

Exploring the Connectivity of ESG Core Values from a Christian Perspective and the Direction of Christian Education Utilizing Design Thinking

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Abstract

Purpose of the Study : This research aims to examine the core values of ESG (Environmental, Social, and Governance) from a Christian perspective and explore the direction of Christian education that fosters character traits such as service, compassion, responsibility, and sharing through the process of design thinking.

Content and Method of the Study : By investigating the background and definition of ESG, ESG practices in businesses, and the current status and values of ESG education in universities, this study examined the core values of ESG from a Christian perspective. Subsequently, the study explored and proposed directions for applying ESG education methods infused with character traits such as service, compassion, responsibility, and sharing through the process of design thinking.

Conclusion and Recommendations : Through this study, the core values of ESG have been derived as elements from a Christian perspective, and exploration has been made on how to integrate them into the design thinking process. Consequently, this study has identified the potential to integrate ESG into the design thinking process with a focus on elements from the perspective of Christian education. This could serve as foundational material for education seeking to apply ESG through the integration of design thinking, and it is hoped that it will be helpful as a basis for further research. Subsequent studies should aim to construct a more systematic framework for the direction proposed in this study through expert reviews.

Key Words

ESG education, ESG Christianity, design thinking education, service, consideration, sharing and responsibility, character

기독교 관점에서 바라본 ESG핵심 가치의 연결성과 디자인씽킹을 활용한 기독교 교육의 방향성 탐구

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논문 요약

연구 목적 : 본 연구는 기독교 관점에서 바라본 ESG 핵심 가치를 중심으로 살펴보고, 디자인씽킹 프로세스를 통해서 섬김, 배려, 책임과 나눔 등 인성을 함양한 기독교 교육 방향성을 탐구하는 것에 있다.

연구 내용 및 방법 : ESG 배경 및 정의, 기업에서 실천하고 있는 ESG, 대학 교육에서의 ESG 교육 현황과 가치를 탐구하여 기독교 관점에서 바라본 ESG의 핵심 가치 연결 요소를 중심으로 검토한 후, 디자인씽킹 프로세스를 통해서 섬김, 배려, 책임과 나눔 등 인성을 함양한 ESG 교육 적용 방안에 대한 방향성을 탐구하고 제시하였다.

결론 및 제언 : 본 연구를 통해서 ESG 핵심 가치를 기독교 관점의 요소로 도출하였고, 이를 디자인씽킹 프로세스에 접목할 수 있는 방향을 탐구하고 모색하였다. 따라서 본 연구는 ESG를 기독교 교육의 관점의 요소를 중심으로 디자인씽킹 프로세스에 접목할 수 있는 가능성을 발견하였다. 이는 디자인씽킹을 접목하여 ESG 교육을 적용하고자 하는 교육에서 기초자료로 도움이 될 수 있을 것으로 기대하는 바이다. 후속 연구에서는 전문가 검토를 통해 본 연구의 방향성 제시에 대해 더욱 체계적인 모형으로 구성될 필요성이 있다.

〈 주제어 〉

ESG 교육, ESG 기독교, 디자인씽킹 교육, 섬김, 배려, 나눔과 책임, 인성

I. Introduction

Amidst the advent of the era of artificial intelligence, there is active research underway on how the direction of education in Christian education should evolve (Hong, 2022; .Ok, 2023; Nam, 2023; Yang, 2022; Yoo, 2022). Furthermore, The climate crisis, demanding carbon-neutral industries, and increasing concern for environmental thinking have made ESG (Environmental, Social, Governance) corporate strategies not only avenues for resource conservation and sustainability but also for public institutions, including elementary, middle, and high school education curricula and university evaluations, to actively discuss and implement ESG education and evaluation methods (Jang & Park, 2023). The mention of ESG first appeared in the report 'Who Cares Wins,' written by the UN Global Compact in 2004. While humanity has prospered through development, excessive development without considering environmental issues has contributed to global warming. As a result of such problems, various countries, including the UN, have begun efforts to reduce carbon emissions and enact policy regulations, leading companies to incorporate ESG values into their management strategies (Kim, 2022). ESG places value on a company's vision and goals for sustainable growth and development (Eccles & Strohle, 2018), and it has been actively practiced in advanced countries such as the United States and Europe (Li et al., 2021). Companies adopting ESG practices are reported to generate greater profits than those that do not (Alda, 2021). Sustainable development through ESG combines economic development, nature conservation, and the reduction of global inequality as common ethical goals. The US Securities and Exchange Commission (SEC) has gradually mandated external certification for carbon emission information, affecting domestic companies with major clients in the United States (Kim, 2022.11.11. Korea Tax Newspaper).

