, and student engagement rather than rote memorization (Vintinner et al., 2015 as cited in Haggard, 1986; Ruddell & Shearer, 2002; Wood,

2001). The findings revealed that teachers initially viewed word walls as passive reference tools for high frequency or pre-taught vocabulary, primarily taught at the elementary level. The research suggested several ways teachers could implement the word wall by having students select a color to associate with the word's meaning, draw a symbol representing the word's meaning, and create a drawing to depict the denotative, connotative, and antonym of the word. After implementation, they observed increased student engagement, ownership, formative assessment opportunities, and a deeper word knowledge, especially when students exercised autonomy by selecting terms, creating visual representations, and applying morphology (e.g. Greek and Latin roots). The study concluded that interactive word walls lead to increased retention of both content-specific vocabulary knowledge and course content in multiple settings.

This article was very impactful on my understanding of CCE as the application of morphology aligns naturally with CCE which values the study of Latin and Greek roots as foundational to language mastery, SAT preparation, and leverage on students' linguistic funds of knowledge such as Spanish-English connections within *Heritage Spanish* dual language programs. This article is impactful because it recognizes the significant gap in literacy research at the high school level and provides concrete adaptable instructional strategies replicable in my research practice. The article was especially significant in challenging the misconception that word walls are primarily elementary school tools. Its strength lies in focusing on secondary classrooms, as an area of limited research, and in demonstrating how interactive strategies foster students autonomy, engagement, and cross-content literacy development. However, there was a limited number of participants in the study, consisting of five English teachers. Future research could expand to include more teachers in career technology and STEM fields.

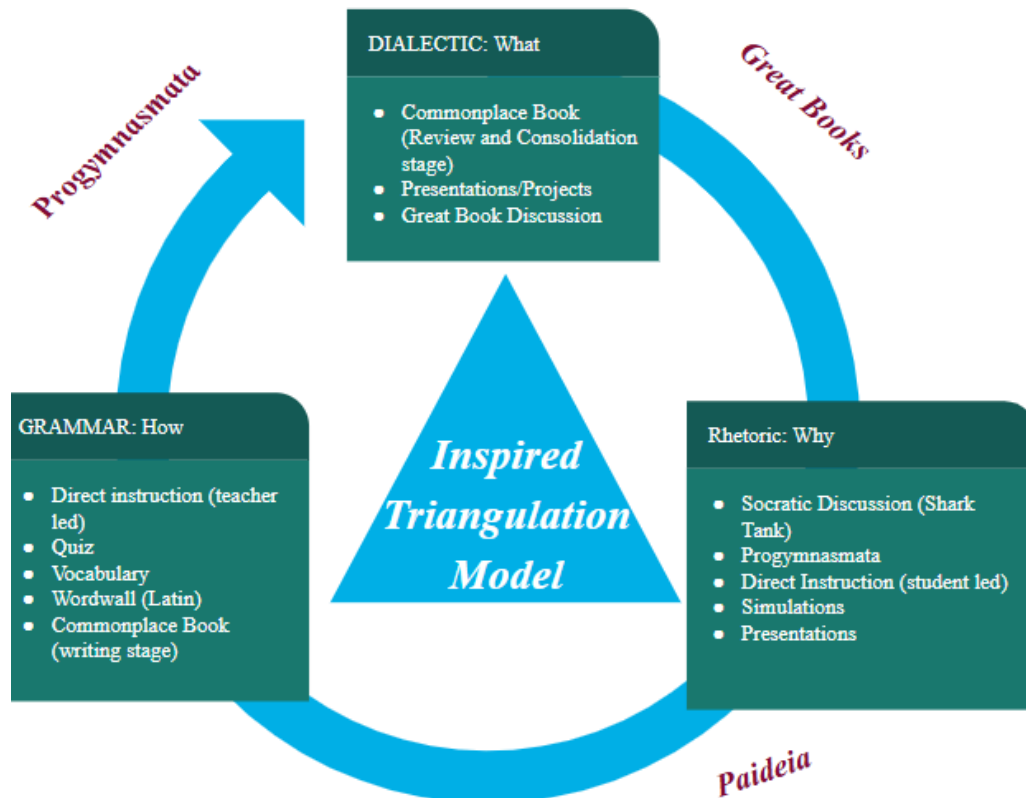
This action research investigates how classical education practices enhance student engagement, critical thinking, and long-term retention. This chapter reviewed relevant literature on assessments, cognition, and classical education to highlight how academic achievement and formation of thought can be cultivated in learners within a high school business classroom. Next, Chapter 3 will outline the methodology and procedures to evaluate the effectiveness of the instructional pedagogy.

Chapter 3. Methods

According to Richard Sagor (2000), action research is a "disciplined process of inquiry conducted by and for those taking the action" (p. 3). This means teachers systematically study their own practice in order to improve lessons that better address students' needs. Action research is relevant because the teacher is both the researcher and the primary consumer of the findings. Its purpose is to generate knowledge, refine instruction, strengthen student learning, and cultivate professional growth. Sagor emphasizes that action research empowers educators by providing concrete *strategies* in their instructional decisions that help meet the needs of a diverse student body (pp. 12-22).

Sagor also outlines seven cyclical steps of action research: (1) selecting a focus, (2) clarifying theories, (3) identifying research questions, (4) collecting data, (5) analyzing data, (6) reporting results, and (7) taking informed actions. The process begins with reflection to determine the focus area of instructional improvement that a teacher wishes to investigate and that aligns with the teacher's values (i.e. meaningful purpose including research that makes their teachers work more successful and satisfying). Next, the research clarifies the theoretical framework guiding the study. In this research, the framework is grounded in a *Trivium* model of Classical Christian Education (CCE) that incorporates strategies such as foundational grammar (knowledge acquisition through tools such as commonplace books and word walls), dialectic (Socratic Seminars and Shark Tank case analysis), and rhetoric (articulate business communication "soft skills" and persuasive financial reasoning). A visualization of the structure is presented in Figure 1.

Figure 1.

Inspired Triangulation Model

Note: Adapted from St. Bonaventura's the *Itinerarium Mentis in Deum* (1221-74)

After identifying the search question that aligns with the framework, the teacher collects multiple form of data to ensure validity, reliability, and (I would add) *replicability*, specifically through triangulation of multiple sources of data (e.g., student work samples, socratic seminar responses, pre and post assessments of critical thinking, reflective commonplace books, and financial decision making scenarios/simulations). Data analysis focuses on identifying patterns and growth trends (i.e. the *story* told by the data). Finally, findings are shared with colleagues

and used to take informed instructional action, as to refine practice in an ongoing cycle of improvement.

Action research is the method for this study because it examines my own classroom practice and seeks measurable improvement in students' critical thinking, communication, and real world financial decision making. With a focus on philosophical and Socratic traditions and their impact on my students, I can instantly discern what is working and what is not (Diener, 2024, p. 76). As a high school business teacher operating under the CCE framework, a trivium based instructional approach helps form habits of prudence, reasoning, and wise stewardship. Action research allows me to translate theory from the literature on classical education, socratic pedagogy, and critical thinking into daily instructional practice, while systematically measuring its impact. *The purpose of this action research project is to determine the effectiveness of a Trivium-based instructional approach in strengthening students' higher order thinking, articulate communication, and practice financial reasoning in a high school business classroom.* The following is the secondary research questions guide my study:

- How does implementing this instructional approach refine my own practice as a *Classical Christian Educator*?

Context of Study

I am a full time teacher candidate at a comprehensive public high school located within Salem-Keizer School District 24J. The school is situated near a commercially developed and residentially stable urban area. Within a one mile radius from retail centers, medical offices, apartment complexes, parks and several churches, the school is situated in a well established and interconnected community. While the surrounding neighborhood trends towards economic stability and is predominantly English-speaking, the student body represents a wider range of

socioeconomic and cultural experiences than neighborhood demographics alone might suggest. Approximately 29% of students qualify for free or reduced lunch under direct certification (e.g. children that are in households that receive Supplemental Nutrition Assistance (SNAP) or other assistance), and the district participates in a community eligibility provision (CEP) that ensures all students receive breakfast and lunch at no cost (No Cost Meals for Students, 2024).

For this action research project, I will focus on my second period Introduction to Business class, which includes 30 students in grades 9-12. The average class is composed of approximately 67% White students (20 students), 13% Hispanic/Latino (4 students), 13% Asian (4 students), 7% Native Hawaiian/Other Pacific Islander (2 students). Eight students (27%) are bilingual speaking: Spanish (3), Farsi (2), Marshallese (1), Thai (1), and Ōlelo Hawai'i (1). Four students (13%) are currently identified as English Language Learners (ELL), three are monitored, and three are post-monitored, meaning nearly one third of the class has received ELL services at some point. Two students are Talented and Gifted (TAG), two receive 504 accommodations, and three receive special education services. One student has an IEP focused on organization and self-regulation.

Academically, students demonstrate varied readiness levels. Although it is a disservice to have freshmen in a business class requiring higher reasoning, structured academic writing, and formal financial analysis, many are capable of thoughtful reasoning provided scaffolded instructional strategies. Several students excel in collaborative discussion, particularly when connected to real world simulations and Shark Tank case studies, while others require explicit modeling, guided practice, and predictable routines to build confidence.

Classroom instruction is intentionally structured to cultivate *scholé* (i.e. a spirit of purposeful, unhurried engagement). Students track the daily agenda upon entry, respond to

warm-ups, and guided practice before they engage in Socratic dialogues, collaborative case analysis (via student packets), and simulations. Movement is permitted after direct instruction to encourage relational and ideological learning. Students' cultural funds of knowledge are rich and include multilingual communication skills, family business experience, service in faith communities, leadership participation, athletics, and part time employment. These lived experiences enrich class discussions about stewardship, risk, budgeting, and ethical decision making in business contexts.