Companies practicing ESG are leveraging psychological factors of the MZ generation to further enhance their brand value. Particularly, the MZ generation values the 'meaning out' as they move based on the meaning behind their actions. 'Meaning out' encapsulates the characteristics of the MZ generation who prioritize expressing their beliefs, values, and assertions. With such characteristics,

the MZ generation expresses their values through consumption, imbuing consumption with 'meaning' and 'value' (Lee, 2022).

Amidst this trend, numerous studies from a Christian perspective on ESG are being reported. In Jang's (2023) study, it was mentioned that the purpose of ESG should not just remain a slogan but should consider both the current and future generations. The importance of ensuring that marginalized and vulnerable individuals have the resources to live their lives was emphasized. Furthermore, from a humanistic perspective, if we consider evolution beyond materialism and respect humans who must live according to the law of survival, including deficit survival, there seems to be no reason to protect the environment, including the Earth, if the universe exists by itself (Jang, 2023). Therefore, it is important to consider the perspective from Christianity, as it dictates the protection of the Earth, the only habitat created by God for humans, and emphasizes the care for marginalized individuals who bear the image of God (Jang, 2023)

Research on ESG is actively progressing not only in the corporate sector but also in academia. According to searches in the Korea Citation Index (KCI), the number of academic journal papers published on the topic of ESG was 211 in 2021, 242 in 2022, and 116 in 2023, indicating continuous research in this area. The cultivation of talents capable of performing environmental, social, and governance (ESG) activities in education is becoming increasingly important (Zhou et al., 2021). Globally, in the era of digital transformation, the question of whether and how digital technology can reduce technical waste and become part of the solution is a major issue (Dwivedi et al., 2022). Moreover, in the field of education, it is reported that cultivating talents capable of performing ESG activities, including the ability to utilize digital technology, is essential (Zhou et al., 2021). Exploration of the direction of ESG-based education continues to be reported not only in general education but also from the perspective of Christian education (Jang & Park, 2023).

In the study of general university education incorporating ESG, Jeon Jong-hee and Han Seung-hoon (2023) tried to explore how ESG education can be applied, focusing on interviews with experts in the field, such as liberal arts curriculum and comparative courses of Korean universities. It was reported that a

basic understanding of employment and start-up understanding would be helpful in understanding sustainable development in university education, the importance of communication skills, and the importance of preparing for personnel interviews. In addition, in the study of Jeon Jong-hee & Han Seung-hoon (2022), the opening of comparative and programming was reported in a timely manner, focusing on the selection and basic matters of course opening and completion. It also mentioned the importance of balance between E, S, and G areas, and the importance of creating an ESG certification system completion system and micro-digri. The necessity of Christian education incorporating ESG In the previous study, Jang Yoo-jung and Park Hyun-jung (2023)'s search for the direction of ESG-based Christian university liberal arts education in the university liberal arts course, considering the connection between first and fourth graders, first graders need to "understand God and the creative world," second graders need to "understand my essence," third graders need to "practice ESG based on understanding the nature of the world and I," and fourth graders need to "social participation through ESG." It is possible to operate as a convergence course through designing ESG-based liberal arts education at Christian universities, and it is important for students to learn from the perspective of "faith" in their major studies, and it is necessary to accurately discern the world view of the present era through ESG liberal arts, and to have a clear sense of materialism and success.

However, the mention of ESG-based education programs utilizing design thinking in Christian education is lacking. There is an urgent need for diverse educational programs in Christian education that integrate ESG and provide creative problem-solving methods and practices. This study can be distinguished from previous research by discussing ESG education approaches centered around service and compassion, responsibility, and sharing through the design thinking process. By presenting new educational approaches for ESG education, this study enriches existing research and provides valuable resources for expanding ESG education approaches through creative problem-solving methods.