I have worked with this group for half a semester, and during that time I have focused on building relational trust, maintaining clear and consistent expectations (specifically, with regards to permissible pre-proved academic and finance games), and creating structured discussion opportunities that encourage students to participate meaningfully. I entered the class already knowing one student from my work as a substitute teacher, and because the group includes freshmen, I prioritized clear, purposeful, and explicit instruction to support their transition into high school. My current areas of growth include creating more space for student work time and refining assessment tools that align with the CCE model. My goal was to design purposeful assessments that measure higher order thinking rather than surface level task completion. These experiences, combined with my commitment to purposeful educational prudence (thoughtful differentiation, wise instructional decisions, and meeting students where they are), stewardship (responsibility, nurture, and honoring God's design in each child), and justice (moral rightness, giving each student what is due, and honoring their dignity as image bearers), ensure that I represent my teaching and students' responses accurately.

Data Collection and Analysis

Data for this longitudinal action research study came from the Introduction to Business course I taught at a predominantly suburban public high school between January and April 2026. While data was collected during a focused six week instructional period, the data was compared to informal baseline observations and from later coursework to assess growth in critical thinking, engagement, and financial reasoning.

Following recommendations from critical thinking scholars such as Boa, Wattanatorn, and Tagong (2018), who developed the Blended Socratic Method of Teaching (BSMT) and aligned it with the RED Model of Critical Thinking (i.e. recognizing assumptions, evaluating arguments, drawing conclusions), I collected multiple qualitative and quantitative data sources to examine student thinking and leaning. However, rather than implementing the RED framework directly, I utilized the Claim-Evidence-Reasoning (CER) model because it had already been adopted as a common instructional practice in the district. The CER framework provided a familiar structure in which students could articulate claims, support them with evidence, and justify their reasoning while fostering many of the same critical thinking processes emphasized by the RED model. Table 1 presents a comparison of the CER and RED models of critical thinking.

Table 1

CER & RED Model Comparison

	CER	RED
Structure Breakdown	Claim: A clear and arguable statement or answer to the question Evidence: Data, facts, quotes, or observations that support	Reason: A statement explaining why something is true or what the main point is Example: A specific instance, scenario, or illustration of the

	the claim Reasoning: Explanation of how/why the evidence supports the claim	reason Detail: Additional information that deepens or elaborates the example
Focus	Argumentation and persuasion to prove claim is correct	Explanation and elaboration to develop an idea with depth
Evidence Type	Formal and cited evidence (data, quotes, experimental results)	Example can be personal, hypothetical, or narrative in nature

These qualitative and quantitative data sources included a course syllabus, detailed lesson plans, Socratic seminar guides, business case studies, Shark Tank discussions, student assignments and artifacts (commonplace book entries, student packets, word wall interactives, and persuasive presentations), classroom communication, course evaluation, exit tickets, simulation assessments, and observational field notes. Students also completed a modified pre and post assessment modeled after the Watson-Glaser Critical Thinking focusing on 15 questions to determine proficiency and growth in the CER-aligned reasoning skills.

Duchatelet and Donche (2022) argued that simulations are complex, context-dependent learning environments requiring intensive contextualized research methods (p. 1). This study adopted a similar qualitative longitudinal case study design because student agency continued to shape the simulation process. Data was collected both in real time, through observations of field notes during Shark Tank Socratic Seminars and *Knowledge Matters* simulations, and collected retrospectively through student reflections and written analysis. This approach allowed me to account for contextual fluctuations in engagement, reasoning, and discourse as learning unfolded. The use of multiple complementary data sources establishes a “chain of evidence” and strengthens validity through triangulation of evidence that “builds upon another” (Duchatelet &

Donche, 2022, p. 1 as cited in Cohen, Manion, & Morrison, 2011; Yin, 2018). For this reason data analysis followed the step-by step approach outlined by Creswell (2009):

Step 1: Organizing the Data. All Artifacts were gathered, digitized when necessary, and organized chronologically. A time line was created to document when Trivium strategies were implemented (See Table 2).

Table 2.

Strategy Timeline (January-April 2026)

Assignment	Date
Personal Monthly Budget	February 6
Shark Tank 1	February 9
Personal Banking Sim	February 11
Finding an Apartment Sim	February 13
Finding an Apartment Math & Reading Quiz	February 13
Buying a Home Sim	February 20
1st Journal check-up	February 20
Shark Tank 2	February 23
Introduce commonplace assignment	February 24
Watson Glaser pre-assessment	February 26
Shark Tank 3	March 2
Paying Your Taxes Sim	March 6
Work History	March 10
Shark Tank 4	March 16
2nd Journal check-up	March 16

Cardboard Minnow Tank	April 3
Shark Tank 5	April 6
Shark Tank 6	April 13
Shark Tank 7	April 20
Watson Glaser post-assessment	April 24
UNIT TEST: Consumer Skills	April 24
Shark Tank 8	April 27
Post-unit exit survey	May 2
Shark Tank 9	May 4
01 Executive Summary	May 6
02 Problems	May 8
05 Solutions	May 8
Shark Tank 10	May 11
03 Customer Segments	May 13
04 Unique Value Proposition	May 13
10 Competitive Advantage	May 15
06 Channels	May 15
07 Revenue Streams	May 20
08 Cost Structure	May 20
09 Key Metrics	May 22
11 Conclusion	May 22
12 Visual Organization	May 27

13 Slide Deck	May 27
14 The pitch Presentation	May 27

Step 2: Reading Through the Data. I read all material to gain a holistic sense of the data, recorded initial impressions, and noted patterns related to student engagement, vocabulary usage, financial reasoning, and quality of argumentation.

Step 3: Detailed Coding. I open coded the condensed data into meaningful segments and unanticipated externalities such as critical thinking, academic discourse, confidence in simulations, and application of financial principles (Appendix A).

Step 4: Generating Themes. From these codes I developed three themes aligned with the RED Model and Trivium framework: (1) Grammar (growth in academic language and engagement), (2) Dialectic (students' analytical processing and meaning making through written reflection, commonplace book journals, creative applications, and formal creative presentations), (3) Rhetoric (students' ability to articulate, defend, and apply reasoning publicly through Socratic discussions, progymnasmata exercises, engagement with Great Books or excerpts, direct instruction, and business simulations). Each theme was supported by multiple data sources including quotations from student reflections, assessment data, and observational notes.

Step 5: Representing Data. Themes were organized in a detailed chronological and conceptually in the findings chapter. The chapter integrated student excerpts, descriptive narratives, and summary charts and tables of post assessment growth.

Step 6: Interpretation. I interpreted the data by connecting the findings to CCE literature and its connection to the *Inspired Triangulation Model* (Figure 1), specifically its connection to the influence of direct instruction on critical thinking, simulation based learning, and socratic

pedagogy. Meaning came from examining how students' reasoning evolved over time and how the BSMT model supports higher order thinking within an authentic business context.

The study highlights the importance of critical thinking in the business community and emphasizes the need for educational institutions to prioritize this skill. The BSMT model is an authentic comprehensive approach that integrates Socratic teaching, Critical thinking, and business case analysis to foster critical thinking skills in students. I began data analysis using open coding to condense data and identify recurring themes (e.g., critical thinking, vocabulary, and engagement). To strengthen credibility and validity, I then triangulated data through the tenets outlined in the conceptual framework to make sense of my pedagogy and student responses (Sangor, 2000, p.5) and invited a mentor, a clinical teacher, a business education colleague, and a university professor, to review my analysis. Their feedback prompted reexamination of several interpretations and enhanced methodological rigor (Merriam & Tisdell, 2015). This approach of data convergence, peer debriefing, and longitudinal contextual analysis situated the study firmly within qualitative methodological research conventions and provides a comprehensive account of how simulation based Socratic instruction fosters critical thinking in a high school business classroom.

Researcher Worldview

In the Gospel of Luke, Jesus shares the parable of the Pharisee and the tax collector (Luke 18:9-14). The Pharisee, a religious leader known for his strict moral rigor, stands in the temple and thanks God that he is not like other men, especially the tax collector besides him. The tax collector, by contrast, was considered a traitor who collected taxes for the Roman Empire and often exploited his own people. Yet, rather than assert moral superiority, he simply prayed, “God, be merciful to me, as sinner.” Jesus concludes by saying that it was the tax collector, not the

Pharisee, who went home justified before God. The takeaway here is that true humility before God, rather than a sense of self-righteousness, is the starting point for truth. Christianity begins not by pointing fingers but by acknowledging our own need for redemption (Romans 3:23). However, positionality frameworks often come from postmodern perspectives that view truth as mainly something socially constructed or shaped by power dynamics (Cline & Shenvi, 2023, p. as cited in Delgado, 2012). Since my research is rooted in a Christian worldview, which upholds the belief in objective truth grounded in God's character and revelation, I chose to express my reflection as a worldview statement rather than a positionality statement. While positionality statements both describe an individual's world view and how a researcher's social and political background influences their interpretation and analysis, it can be too narrow in scope (Holmes, 2020, p.1 as cited in Savin-Baden & Major, 2013). The Bible is one entire hegemonic discourse that tells how God has all the power. In *Pedagogy of the Oppressed*, educators and learners together are instructed to "die and be resurrected" on the side of the oppressed and into a "faith" in "permanent struggle" similar to how Christians are called to "bear their cross" and "resurrect" with Christ in death. However, in Freireian contexts, the fall takes the place of oppression, and original sin takes the place of privilege. The solution is *activism* that has the potential to disrupt, deconstruct, and dismantle (John 10:10) these oppressive systems and structures in order to create a society in which social justice can be achieved.

A Christ-centered worldview offers a broader more strict framework and interpretation of justice that demands present their bodies as "living sacrifices" and sacrifice of good works and generosity (Hebrews 13:16) grounded in three claims: all people are united in creation and bear the *Imago Dei* (Genesis 1:26-27) regardless of race, ethnicity, or background, thus affirming the inherent dignity of every person and challenging the notion that humanity can be reduced to

competing oppressor and oppressed identity groups despite claims of *intersectionality*; all people have a fallen nature through sin; all are equally in need of a redemption and restoration is offered to all through Christ (John 14:6). As Hirsch (2020) argues, people improve systems not merely through resistance but through cultivating shared civic knowledge that brings individuals together into a democratic whole. Human beings are moral creatures and live in subservience to God's moral ideals and laws that are more than cultural conventions. Jesus Christ is the only perfect embodiment of the moral life Christ suffered for you, leaving you an example, that you should follow in his steps. "He committed no sin, and no deceit was found in his mouth" (1 Peter 2: 21-22). Thus, the central educational "question is not whether the theory of the cosmos affects matters, but whether, in the long run, anything else affects them" (Chesterton, 1986). That is, the question is not "How do we dismantle systemic oppression?" but rather: "How do we educate in ways that foster belonging, stability, and shared identity in a diverse democracy?" Freire was right to say that to teach is a political act. Schools are moralizing agents that play a vital role in cultivating democratic citizenship (Dewey, 1916). But unlike Dewey's romantic belief that children should drive curriculum, I maintain that a shared cultural knowledge rich curriculum must form the foundations of an educated citizenry (i.e. worldview). This cultural literacy and communal knowledge can be found in classical education, or a similarly liberal arts education, designed to "liberate" the mind, enhance student motivation, prepare students for any future, and instill intellectual self-confidence through systematically imparting missing background information to understand the world better.

A worldview is a way of looking at all of reality. It answers basic questions like: Who are we? What is our fundamental problem as human beings? What is the solution to our problems? What is our primary moral duty? What is our purpose in life? Freireian world view and

Christianity answers these basic questions about life in totally different ways. Christianity is described as a narrative that begins with creation and ends with restoration. We are created by a holy living just God, but we fell, we sinned, we rebelled against God, so God sent Jesus to rescue us, and one day there will be *Justice* when God comes to restore all things. That's the arch of the Christian message. However, this worldview must not detract from the true aim of education: to teach minds how to learn for themselves, love God, and learn their purpose and place in the wider world. Because every nation, tribe, people, and tongue have different expressions of faith that lead to a more complete understanding of God (as reconciled by Jesus and not ecumenical), CCE celebrates and develops the *whole person* through the languages (via Latin) and studying the classics of all races to empower and liberate students in a more joyful appreciation of knowledge and appreciation of culture as a social construct in the classroom (Nagley, 2021).

Chapter 4. Findings

Three major themes emerged from analyzing the data. They are engagement, critical thinking, and social-*spiritual* development. Each theme is discussed with supporting data.

Engagement: Foundation to Knowledge and Academic Language Through Purpose

One theme that consistently recurred in my analysis was the challenge and opportunity of building genuine student engagement. One of the central principles of Classical Christian Education (CCE) is the idea of holistic development in which students' work, family, community, and emerging sense of purpose become part of the substance of academic learning. However, while classical education *can* unintentionally marginalize students whose identities or experiences are underrepresented in canonical *western* curricula, Classical *Christian* pedagogy seeks to create disciples. It balances students' lived experiences, defined through personal identity, cultural background, community context, language, emotions, and social realities *not as central*, with a balanced emphasis on shared intellectual traditions, objective knowledge, or systematic skill progression, all oriented towards the student's spiritual growth and, ultimately, their walk with Jesus. This contrasts with more humanistic tendencies found in both Paulo Freire's pedagogy and classical *liberatory* education by viewing students not merely as intellectual beings, but primarily as spiritual beings whose souls are expressed through both body and mind. While classical education

Prior to this unit, I administered an open-ended post-unit personal finance exit survey with 138 student responses. The survey (See Figure 3) asked eight main open-ended questions designed to surface both academic needs and student experience.

Figure 2.*Post-Unit: Personal Finance Exit Survey 8 Open Ended Questions*

-
1. What would you suggest I could do better to improve student engagement? (don't worry about hurting my feelings, your input helps me improve my teaching).
 2. What would you suggest I could do better to improve student engagement? (don't worry about hurting my feelings, your input helps me improve my teaching).
 3. What was your favorite part of this class? It's okay to list more than one thing (topics, activities).
 4. What was your LEAST favorite part of this class (Again, don't worry about hurting my feelings. I can't improve if I don't understand your experience).
 5. What aspects of this class are you most likely to apply to your life in the future?
 6. Have you already changed your financial behavior due to what you've learned in our class? Explain.
 7. Is there anything we did not cover that you wanted to learn about?
 8. Anything you would like to add?
-

When I analyzed the coded data, several recurring themes emerged: students found the class pace too fast and lecture-heavy (See Appendix C). They felt that many activities were disconnected from their *current* lived experiences and they struggled to see themselves as capable learners. One student wrote directly, “I am thinking that I hate this class and everything it stands for.” Others noted that the warm-up questions, designed to connect them to the material, felt like “just busy work” rather than a genuine invitation to think. These responses were difficult to read, precisely because they reflected tensions I was already experiencing as a student teacher

attempting to implement the Classical Christian Education (CCE) Trivium framework within significant institutional and practical constraints. Balancing university coursework, edTPA requirements, lesson planning, grading, classroom management, and the expectation of a full-time teaching placement limited the time and flexibility needed to fully adapt instruction to students needs and balanced lived experiences. As a result, some lessons relied too heavily on pacing, compliance, and content coverage rather than deep relational and dialogical engagement faithful to the CCE pedagogy. Although difficult to hear, the critiques carried an element of truth that I could not ignore. I responded to the students' concern directly, acknowledging their frustration and naming the real-world parallel: "Having a daily deliverable is much closer to the real world of work...finding appropriate ways to express yourself and still get the work done at a high level can be hard for many of us." More than correction, these survey responses became a curriculum revision tool.

The warm-up questions at the start of each class were an early point of intervention. Originally drawing from the Next Gen Personal Finance (NGPF) teacher-vetted curriculum, the warm-ups asked students to connect their consumer behaviors to broader financial patterns: "Describe the last time you bought something because of an advertisement. Why was the advertisement convincing to you?" and "How many minors have had their identity stolen? What measures can you take to avoid having this happen to you?" These questions were meant to spark engagement, but the survey data showed that students were reading them as tasks to complete rather than conversations to enter. Reflecting on this in my teaching journal, I wrote: "A student cried today. This most likely means cognitive overload. What can I do to turn warm-up questions into opportunities for positive self-concept?" And then I realized, "it's not what I can do, but what students can do on their own." This shift in perspective was significant.

Rather than delivering engagement to students, I began designing conditions that invited students to generate it themselves via organic forms of project-based learning, student led conferences (where objectives are planned first and shared with students), self-directed learning (where students explore topics of personal interest), and reflective portfolios in conjunction with commonplace journals (Lynch, 2022).

The grammar stage, as I came to understand it through implementation and profuse readings, requires what Gregory (2004) calls an awakening of the student's mind: “The learner's mind must work through the senses. There must be mind in the eye, in the ear, in the hand” (p. 52). In the Dark Patterns and Advertisement lessons, I began to see what this looked like in a financial literacy context. Students were instructed to read an introduction, watch a video on deceptive website design practices, and then answer a series of scaffolded questions: first define dark patterns, then identify three examples from the video, and finally wrestle with the ethical and legal dimensions of the practice. The final question was where something shifted and where the boundaries between grammar, dialectic, and rhetoric stage meshed. The question asked: “Do you think dark patterns should be illegal? Why or why not?”. One student wrote, “Dark patterns should be illegal because they use deceptive design tactics to trick people into spending more money or giving up personal data against their will.” Another offered a more ambivalent position: “I think that it would be illegal to an extent. I think it’s not okay to take information or manipulate someone to sign up for something.” These were not polished arguments, but they were genuine ones. Students were beginning to taste the lesson, to use the language of the unit in service of a real opinion, that with enough study and thought could be turned into a Dark pattern law, and thus serve as social-spiritual agents and participants in the justiciable.

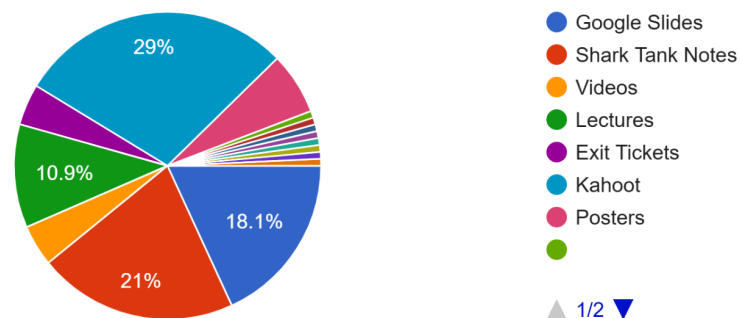
The Word Wall activity served as a structural anchor for this vocabulary development across the unit. Students encountered and recorded financial terms in context, building what Sayers (1947) would recognize as "shedding the load" by teaching fewer things differently. Language would thereby lower their cognitive load and allow them to engage more fully with the content as the unit progressed (Paas & van Merriënboer, 2020; Engel et al., 2013; Willingham, 2006; Elleman & Osmond, 2019). The survey data, shown in the figure below confirmed the pattern: 29% of students identified Kahoot as the most helpful tool for preparing for assessments, followed by Shark Tank notes (21%), and Google Slides (18%).

Figure 3.

Most Helpful Assessment Method

What helped you prepare for assessment the most?