Therefore, this study aims to explore the directionality of incorporating ele-

ments of service, compassion, sharing, and responsibility into education, using design thinking centered around the core values of ESG from a Christian perspective. By first examining the background of ESG, ESG practices in the corporate sector, the current status of ESG education in universities, and its values, this study seeks to utilize design thinking to investigate how these elements can be integrated into education. It is anticipated that this study will provide foundational material for learning activities based on design thinking processes in Christian education. Design thinking processes offer learners the opportunity to engage in creative problem-solving and practical prototyping experiences, thereby facilitating active learning beyond theoretical understanding. Hence, it is deemed necessary to discuss the applicability of design thinking processes in fostering learning experiences

II. ESG

1. ESG Background and Definition

ESG, which originated in the UK, has become a significant global issue, encompassing environmental, social, and governance aspects. The framework for ESG (international framework) is as follows, as shown in <Table 1>.

CSR (Corporate Social Responsibility) is often mentioned alongside ESG. The discussion on CSR began in earnest with Howard Bowen's "Social Responsibilities of the Businessman" in the 1950s (Go et al., 2023). CSR is defined as the obligation of companies to pursue desirable policies in line with the goals and values of our society (Ahn, 2011). Unlike CSR, which focuses on fulfilling a company's social responsibility through social contribution activities rather than profit, ESG emphasizes long-term profitability growth and sustainable development. In other words, for sustainable growth, it is important for companies to not only consider financial indicators but also recognize the significance of their social impact and engage in socially influential activities and sponsorships.

〈Table 1〉 ESG Framework

Dimension	Factor	Definition
Environment (E)	Greenhouse gas emissions Energy consumption and efficiency Water usage and recycling Waste production and management (liquid, solid, hazardous) Impact on and dependence on biodiversity Impact on and dependence on ecosystems Innovation of environmentally friendly products and services	Environmental issues that can have a positive or negative impact on the financial performance or solvency of corporations, sovereigns, or individuals.
Social (S)	Freedom of association and collective bargaining Child labor Forced labor Occupational health and safety Customer health and safety Discrimination, diversity, equality Opportunities Impact on poverty and local communities Supply chain management Training and education Impact on local communities	Social issues that can have a positive or negative impact on the financial performance or solvency of corporations, sovereigns, or individuals.
Governance (G)	Code of conduct and business principles Responsibility Executive compensation Transparency and disclosure Diversity and structure of the board of directors Bribery and corruption Shareholder rights Stakeholder engagement	Governance issues that can have a positive or negative impact on the financial performance or solvency of corporations, sovereigns, or individuals.

Source: Based on self-explanation of the EBA Report on ESG Risk Management and Supervision.
 Online: [Link] https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2021/1015656/EBA%20Report%20on%20ESG%20risks%20management%20and%20supervision.pdf (Visited on February 12, 2024). (Requoted from Li et al., 2021)

2. ESG practices in companies

〈Table 3〉 below is an ESG that is practiced by companies such as Unilever,

Patagonia, Seventh Generation, and DR.BRONNER. Unilever is putting social responsibility into practice. It is providing social help in a variety of fields, including support for low-income families, reduction of disposable products, and opposition to animal testing, and is fulfilling its goal of being eco-friendly. Unilever is operated with the most emphasis on increasing the sustainability of its management itself. The advertising sentence "Don't buy this shirt" has become an issue, and Patagonia is conducting a campaign that can have a good influence on society. They are making efforts to reduce waste by making long-lasting products, and they are trying to save water and energy in the production process. They also use 1% of their efforts for environmental and social responsibility and support organizations that work to protect and revive the environment. Seventh Generation runs the company by incorporating the laws of the American Indian tribe, the Iroquois, into its name, meaning that "decisions must consider the impact that will have on the seventh generation." It emphasizes using eco-friendly materials, not testing animals, and not using animal-based ingredients. Emmanuel Bronner, the founder of DR. BRONNER, began giving lectures on human peace after his family was slaughtered by the German Nazis during World War II, and gave soap as a gift to those who came to the lecture. Soap began the creation of a brand with his philosophy, which has grown to be the No. 1 brand in the organic body care market share in the United States to this day. It also established the Dr. Bronners Foundation to expand its community service area worldwide and take the lead in supporting various charities. DR. BRONNER'S is taking the lead in realizing ALL-ONE, a brand philosophy that means the coexistence of people, animals, and the earth, rather than pursuing positive changes and profits in the world, and is a social enterprise that contributes a certain amount of sales revenue to charity every year (Kim, 2023).

Companies incorporating ESG are on a rising trend. ESG advocates environmental protection, sustainability, and values for the next generation, prompting consumer interest and sustained consumption. In other words, companies are leveraging ESG to not only promote environmental conservation and charitable activities but also encourage consumers to recognize the 'value' of their products.