138 responses



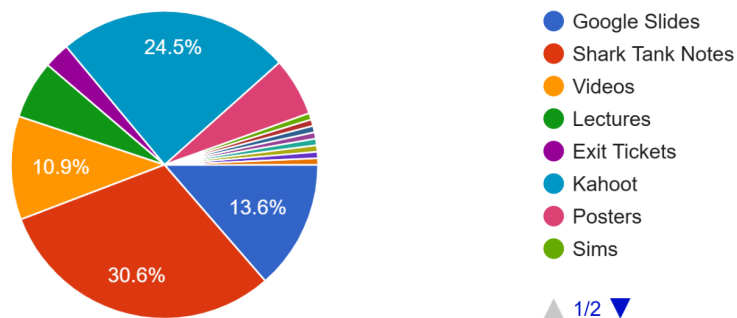
The Shark Tank notes, Kahoots, and Google slides in particular, emerged as a consistent favorite across survey responses (Figure 5).

Figure 4.

Most Enjoyable Instructional Method

What instructional method did you enjoy the most?

147 responses



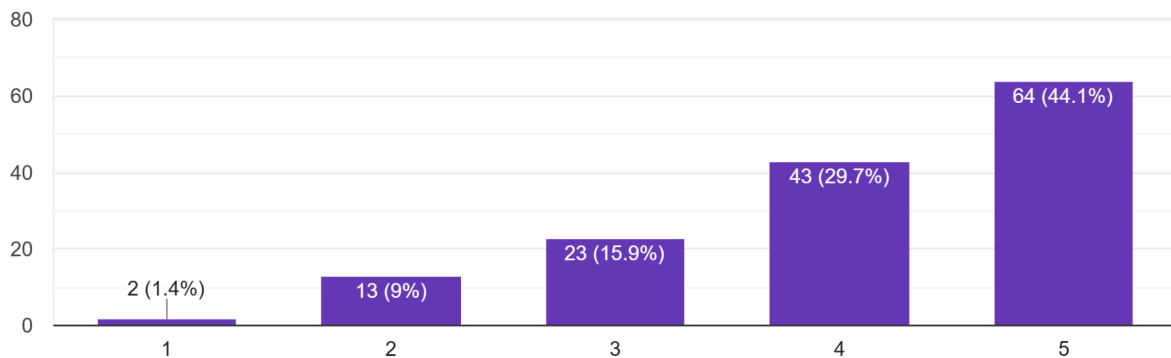
Students described them as "accessible" and "routine" which are qualities that, in a classical framework, signal that the grammar stage is working as intended. When students know what to expect, they can invest their cognitive energy in the content rather than navigate the format.

One of the more revealing findings from the survey came in response to the question about whether personal interest in a topic positively impacts engagement. The following figure shows the largest segment, 73.8%, of students who voted four and five out of a five point scale said it did.

Figure 5.*Interest & Engagement*

Being personally interested in a topic positively impacts my engagement and effort in class.

145 responses



This finding revealed that when students can locate themselves in the content, they learn differently. I attempted to honor this by including what I came to call “funds-of-spirits” anchored through the unit. These included warm-up questions that referenced real consumer decisions students had made, video clips that illustrated financial concepts through familiar socio-spiritual contexts, and story based instruction that linked car insurance to real stakes. When I told a story during the car-buying lesson about a former teacher who died in a car accident, I believed it resonated with students more deeply because several students had recently lost their own teacher in a motorcycle accident. I was attempting to do what Gregory (2004) argues is essential: to find “the relation of the lesson to the lives and duties of the learners” (p. 45). Although I did not always succeed in this, since my pacing often outran the students’ processing, the aspiration itself helped form future curricular revision.

In sum, the analysis of the survey responses, lesson plans, observation reflections, and assignment coded data collectively point to the grammar stage as a site for both challenges and

possibility with regards to engagement. When routines were consistent, when vocabulary was scaffolded, and when content was anchored in students' real experiences, engagement increased in observable ways. However, when pacing was too fast, when the warm-up felt like busy work, and when students could not see how the material related to their personal lives as spiritual entities, disengagement followed. The grammar stage is not passive. Engagement is the foundation upon which all further reasoning and expression depends. Building a deliberate foundation with attention to the full human being in each desk was the central work of this first theme.

Critical Thinking: Analytical Reasoning Through Trivium-Based Instruction

The second theme that emerged from the data was the development of critical thinking, which became most visible during the dialectic stage of instruction. In the classical Trivium, dialectic follows grammar— although traditionally based on age— can be revisited as foundations for deeper learning. Once students have accumulated foundational vocabulary and observed structures of the subject, they are ready to wrestle with its complexity and ask how and why. They began to reason positions of their own. As Sayers (1947) comically describes it, the dialectic stage is characterized by “contradicting, answering-back, liking to ‘catch people out’ (especially one’s elders), and the propounding of conundrums (especially the kind with a nasty verbal catch in them)” (p. 11). These qualities can be properly channeled in the classroom to produce intellectual vitality. My task during this phase of the unit then became to create structures rigorous enough to shape the energy without extinguishing this spirit or curious contention.

The primary instrument of measuring critical thinking development in this unit was the Watson-Glaser Critical Thinking Appraisal (WGCTA), a psychometric assessment that evaluates

five components of reasoning: inference recognition of assumptions, deduction, interpretation and evaluation of arguments. I administered a pre-assessment during the fourth week of the semester, drawing on 130 responses. The post-assessment, administered during the last four weeks of the unit, yielded 84 responses. The results (Appendix A) were striking.

At the beginning of the semester, students answered correctly only 33.3% of the critical thinking questions. This was a baseline I had confirmed when I observed anecdotally. Many students accepted claims at face value, struggled to distinguish inference from evidence, and had difficulty constructing an argument that moved from claim to warrant to conclusion. By the end of the unit, the correct response rate had risen to 80%. Of the fifteen questions on the assessment, students moved from majority incorrect to majority correct on ten questions. The most significant gain appeared in questions related to inference, deduction, and interpretation of evidence, which are the exact competencies the dialectic stage is designed to develop.

However, I want to be transparent about complications in this data. When I reviewed the post-assessment results, the pattern of responses on several questions suggested that a portion of students had used AI tools to generate answers. Given that the test was administered digitally and without proctoring, this was a reasonable hypothesis. I estimated that roughly 45% of students may have used AI assistance, leaving a genuine “Luddite” segment of approximately 25% who completed the assessment independently and demonstrated authentic critical thinking growth. This does not invalidate the data, but it does require a nuance in its interpretation. The growth I observed in post-assessment scores reflects a combination of genuine learning and AI-assisted response generation. What the data cannot tell me, and what I found more interesting as an educator, is what it means for students to navigate the boundary. W.E.B Du Bois’ challenge resonates here: “If we make money the object of man-training, we shall develop money-makers

but not necessarily men” (Du Bois, 1903, p. 33). The question, therefore, is not whether students use AI, but what the use of AI is doing to them as persons and thinkers.

The Shark Tank Socratic seminar structure was the primary pedagogical vehicle for dialectic stage reasoning. Each Monday, students encountered a business case study and were asked to analyze it using a structure notation system that required them to identify problems the business was solving, evaluate competition, assess its financial viability, and decide whether they would invest (Figure 5).

Figure 6.

Shark Tank Notes Questions

Shark Tank Notes

	First	Second
Name of Product/Company		
What type of investment are they seeking?		
What valuation does the owner give their own company?		
What was the best offer the Sharks made, and why?		
Did they make a deal? If so, what?		
Your Opinion: Would you invest? Why?		
What did you learn?		

Professional Development Journal:

The first case was car Car Next Door, a peer sharing company subsequently acquired by Uber. The question asked students to grapple with the question: *“If you were an investor, would*

you invest in Car Next Door after its acquisition by Uber, and what strategies should the company implement to address its major challenges and remain competitive and suitable in the long term?” Students posted responses on Padlet, making their reasoning visible to peers and creating a dialectic space. Even the most introverted students found this format accessible, as it lowered the social stakes of participation compared to traditional hand raising.

In the future, I plan to have students draft their initial reflections within two evenly split communal center tables, where writing and concentration can unfold organically. This structure removes the option of hiding behind pseudonyms and creates a context for students to calibrate their language. For example: one student's reply to a peer read: “The question is asking if you would invest after Uber acquired it, so your comment on it before Uber's acquisition is irrelevant” (See Appendix D). This word “irrelevant” was likely too blunt. However, the instinct benign it was sharp as the student could distinguish what the company was and what it became under new ownership.

Figure 7.*Student Reply to Padlet Discussion*

3 months ago

If I was an investor I would not invest in the car next door. I find it pointless to invest in something that most likely would barely get used. Plus there is a big safety concern with the key box being on the outside of the window, and not somewhere else on the car. Also in general it's just not safe to have the key on the outside and to where someone could see the password even though they said it was a one time code. I see how it could benefit some people but it is not something that will benefit me. Now, if they collabed or did something with Uber that might be a higher chance for me to invest, but alone that is not something I would invest in.

**Awesome Puma**

3 months ago

the question is asking if you would invest AFTER uber acquired it. so your comment on it before ubers acquisition is irrelevant. but uber did end up making some pretty negative choices with the company and in many eyes "ruined" the company.

The Claims, Evidence, Reasoning (CER) model provides the structural grammar for these dialectical exchanges. Though I did not implement the CER with full consistency across every lesson, its underlying logic is a practice widely taught by other teachers, specifically, English teachers within the school and shaped how I framed every discussion question and how I responded to students' contributions. The Shark Tank questions were designed not as a tool to recall questions, but as a tool that provided opportunities for students to synthesize financial concepts they had learned in the grammar stage, market analysis, valuation, competitive advantage, and apply them to real business decisions. The discomfort that produced was pedagogically productive as students' responses revealed patterns of growth. In early Shark Tank

notes students tended towards assertions without evidence. They liked and disliked a business idea based on intuition and justifications were thin (Figure 7). As the unit progressed, I observed a shift. Students began asking more specific questions during the analysis phase. They referenced financial data from the case studies rather than relying on personal preferences (Figure 8).

Figure 8.

Jane Doe's Shark Tank Notes #1

Professional Development Journal

In this class i really want to learn how to become a better for my future such as how i spend my money, what i spend my money on, loans, bitcoin and etc. i think into to business will really help me become better how i choose to spend my money. i have really enjoyed the assignments we have done so far such as building your job and life, how much you spend her month and what do i need to spend the most on or what i need to spend less on. These assignments have made me realize how much things are in the real world and why planning ahead really matters. i hope this class continues to teach me real life skills that will help me be responsible financially in my future life.

Figure 9.

Jane Doe's Shark Tank #11

Professional Development Journal

Jax sheets net worth is now over 800,000 which is pretty good for the sharks not making him an offer but i dont think its high enough to go back to shark tank. He seemed like a very nice guy but he didnt really know what he wanted for his business when

he was asked what his numbers were and it kinda sounded like he was guessing which is not what they want they want someone who come in with numbers and what they want. The smart tires companies networth is 55.6 million which is crazy high for someone coming off of shark tank but one of the reasons that the number is so high is because they have connection with NASA which is pretty cool but they needed to talk more about himself and their business and not NASA. but they are selling the wheels for way more than it actually takes to make. They are making people pay 800-900 dollars which it takes 150 to make.

In the professional development journal for Shark Tank 1, which required students to write a 150 word reflection about the two videos they watched, the reasoning demonstrated in students' written responses showed meaningful development. The students ho wrote that they had a positive outlook towards the class because "these assignments have made [her] realize how much things are in the real world and why planning ahead really matters" was not simply stating their option, they were building affect that would allow them to look deeper into financial aspects of their business proposals. This is the financial beginning of an argument.

The data shows that when students are given a genuine question to wrestle with, one that Gregory (2004) would call a "bugle blast" that "*summon[s] all the faculties into the field of action*" (pp. 56-57), something happened. Students who had been passive during instruction

leaned forward during case study discussions. Students who resisted writing in her notebooks filled their Padlet responses with specificity and opinion. The collective class growth from 33.3% to 80% on the Watson Glaser assessment, even accounting for AI use, represented a directional signal that is difficult to dismiss. It revealed that critical thinking does not develop in a vacuum. It develops in response to structural provocation, repeated practice, and the safety to be wrong on the way to being right. That shift from the procedural to the analytical was the exact result the dialectic stage is designed to produce.

Social-Spiritual Development: Growth in Confidence, Identity, and Purpose

The third theme that emerged from the data was social-spiritual development which is loosely defined as a composite of student growth in confidence, sense of purpose, willingness to contribute publicly, and capacity to connect academic learning to a larger understanding of self and community. Within the Trivium framework, this corresponds to the rhetoric stage whereby the student moves from observing and wrestling with ideas to expressing them. As Sayers (1947) describes it, the rhetoric states are when “the imagination...will reawaken, and prompt them to suspect the limitations of logic and reason...things once coldly analyzed can now be brought together to form a new synthesis” (p. 17). In a personal finance classroom, this synthesis takes a particular form. Students who began the unit asking “where do I write this?” as a form of learned helplessness, end it by presenting a business pitch, designing a fraud-prevention campaign sticker, or filing a simulated tax return with the confidence of someone who has understood both procedure and reason.

The Minow Tank entrepreneurship project was the primary site of rhetoric-stage development finding in this unit. Students worked in assignment teams to design a cardboard prototype of the original product. The project required students to integrate everything they had

learned about market analysis, financial literacy, consumer psychology, and communication into one through-out presentation. Students used the CER model unknowingly by asking students to state the valuation or ‘ask’ of their product (the claim), support it with evidence (market needs and cost data), and explain their reasoning (why their product is a viable solution to a consumer problem). They then presented and defended their ideas in front of the class responding to questions from their peers and from me. Every member of the class must stand in front of the class even if they don't present to help them take a step towards overcoming their fear of standing in front of people— an element of SEL development.

The presentations demonstrated growing professional development in terms of presentation and confidence. One group developed a watch with GPS trail-mapping functionality designed to help hikers navigate routes less traveled on and based on their experience level (Appendix B). Their presentation included a target audience, a value proposition, and an analysis of their competitive advantage over existing products like Garmin. This specificity was possible due to the grammar stage vocabulary and dialectic stage reasoning the unit had built on (i.e. scaffolding).

Another group designed an “iPay ring” — a contactless payment device built into iPhone functionality. The pricing model was well researched, as it was calibrated to Apple’s premium model, and was well articulated in their defence. This team earned the “Prime for Market” award. Although there were no “real” polished products, the range of topics addressed by the class were authentic intellectual acts that had them state their position and be able to defend it. The following figure included a visual representation of the issues students discussed in their poster presentations.

Table 3.*Product Issues Students Discussed in Their Poster Presentations*

Product Issue	Technology	Beauty	Health	Consumer Goods
Number of Students	15	4	3	14

The shift in self-perception was one of the most consistent findings across my observational data. In my teaching journal, I noted a moment during the Minow Tank project when a student who had written in their survey that the class was “just busy work” stood in front of their peers and delivered a two minute pitch without notes. These two moments in time, the dismissive survey and the confident presentation, hinted to the students response not as a result of the project, but as a result of sequence whereby the grammar stage builds vocabulary, the dialectic builds reasoning, and the rhetoric stage gave it form and an audience. These “tools for learning,” commonly cited by Sayer (1947), became visible in the students two minute presentation at the front of the room.

The tax filing simulation through the *Knowledge Matters* software provided a different rhetoric stage experience. With classes I did not publicly present, students were asked to navigate forms, make decisions, and complete a process that even most adults find daunting. What I observed during the simulation for those classes was a shift in posture. Students who had been passive or reluctant during earlier lessons, leaned towards their screens as they perceived what they were learning to be practicable to their incoming adult lives. They asked each other questions rather than waiting on me. I was impressed by how quickly one student who tends to

be off-task during instruction completed the simulation and proceeded to help a friend navigate the confusion of each tax return line. I believe the simulation created conditions for what Maslow would recognize as self-actualization with a bounded task. That is, some students discover they were capable of something they had believed was beyond them. Others decided it was best to hire an accountant.

The sticker design project from the scams and fraud lesson offered another example of rhetoric-stage social-spiritual development. Students were asked to create a campaign sticker design to communicate fraud prevention strategies (Figure 10).

Figure 11.

Campaign Sticker Instructions

ACTIVITY: CREATE: Sticker

Use the sources in the "Learn More!" section (at the bottom of the activity assignment) to create a sticker on preventing fraud or the steps to take if you are scammed. Design the sticker using Canva or another design platform.

INSERT SCREENSHOT HERE
[COPY: WINDOWS + SHIFT + S]
[PASTE: CTRL + V]

The task required them to make informed decisions about visual communication, audience awareness, and persuasive design. Several students used AI tools to generate initial designs and then modified them (Figure 11). Thus, demonstrating resourcefulness and design priorities in light of their extracurricular responsibilities. Others worked from scratch (Figure 12).

Figure 12.

AI Student Designed Sticker



Figure 13.

Student Designed Sticker



One student, who had misread the instructions and created a poster, came to me to clarify and then produced a second artifact rather than simply submitting the first. That willingness to re-do rather than submit and be done is a rhetorical stage behavior since it reflects that the student had internalized the high achieving standard, knew the difference between adequate and good, was able to communicate their needs, and most importantly cared to make a difference.

Many of the students came to the class with histories that made school feel hostile or indifferent. Several were working part-time jobs. Several were navigating family financial stress, and still others had been told that academic success was not for them, and they should pursue a trade. However, the CCE framework I was operating within insists that education is not primarily about economic utility but about the formation of persons. We are again reminded of W.E.B Du Bois' timeless words when he states that the true aim of education is "not to make men carpenters, it is to make carpenters men" (Du Bois, 1903, p. 33). When the student who had described the class as "just busy work" stood up and delivered a business pitch, something had shifted in their understanding of what they were capable of. Although, I cannot measure that shift with a rubric, I believe the data I have described points towards it consistently.

Socio-spiritual development manifested in subtle ways throughout the unit. When I played the inspirational Pixar video during attendance at the start of class, I told the student directly: "when life becomes monotonous, when meaning feels absent, you will need to feed your mind with what is good, true, and beautiful." That framing is something I could make into an assessment item, but is also an item not separate from academic work. It is the framework within which academic work acquires significance ultimately leading to purpose. For example, when students wrote that dark patterns were wrong because they violated people's autonomy, they were

demonstrating financial literacy and articulating a moral claim rooted in a sense of human dignity.

The commonplace journals served as a complementary structure connecting all three stages. In the first stage commonplace journals (a) students write down interesting quotes or claims they can later use in speech. In the second stage (b) students contend and synthesize those quotes against one another within their own commonplace journal. In the last stage (c) students implement those quotes within a presentation or public debate. I introduced the journals early in the unit that stretched from Sei Shōnagon's (清少納言) eleventh-century Pillow Book, to John Locke's 1760 formalization of commonplacing in academic practices at Oxford. The invitation I extended to students to connect their daily interdisciplinary academic experiences was simple. I asked them to record what struck them in their interdisciplinary readings, what they noticed, and questions they may have. I provided examples, explained the purpose, and told students I would check for completion rather than evaluate content. I provided a rubric below (Appendix D). Given the low submission rates, I graded based on complete and incomplete, but had I implemented the rubric faithfully as the center piece of the class, the rubric would look as follows.

Unfortunately, not all students complied, but those that did completed something remarkable. They completed journal entries showing a kind of thinking that was associative, explanatory, and raw in nature. One student used a journal entry to write about the discomfort with a Shark Tank case that asked them to evaluate the valuation of a business someone found objectionable, while another used them to jot down business ideas for their business plan they would carry out in actuality. It was a financial platform that people could subscribe to receive financial literacy advice. This demonstrated high entrepreneurial spirit. That process of raising

through discomfort, without the pursuit of grades, but the pressure to defend a claim was exactly what the rhetoric stage is designed to produce.