〈Table 2〉 ESG Practices Implemented by Companies





Company	Related Image	Characteristics	Examples of Use
Unilever		Dedicated to improving the health and well-being of over 1 billion people, Focusing on environmental protection, Practicing net positive management.	Developed recyclable tubes.
Patagonia		Established a corporate philosophy of protecting the natural environment over business profits.	Utilized polyester fabric produced from discarded PET bottles in garment manufacturing
Seventh Generation		Consideration for the impact on future generations.	Eco-friendly packaging, natural detergents, green offices
DR. BRONNER'S		Established the "Dr. Bronner's Foundation" to lead charitable donations.	Uses organic ingredients meeting organic food standards and manufactures natural soap.

Image source: Google

3. The current status and pursuit of values in ESG education in higher education.

The social need and demand for ESG-related competencies in higher education and their impact on employment and work are increasing (Jeon & Han, 2023), and universities are showing significant interest in ESG education and management at their level, making various efforts to implement it (Jeon & Han,

2023). ESG education is already actively being implemented in university education overseas. Major universities such as Stanford University and Harvard University have been offering ESG education in MBA programs since the 2010s, and the course 'Reimagining Capitalism,' introduced in 2012, has become a representative compulsory course in the Harvard MBA program (Kang, Chosun Ilbo, 2021). Domestic universities have also started to introduce ESG into their curricula, with a growing trend of universities offering ESG courses. Yonsei University introduced an ESG course in graduate school curricula starting from the first semester of 2021, with a new course 'Legal Challenges of ESG and Metaverse' in the Graduate School of Law, Hongik University's Graduate School of Business Administration introduced a course on 'ESG Investment,' and Hanyang University established the first domestic ESG specialized track 'HUBS ESG' in the MBA program of the Graduate School of Business (Kang, Chosun Ilbo, 2021). Additionally, the number of ESG courses offered in undergraduate majors is increasing. Dong-A University opened a course titled 'Addressing Social Issues Together for ESG Management Practice,' and Hanyang University included 'ESG Consulting' as a regular course in the 'Social Innovation Convergence Major' starting from the second semester of this year. This phenomenon is driven by the trend of companies recruiting talents with ESG competencies in job interviews. Recently, LG Electronics has been giving bonus points in document screening for applicants with ESG activity experience. Experts believe that this social trend will benefit students' employment and work performance as ESG-related courses are increasingly integrated into the curriculum (Kang, Chosun Ilbo, 2021). The following <Table 3> presents the current status of ESG course offerings in domestic universities.

Specifically, the consumption tendencies of the MZ generation are moving towards 'values,' and the inclination to have a significant interest in 'social values' also influences the introduction of ESG education in universities. According to a survey conducted by the job preparation platform Job Korea targeting 1,188 job seekers, 63.8% expressed a desire to work for companies practicing ESG management(Kang, 2021).

〈Table 3〉 Current Status of ESG Course Offerings in Domestic Universities

University Name	College Course	Title	Opening Date
Yonsei University	Graduate School of Law	Legal Issues of ESG and Metaverse	Spring Semester 2021
	Graduate School (Future)	Integrated Sustainable Investment in ESG	Spring Semester 2021
Hongik University	Graduate School of Business	ESG Consulting	2nd Semester 2021
Hanyang University	Undergraduate General Education Course	ESG Consulting	2nd Semester 2021
	Graduate School of Business MBA Program	HUBS ESG	2nd Semester 2021
Donga University	Undergraduate General Education Course	Social Issues Addressed Together for ESG Management Practices	2nd Semester 2021

Source: Kang Myung-yoon, Chosun Ilbo, <https://bitly.ws/3cZyP>

ESG is considered essential rather than optional for all companies, emphasizing the need for talents who understand ESG better. It was emphasized that students who received ESG practice education during their youth are likely to grow into talents who practice ESG management. Furthermore, the QS World University Rankings, a UK university evaluation agency, has introduced the Sustainable Development Goals (SDGs) into the evaluation of university research grades starting this year(Jang & Park, 2023), indicating that ESG education in universities will expand further globally.

III. Value Connection of ESG-Based Christian Education

1. ESG (Environment, Social, Governance) from a Christian Perspective

In the Bible, we can find a mention of practicing ESG values in the verse 'Be fruitful and multiply; fill the earth and subdue it; have dominion over the

fish of the sea, over the birds of the air, and over every living thing that moves on the earth' (Genesis 1:28). Kim(2022) mentioned the implementation of ESG values in worship, discussing the 'E' issue of ESG and emphasizing the importance of having a responsibility to preserve the life and nature created by God and keeping covenant with God as gratitude for the created world. Furthermore, in church construction, the importance of environmentally friendly space configuration for worship was discussed, along with mentioning representative cases such as Tadao Ando's church series architecture, which harmonizes nature and worship spaces, including the Church of Wind, Church of the Sea, and Church of Light. Addressing the realization of 'S' values, the issue lies in the ministry for the socially vulnerable and caregiving, which is the identity of the church. It connects with the responsibility of Jesus Christ, who chose the cross to save people, emphasizing worship that highlights the socially vulnerable and social responsibilities. Additionally, mentioning the establishment of 'G' in worship composition, it is noted that in recent years, worship communities have increasingly gathered their talents to participate together, with congregants contributing their talents in music, art, praise, drama, digital videos, dance, etc., enriching worship with diverse contents. This fosters vibrant communication between pastors and laypeople during worship, which connects with the decision-making and proper communication process of ESG's 'G' (Kim , 2022).

The values advocated by ESG are also connected to the values of the MZ generation, which most university students belong to. The MZ generation now considers 'what,' 'how,' and 'why' to be important, and they are interested in what kind of faith experience the church offers that is different from the world and how it provides it (Lee, 2022). The MZ generation values mutual, voluntary, and communicative relationships rather than unilateral and coercive ones (Lee, 2022). In other words, the MZ generation is a generation that considers what activities mean to them to be important. The values pursued by ESG are connected to the characteristics of the MZ generation, which seeks 'meaning-out.' The MZ generation expresses 'meaning' and 'value' through consumption, and discourse on ESG is likely to indicate a model for enhancing the faith capacity of the MZ generation in faith education (Lee, 2022)

Lee Eun-kyung (2022) suggests enhancing faith capacity through ESG, emphasizing that beyond mere profit-seeking, companies should start incorporating ‘public responsibility,’ ‘collaborative pursuit,’ and ‘sustainability’ into their essence and purpose. It is reported that decisions that harm the environment and society should not be made. Since the church is a selfless non-profit organization dedicated to fulfilling the heavenly mandate of God’s kingdom rather than pursuing economic interests or performance as a profit-oriented group, there is a connection(Lee, 2022). In Lee Eun-kyung’s (2022) study, in the discourse on ESG, the importance of the environment (Environment) - understanding humans as beings who coexist with nature, society (Social) - the church as a community of hospitality that provides safety and rest, and governance (Governance) - the importance of being a transparent and fair church, where no one is excluded, and the importance of Christian sharing and responsibility are mentioned.

2. The Connection of Christian Education Values Based on ESG - Service, Compassion (Helping the Weak), Sharing, and Responsibility

In this study, the connection of Christian education values based on ESG is viewed through three aspects (Service, Compassion, Sharing, and Responsibility). ‘Service,’ represented by the verb ‘diakoneo,’ often denotes various forms of service and is sometimes associated with ‘waiting at the table,’ frequently appearing in the New Testament concerning meals (Matthew 4:11; Mark 1:13). It broadly signifies ‘providing for livelihoods.’ Environment-related themes can be linked to biblical verses like Genesis 1:28, where God commands humanity to ‘be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth.’ ‘Compassion’ refers to caring and looking after others (Naver Korean Dictionary). For Christians living together on this earth, it entails practicing ‘love in action’ as citizens of the Kingdom of God. In an era marked by rampant selfishness, practicing ‘compassion’ is crucial, echoing Proverbs 19:17, which promises that ‘Whoever is kind to the poor lends to the LORD, and will be repaid in full.’ Sharing and Responsibility can be found in

the commandment 'Love your neighbor as yourself' (Matthew 22:39), emphasizing charitable acts toward the poor based on loving one's neighbor as oneself. Hwang and Cho (2019) argue that when equality, justice, and sharing interact based on a Christian worldview, they imbue corporate social responsibility with substantive value, suggesting that integrating Christian principles into education can influence the attitudes of learners entering society after graduation.