My university supervisor's final observation captured something quantitative data could not. He said "students respond to personable stories and examples that relate to the lesson." This observation points to the truth about the rhetoric stage that is easy to overlook in the pursuit of measurable outcomes. Students become ethical rhetoricians that advocate for the true, the good, and the beautiful not solely through techniques in their toolbox of learning, but through relationships where they experience being seen and are challenged by someone who believes they are available or more than they have yet demonstrated. Didn't Alexander the Great believe he was the son of a God? (Wasson, 2016). They had to believe to achieve. Even if students don't become rulers of nations, the pursuit of Purpose, Virtue, and Wisdom: can be cultivated in them to live a life worth living, and to be the best that they can be. That belief, expressed consistently and concretely through high expectations and genuine investment in students' work is itself a pedagogical act worth laboring for. It is, I would argue, the most important one.

At the beginning of the semester students arrived uncertain about their capacity to succeed. The social-spiritual development that classical education identifies by the culmination of the three stages is the beginning of what a classical education means by flourishing. The data from Minow Tank presentations, tax simulation observations, sticker design project, Socratic discussions, post-unit surveys, and teaching journal reflections collectively demonstrated that the rhetoric stage contributes to measurable and observable growth in student confidence, purpose, and willingness to contribute. Students left the classroom with the experience of having presented publicly, created meaningful designs, and defended their ideas before an audience.

Taken together, the three themes that emerged from each stage, engagement, critical thinking, and social-spiritual development, tell a coherent story about what purpose-centred pedagogy rooted in the classical Trivium can produce in a high school personal finance classroom. While grammar establishes vocabulary, routines, and relational conditions that make learning possible, the dialectic challenges these students' reasoning through complexity, nuance, a framework for evaluating claims, and repeated practice that 'makes the teacher' for the continuation of the human race and civic life. It is precisely because *'la practica hace al maestro'* (i.e. practice makes the teacher) that the rhetoric stage asks students to do something with what they have related. They are asked to make it public, to defend it, and to take risk being wrong in front of an audience. In that way, they discover in that world something about who they are becoming.

That being said, the data concludes that students learn more deeply, durably, and humanly when the conditions for learning reflect coherent understanding of what human beings are for. The classical christian framework treats financial literacy not as an end in itself, but as one domain by which students can practice habits of mind and character that will serve them across every domain in life. I must emphasize that the Trivium framework is not a curriculum, but a set of tools for learning that when handed to students in the right sequence and with the right relationships acquire both content and critical thinking skills that an ethical person is called to be.

Chapter 5. Discussion, Limitations, and Conclusion

When integrating all three Trivium stages, the patterns of students' responses were fairly consistent with the reviewed literature and in some cases exceeded what the literature was able to explain given CCE theoretical limitations (further discussed in the following section). I observed increased engagement when routines were structured and content was personalized. I observed measurable growth in critical thinking when Socratic questioning was applied to real-world case analysis that dealt with “vital human questions present in the readings— what is a home, what is friendship, what is justice, what is healthy work, what is the happy life— dealing with them in concrete ways” (Francis, 2016, p. 4). I observed emergent confidence during public rhetoric tasks—all consistent with the extended body of scholarship examined in Chapter 2.

The grammar stage findings most directly corroborate the works of Vintinner et al. (2015) whose study of interactive word walls in secondary classrooms found that when students exercise autonomy in selecting and representing vocabulary, engagement and cross-content retention increases. My implementation of the word wall activity in the consumers skills unit followed a similar logic whereby students encountered financial terms in context, built visual associations, and applied the vocabulary in subsequent connotative tasks. The survey data confirmed that structured, low stakes tools such as Shark Tank notes, Kahoot reviews, and Google Slides were the most valued activities. This finding mirrors Beverson’s (2020) synthesis of the testing effect literature has when administering low-weight assessments designed to strengthen long-term retention and metacognitive awareness. Where my approach extended Vintinner et al.’s work was in the explicit embedding of vocabulary instruction within a moral and purposive framework. Financial terms were thus introduced as language with ethical stakes and real decision making meaning. This move from content-neutral vocabulary instruction

towards what I call "funds-of-spirits" instruction connects academic language to students' spiritual, communal, and vocational identities, which is a contribution that secular literacy research does not fully account for.

The dialectic stage findings build most directly on Boa, Wattanatron, & Tagong (2018) development and validation of the Blended Socratic Method of Teaching (BSMT) model which integrates Socratic questioning, collaborative case analysis, and digital dialogue to improve business students' critical thinking. The Shark Tank seminars mirrored the BSMT five step approach in that students analyzed cases, development positions, posited responses to a shared digital platform (i.e. Padlet), and engaged in back and forth reasoning. The Watson-Glaser pre and post assessment results in the study, a rise from 33.3% to 80% in correct responses across five reasoning domains, yield higher results compared to the below average BSMT study's findings that Socratic instruction produces significant gains in students' evaluative reasoning.

However, a key point of difference is that the Boa et al. studied undergraduate business students in a controlled ten-week intervention with clear comparison conditions while this study was conducted in a mixed-grade high school classroom with significant contextual complexity ranging from ELL students, IEP accommodations, and uncontrolled variable of student AI use. Despite this finding, the fact that measurable growth still appeared in this less controlled, albeit more diverse setting, suggests the BSMT real-world cases help develop higher order reasoning.

My use of the Claims, Evidence, Reasoning (CER) model as a structural scaffold for this Socratic process is also consistent with Johnson and Jahan's (2021) finding that "Commonplace book culture," the integration of reading, reflective writing, and collaborative dialogue, supports students capacity to consider multiple perspectives and evaluate varied information sources.

The rhetoric stage findings closely resonate with Marcus's (2018) synthesis of simulation based learning in the business classroom in which he argues that simulations keep students motivated because they build on prior knowledge and provide experiences students can connect to real-world situations. The Minow Tank project and Knowledge Matters tax simulation both functioned with the intention to inculcate self-directed problem solving skills for vocational preparation. My findings extended Marcu's work by connecting simulation based motivation to both career readiness and what Porter (2024) calls the formation of a "mature, moral, and rational adult" (p. 28). For example, both the student who re-did their sticker assignment and the student who delivered the business pitch after describing the class as "just busy work," were demonstrating two key proficiencies: employable skills and what Hocking (2010) describes as the development of "empathic connection" or "living within the diversity of other points of view" through authentic self-expression (p. 4). The rhetoric state, thus, assess competence while simultaneously accomplishing the deepest aims of holistic education—the formation of persons.

Limitations

The first lamination of this study is theoretical. While the Classical Christian Education (CCE) framework encompasses a plethora of tenants ranging from the seven virtues, Paideia, the Great Books tradition, and the integration of faith within all areas of knowledge, this study was not wholly faithful in its application to those tenants. Teaching in a public secular high school meant that the explicitly Christian dimension of CCE (i.e. the formation of students as image bearers of God), via the integration of Scripture as a primary text to understand the world and the cultivation of a Biblical worldview, could not be made the main aim of instruction. As a result, the CCE framework missed the mark and applied more as a pedagogical philosophy that emphasizes virtue, Socratic dialogue, and the Trivium sequence, than a fully integrated

theological-educational dialogue. Further research should examine Trivium based instruction in settings where the full CCE framework can be applied without instructional constraints (i.e. faith based schools) such as the one of a kind *Good Soil Study*, commissioned by the Association of Classical Christian Schools and conducted by the University of Notre Dame's Sociology Department (Goodwin & Sikkink, 2020).

It is this study that deepened my interest in CCE. The researchers examined graduates from public schools, private schools, Catholic schools, evangelical schools, homeschool programs, and Classical Christian schools. After controlling for family income, parental education, and home environment, they found that Classical Christian graduates led all educational sectors in seven outcome areas, including college readiness, life outlook, Christian commitment, independent thinking, and cultural influence. What struck me most was not academic achievement. It was integration. These graduates appeared to possess stronger senses of purpose, identity, and responsibility alongside strong academic outcomes.

This study did not attempt to reproduce those conditions, but instead asked a narrow question: Can the pedagogical logic of the Trivium be meaningfully adapted into a high school business classroom to improve student engagement, critical thinking, and communication? Thus, the faith dimension is acknowledged as a significant variable that the study could not account for, and this study should be interpreted with that boundary clearly in mind.

A second limitation is methodological as the integrity of the Watson-Glaser Critical Thinking Appraisal data was limited to only fifteen questions. The pre and post assessment was administered digitally in an un-proctored environment and the pattern of responses on the post assessment suggested that a significant portion of students use AI generated answers. This observation makes it impossible to attribute the significant rise from 33.3% to 80% in correct

responses solely on instructional growth. A better designed approach would have included a proctored assessment environment, a control group receiving non-Trivium based instruction, and a larger more consistent sample size that did not change significantly between pre and post assessment in order to reduce selection bias. Further research must therefore more rigorously isolate the effects of Trivium-based instruction on critical thinking development.

Lastly, Porter's (2024) study of CCE in urban settings found that outcomes were strongest when school cultivated a parent-students-teacher triad. This study, however, collected no data on family engagement, students' home environment, or the ways that students' cultural and spiritual funds of knowledge were being developed or constrained outside of the classroom. Additionally, given that approximately 29% of students qualify for free and reduced lunch and several were navigating part-time employment or family financial stress, the absence of an examination of this contextual layer represented a pressing gap that further research can explore. Future research should also incorporate family surveys, home-school communication logs, student involvement in sports, clubs, and community partnerships (specifically, religious affiliations) that would enable a more complete picture of the constraints Trivium-based instruction has in students from diverse cognitive, social-spiritual, physical, and socioeconomic backgrounds (i.e. a whole child approach to education).

Conclusion

This action research project began with a conviction drawn from my own educational history. Rather than treating students as products of social forces or economic projections, my conviction resides in the timeless educational practices of Classical Christian Education (CCE): that students learn most humanly when education treats them as rational, spiritual, and

purposeful beings— made, as John Senior would say, “for the stars but rooted in the soil” (Bethel, 2016, p. 8).

By this Senior meant that the “human plant,” in order to tend to spiritual dimensions of Christianity, must first be nourished in the concrete and the real. Relativism, having persuaded a generation to treat all truths as subjective and all meaning as self-constructed, leaves students not liberated but adrift, their minds turning, as Chesterton wrote, in a disconnection from things (p. 8). The task of the Classical Christian educator, thus, is not to cut down jungles, as C.S Lewis put it, but to irrigate deserts and restore in students the philosophical conviction that stones are hard, water is wet, and that the difference between truth and error is not a matter of perspective but of reality (p. 12). Thus, before any argument can be evaluated, before any claim can be defended, before any financial decision can be made wisely, a student must first believe that the world is knowable and that what they know about it corresponds to something real. This is exactly what the Trivium is designed to restore.

The grammar, dialectic, and rhetoric stage of the classical Trivium provided the structure for that rooting. The grammar stage gave students language and routines solid enough to stand on, furnishing them with the vocabulary through which a discipline makes its claims on the world. The dialectic stage asked students to wrestle with real questions (about dark patterns, financial risk, ethics of design) in order to test those claims against evidence and reason, and to discover that not all arguments are equally valid and that the difference matters. Lastly, the rhetoric stage asked students to make their reasoning public and defend it in order to make their claims answerable and real. When students discover that their thinking corresponds to something outside themselves, that what they have learned has weight and consequences, they learn that they are capable of more than they had been told.

G. K. Chesterton warned that the most dangerous criminal is the educated criminal who knows that truth demands obedience but offers instead a broader, more modern, more liberating view of life in which all truth is relative and tolerance is virtue (p. XIII as cited in G. K. Chesterton, 1908, p. 43). Seniors' remedy was the immersion in the great imaginative literature, poetry, song, stargazing, and the persistent invitation to taste the mysterious beauty at the heart of real things.

By asking students to analyze real businesses, draft real arguments, design real campaigns, file real tax returns, I was attempting to do what Senior's program did with poetry. I aimed to reconnect students to a world that is knowable, consequential, and worth engaging with. Faith, Senior wrote, perfects reason the way a sculpture perfects a stone, but if the stone is pulverized, the form is empty air. This study is my effort to keep the stone intact and to give students the vocabulary, argument, and voice that makes genuine formation possible, so that whatever grace builds upon that nature finds something solid to work with. That is what classical education has always meant by flourishing, and is what, albeit imperfectly, this study sets out to pursue.

The work of education is never finished. We are continually faced with the question of what it means to cultivate purpose, virtue, and wisdom in the whole child, and to craft a pedagogy useful, as Paul wrote, for teaching, rebuking, correcting, and training in righteousness (2 Timothy 3:16). Every refinement of practice, every revision of a lesson plan, every honest reckoning with data that did not go as hoped, is an answer to the question. This question is one answer offered in the hope that it can contribute to and ongoing practice of educators who believe, as I, that the deepest purpose of a classroom is to prepare students not solely for a career

but for life— and, ultimately to prepare them to ask the perennial question with clarity and courage: *What does it mean to be a follower of Christ?*

References

- American Management Association. (2010). AMA 2010 Critical skills survey. Retrieved from [http://www.amanet.org/news/AMA-2010-critical skills-survey.aspx](http://www.amanet.org/news/AMA-2010-critical%20skills-survey.aspx).
- Anthony, M. J., & Benson, W. S. (2003). Exploring the history & philosophy of Christian education: Principles for the 21st century.
- Arjomandi, A., Seufert, J., O'Brien, M., & Anwar, S. (2018). Active Teaching Strategies and Student Engagement: A Comparison of Traditional and Non-traditional Business Students. *Journal of Business Education & Scholarship of Teaching*, 12(2), 120–140. <https://files.eric.ed.gov/fulltext/EJ1193332.pdf>
- Baxter, N. S. (2008). *The Progymnasmata: New/Old Ways to Teach Reading, Writing, and Thinking in Secondary Schools*. BYU ScholarsArchive. <https://scholarsarchive.byu.edu/etd/1523>
- Bethel, F., & Von Hildebrand, A. (2016). *John senior and the restoration of realism*. Thomas More College Press.
- Beverson, J. (2023). *Literature review on low-stakes testing and course performance* (RRN 2621). Crafton Hills College, Office of Institutional Effectiveness, Research and Planning. https://www.craftonhills.edu/about-chc/research-and-planning/research-briefs-and-reports/instruction/rmn2621_literature_review_low_stakes_testing.pdf

- Boa, E. A., Wattanatorn, A., & Tagong, K. (2018). The development and validation of the Blended Socratic Method of Teaching (BSMT): An instructional model to enhance critical thinking skills of undergraduate business students. *Kasetsart Journal of Social Sciences*, 39(1), 81–89. <https://doi.org/10.1016/j.kjss.2018.01.001>
- Barcalow, D. (2001). Adler, Mortimer, J. In M. J. Anthony (Ed.), *Evangelical dictionary of Christian education* (p. 22-23). Grand Rapids, MI: Baker Academic.
<https://archive.org/details/evangelicaldicti0000unse>
- Cabell, S. Q., Kim, J. S., White, T. G., Gale, C. J., Edwards, A. A., Hwang, H., Petscher, Y., & Raines, R. M. (2025). Impact of a content-rich literacy curriculum on kindergarteners' vocabulary, listening comprehension, and content knowledge. *Journal of Educational Psychology*, 117(2), 153–175. <https://doi.org/10.1037/edu0000916>
- Du Bois, W. E. B. (2017). *The talented tenth*. Okitoks Press.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*, 3rd Ed., Sage Publishing.
- Cline, T., & Shenvi, N. (2023). *What if Critical Race Theory Were Just a Legal Theory? A Christian Critique*. *Scholars Crossing*, 17(3), 557-588.
<https://digitalcommons.liberty.edu/lu law review/vol17/iss3/6>
- Diener, D. (2024). The Principles of Classical Education in advance. *Principia a Journal of Classical Education*. <https://doi.org/10.5840/principia202462410>
- Estep, J. R., Jr., Anthony, M. J., & Allison, G. R. (2008). *A theology of Christian education*.

Nashville, TN: B&H Academic.

Freire, P. (2000). *Pedagogy Of The Oppressed: 30Th Anniversary Edition; Trans. By Myra*

Bergman Ramos. Editorial: New York Continuum.

Diehl, D. (2006). Educational Philosophies Definitions and Comparison Chart. In *Augsburg University*. Augsburg University.

https://web.augsburg.edu/~erickson/edc490/downloads/comparison_edu_philo.pdf

Duchatelet, D., & Donche, V. (2022). Assessing student learning during simulations in education: Methodological opportunities and challenges when applying a longitudinal case study design. *Studies in Educational Evaluation*, 72(1), 101129.

<https://doi.org/10.1016/j.stueduc.2022.101129>

Gaskell, J. (1986). The Changing Organization of Business Education in the High School: Teachers Respond to School and Work. *Curriculum Inquiry*, 16(4), 417.

<https://doi.org/10.2307/1179430>

Goodwin, D., & Sikkink, D. (2020). *Good soil: A comparative study of ACCS alumni life outcomes*. Association of Classical Christian Schools; The Classical Difference Magazine.

<https://classicaldifference.com/wp-content/uploads/2020/06/The-Classical-Difference-Good-Soil-7-outcomes-full-research-report-Draft-3-28-2020.pdf>

Harken, Brent. (n.d.). *Creating A Covenant Christian Community Of Education Informational*

- Packet*. Coeur D'Alene Classical Christian School.
<https://static1.squarespace.com/static/6373d328c9a1fd0c19a0805d/t/68a789285956144b17211e6b/1755810088617/2025+CDA+Packet+Overview.pdf>
- Hocking, D. (2010). *Using journals to enhance learning in business classes*. Retrieved December 8, 2025, from <https://files.eric.ed.gov/fulltext/EJ1096999.pdf>
- Hicks, D. V. (1999). *Norms and nobility: A treatise on education*. Lanham, MD: University Press of American, Inc.
- Higham, D. (1948). *THE LOST TOOLS OF LEARNING Remaining sections from Project Gutenberg Canada ebook #60*.
<https://www.pccs.org/wp-content/uploads/2016/06/LostToolsOfLearning-DorothySayers.pdf>
- Hirsch, E. D. (2016). *Why Knowledge Matters: Rescuing Our Children from Failed Educational Theories* (1st ed.). Harvard Education Press.
- Hirsch, E. D. (Eric D. (2020). *How to educate a citizen : the power of shared knowledge to unify a nation* (First edition.). Harper, an imprint of HarperCollinsPublishers.
- Holmes, A. G. D. (2020). Researcher positionality - a consideration of its influence and place in qualitative research - a new researcher guide. *Shanlax International Journal of Education*, 8(4), 1–10. <https://doi.org/10.34293/education.v8i4.3232>
- Johnson, A. M., & Jahan, N. (2021). Assessing the Impact on Critical Reading and Critical Thinking. *Pedagogy : Critical Approaches to Teaching Literature, Language, Culture, and Composition*, 21(2), 277–294. <https://doi.org/10.1215/15314200-8811466>
- Lin, Y.-L., & Wang, W.-T. (2025). Using Business Simulation Games to Explore the Effects of

Instructional and Technological Support on Students' Psychological Needs, Cognitive Load, and Learning Achievement. *Journal of Educational Computing Research*.

<https://doi.org/10.1177/07356331241313128>

Lynch, B., & School, V. (2022). *The Four Foundations of Great Teaching The Four Foundations of Great Teaching*. Retrieved April 15, 2026, from

<https://mrc.classicalchristian.org/wp-content/uploads/2022/11/The-Four-Foundations-of-Great-Teaching-April-4-2022-Revisions.pdf>

Marcus, S. (2018). *Building 21st century business skills in high school business classrooms using digital games and simulations*. UNI ScholarWorks. <https://scholarworks.uni.edu/grp/199>

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Naugle, David. Introduction. (n.d.). Worldview and a Christian Worldview.

https://www.dbu.edu/naugle/academic-papers/_pdfs/11/worldview-and-a-christian-worldview.pdf

Negley, Mary E., "Culturally Contested Curriculum? African American Students and Classical Education" (2021). Electronic Theses and Dissertations. 2289.
<https://digitalcommons.georgiasouthern.edu/etd/2289>

No Cost Meals for Students – Here's What You Need to Know. (2024, September 18).

<https://salkeiz.k12.or.us/details/~board/district-news/post/no-cost-meals-for-students-here-s-what-you-need-to-know>

- Ormrod, J. E. (2020). *Human learning* (Eighth edition.). Pearson.
- Perrin, C. A. (2004). *An introduction to classical education : a guide for parents*. Classical Academic Press.
- Plato, Republic, in Complete Works, ed. John M. Cooper (Indianapolis: Hackett Publishing Company, 1997), 518d3–7.
- Porter, E. P. (2024). *Can a Classical Christian Education Help Break Generational Poverty in Urban Students?* FireScholars. <https://firescholars.seu.edu/classicalstudies/9>
- Poucher, D. R. (2017). Teaching Personal Finance as a General Education Course in a Liberal Arts Institution. *Christian Business Academy Review*, 12.
<https://doi.org/10.69492/cbar.v12i0.447>
- Smith, M. K. (2020). *Classical Christian Education and Students' Christian Formation*. Scholars Crossing. <https://digitalcommons.liberty.edu/doctoral/2342>
- Smith, Y. S., Chun, D., & Chandler, T. (2016). What's Done is Donne: Great Books Programs and the Business Student. *Christian Business Academy Review*, 11.
<https://doi.org/10.69492/cbar.v11i1.426>
- The Classical Difference. (2020, October 21). *Paideia: An Introduction*. The Classical Difference. <https://classicaldifference.com/paideia/>
- Tibbetts, W., & Leeper, G. (2016). Experiential Learning Outside the Classroom: A Dynamic Model for Business and Leadership Education Using Short-Term Missions. *Christian Business Academy Review*, 11. <https://doi.org/10.69492/cbar.v11i1.423>
- Vintinner, J. P., Harmon, J., Wood, K., & Stover, K. (2015). Inquiry into the Efficacy of

Interactive Word Walls with Older Adolescent Learners. *The High School Journal*, 98(3), 250–261. <https://doi.org/10.1353/hsj.2015.0007>

Wasson, D. L. (2016, July 28). *Alexander the Great as a God*. World History Encyclopedia. <https://www.worldhistory.org/article/925/alexander-the-great-as-a-god/>

Appendix A

Question Correctness	Beginning of the Semester	End of the Semester
	O- Right X- Wrong	O- Right X- Wrong
Question 1 - Argument	X	O
Question 2 - Argument	O	O
Question 3 - Argument	X	O
Question 4 - Assumption	O	O
Question 5 - Assumption	O	O
Question 6 - Assumption	X	X
Question 7 - Deduction	X	O
Question 8 - Deduction	O	O
Question 9 - Deduction	X	O
Question 10* - Inference	X	X
Question 11* - Inference	O	O
Question 12* - Inference	X	O
Question 13 - Interpreting	X	O

Information		
Question 14 - Interpreting Information	X	O
Question 15 - Interpreting Information	O	X
Percent of Correct Response (%) *See Q10-12 within link for comprehensive data: Comprehensive Assess...	33.3%	80%

Appendix A. Comprehensive Pre & Post Watson Glaser Critical Thinking Appraisal (WGCTA)

Assessment Results

Appendix B

Trail Watch

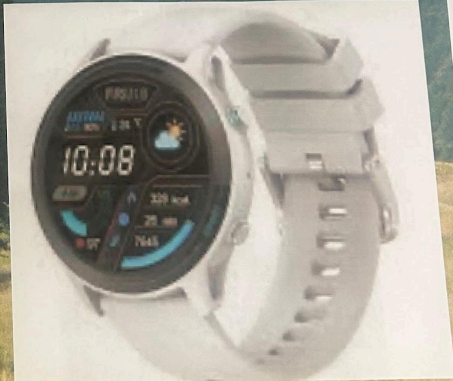
Problem	Solution	Key Metrics
Carrying an Iphone, not knowing trails, and trails not accurate	Convenience More Options Trail vise Verified trails/Updated	Miles Time Terrain Coordinates

Value Proposition

A Trail Watch that has verified explicit hiking Paths. Our product is different from others because there is no watch that could do this. Our product is worth buying because its more convenient, allows you to find new trails that are verified, and is reliable.

Cost Structure and Revenue Streams

\$5,000 to build software and \$100-140 to make them and to buy them it cost \$200-300 with a life span of 10-30 years



Target Audience	Unfair Advantage	Channels
Hikers 20's-30's Places with less urban	Be the first in the Market and of its kind	Website and Promote to forums

Appendix C

Codes	Themes	Commonalities in Responses
Shark Tank notes Simulations/sims Group projects Kahoot Posters Cardboard prototype	Preferred learning activities	Participants consistently identified Shark Tank notes as a favorite activity, frequently citing its accessible and routine structure. Simulations were polarizing. Students enjoyed many for their real-life application, but disliked by others for being confusing or tedious. Hands-on and creative activities (posters, cardboard prototypes) were broadly appreciated. Kahoots were cited as engaging review tools.
Budgeting Saving Investing Taxes Credit scores Insurance Car payments Scams/fraud Banking, resumes	Real-world financial skills	Participants most frequently identified saving money, avoiding scams, and understanding credit as the content they found most useful or would carry into the future. Taxes were a notable gap. Many participants wanted more depth on tax filing. Students with no income noted difficulty applying lessons immediately but anticipated using them later.
No income/broke Already knew the material Hasn't changed behavior Too young	Perceived personal irrelevance	A significant number of participants reported that their financial behavior had not changed, most often citing lack of income or a job as the reason. Many also noted they already practiced recommended habits (saving, cautious spending) before the class, reducing their sense of new learning. Some dismissed content as not yet applicable to their life stage.
Too many assignments Too fast pacing Confusing simulations Too much writing Long lectures Boring slideshows	Workload and pacing	Participants expressed frustration with the volume and pace of assignments across many responses. Simulations were frequently cited as overwhelming or poorly explained. Many students noted they struggled to keep up, especially those involved in sports or other demanding courses. Long lecture-style instruction without enough processing

		time was commonly cited as a barrier to engagement.
Random groups Not choosing partners Group projects with unequal participation Preferred working with friends	Social dynamics of group work	Participants had strong feelings about group composition. Being assigned to random groups was among the most commonly cited dislikes. Many reported that random groups led to uneven participation, while working with friends was listed as a favorite aspect of the class. The tension between structured grouping and peer comfort was a recurring theme.
Speak louder Slow down More interactivity Stricter classroom management More one-on-one support Less AI use More games	Instructional and classroom environment feedback	Participants offered specific, concrete suggestions for improvement. Volume and clarity of instruction were mentioned repeatedly. Students requested more interactive activities (Kahoots, games, sticker activities) and less reliance on slideshows and videos. Several participants noted classroom noise as a barrier to learning and called for firmer management of disruptive peers. A minority flagged concern about over-reliance on AI for completing work.

Appendix C. Codes, Themes, and Commonalities in Responses

Appendix D

Criteria	4 (Exceeding)	3 (Meeting)	2 (Developing)	1 (Attempting)
Description of criteria	Detailed, clearly organized index with logical headings; entries are easy to locate, reflecting intentional and thoughtful structure. Includes meaningful quotation(s) from each reading, with insightful explanations linking to themes, concepts, or personal/business insights. All reflections meet/exceed 300 words, demonstrating deep analysis, synthesis, and thoughtful connections. Notes from every class session; organized, clear, and show active listening with examples or visual aids.	Index is clear with consistent headings; most entries are easy to locate, organization is functional but may lack refinement. Includes required quotations per reading with explanations showing understanding but possibly lacking depth. Reflections meet length requirements and show clear understanding with some analysis. Notes from most class sessions; clear but may lack elaboration or examples. Clear writer's voice present, competent but less distinctive. Some thoughtful visual organization supporting	Basic or inconsistent index; some entries difficult to find; limited categorization or organization. Some readings missing quotations or explanations are brief and surface-level. Some reflections under required length or mostly summaries with limited insight. Notes missing for several sessions or minimal detail in notes provided. Limited personal voice; writing feels mechanical or summary-based. Minimal visual organization with limited design effort. Somewhat disorganized or inconsistent neatness. 2 to >1 pts	Minimal, disorganized, or missing index with difficult to locate entries. Few quotations included or no explanation connecting them to content. Missing or largely incomplete reflections. Few or no notes present; notes are highly incomplete. Little to no effort to show personal voice or engagement in writing. No intentional design or visual elements. Difficult to read or carelessly assembled presentation. 1 to >0 pts

	Strong, authentic author voice with original word choice and engaging writing style. Effective visual design elements (layouts, drawings, color) that enhance clarity and communicate thought. Visually polished, neat, and engaging presentation showing pride in craftsmanship. 4 to >3 pts	clarity. Generally neat and readable presentation. 3 to >2 pts		
--	---	---	--	--

Appendix D. High School Business Commonplace Book Rubric