IV. Utilization Strategies of ESG-Based Christian Education Using Design Thinking Process

1. ESG-Based Christian Education Utilizing Design Thinking Process

Design thinking is a process presented by the d.School at Stanford University, consisting of five stages: empathizing with people's observations and understanding, defining and identifying problems, generating solutions, and prototyping solutions creatively to address uncomfortable situations that can arise in daily life (Kim, 2023a). The design thinking classes at Stanford University's d.School are characterized by learners from various disciplines coming together to autonomously select topics of interest and collaborate. It is a methodology gaining attention in both businesses and schools as a way to provide creative problem-solving for issues encountered in everyday life. One notable feature of design thinking is its cyclical stages, allowing for iteration from the initial phase if desired outcomes are not achieved in the final testing stage. Additionally, it involves using simple tools to create prototypes and enables iterative attempts without fear of failure, facilitating free brainstorming for idea generation and prototype completion.

The importance of design thinking education lies in its ability, as noted by Kim(2023b), to simultaneously foster divergent and convergent thinking among learners, thus cultivating creative abilities. It serves as a guideline for innovative problem-solving, aiding in creative problem-solving (Kim, 2023b). Therefore, integrating design thinking into university education to learn about ESG is expected to facilitate learners' understanding and provide an efficient learning

approach. The following outlines the step-by-step content that can be applied to ESG using design thinking stages.

〈Table 4〉 Utilization of Design Thinking Themes Based on Biblical Verses

Design Thinking Stage	Applicable Contents of ESG	Topics (Example)	Elements to Include in Problem Solving	Applicable Biblical Verses
Empathy	Utilizing discussion time for learners to select ESG (Environmental, Social, Governance) topics Acquisition of ESG content through discussion	For the Environmental (E) related topic, one could explore the issue of single-use plastic usage and methods to address it	For the topic of Service (Serving Leadership)	God blessed them and said to them, 'Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.' (Genesis 1:28)
		Social (S) pertains to the issue of child labor in developing countries	Compassion (Assisting the Weak)	To show pity to the poor is to lend to the LORD; he will repay you for what you have done. (Proverbs 19:17)
		Governance (G) Related topics include finding solutions and resolving issues related to housing problems among vulnerable populations.	Responsibility and sharing	Love your neighbor as yourself. (Matthew 22:39) Religion that God our Father accepts as pure and faultless is this: to look after orphans and widows in their distress and to keep oneself from being polluted by the world. (James 1:27)
Problem Definition	Through problem definition, one can deeply contemplate issues related to ESG (Environment, Social, Governance).			
Ideation	Developing solutions for ESG (Environmental, Social, Governance) related issues and devising methods to practice service, integrity, responsibility, and sharing.			
Prototype	Deriving creative problem-solving methods through brainstorming for prototype development			
Test	Exploring the potential for problem-solving through demonstration with prototypes			

The utilization of design thinking themes based on biblical verses can be structured as follows in Table 4. In the empathy stage of design thinking, learners can acquire the content of ESG using ESG-related topics, such as addressing the issue of single-use plastics for the environment (E), child labor in developing countries for society (S), and housing issues for vulnerable populations for governance (G), and devising solutions. Components to be included in problem-solving should be composed of service, compassion (assisting the weak), responsibility, and sharing. Relevant biblical verses include Genesis 1:28, which emphasizes stewardship of God's creation; Proverbs 19:17, advocating compassion for the poor; Matthew 22:39, urging love for neighbors; and James 1:27, highlighting care for orphans and widows. In the problem definition stage, learners can deeply contemplate ESG-related issues, while in the ideation stage, they can brainstorm with team members to discuss solutions for ESG-related problems and practice service, character, responsibility, and sharing. In the prototyping stage, creative problem-solving methods derived from brainstorming can be used to develop prototypes, and in the testing stage, the potential for utilizing prototypes for problem-solving through demonstrations can be explored. The advantage of using these design thinking stages to acquire ESG subjects lies in the experiential learning theory proposed by E. Dale, which suggests that learners can remember up to 90% of what they directly experience and execute (Kim, 2023a), thus providing an effective method for learners to understand ESG concepts and learn effectively based on biblical verses.

V. Closing remarks

The purpose of this study is to explore the core values of ESG from a Christian perspective and to investigate the direction of ESG education using design thinking in Christian education. This study considers the urgency of ESG education in Christian education as ESG is actively discussed not only in corporate settings for conserving and sustaining environmental and social governance

resources but also in educational curricula. Thus, it is deemed valuable to explore the direction of ESG education using design thinking in Christian education. Recent preliminary studies on Christian-based ESG also emphasize the importance of interpreting and applying ESG from a Christian perspective. In this study, design thinking processes that can generate creative thinking were utilized. The study structured the content around the core values of ESG, namely, service, consideration, responsibility, and sharing, suggesting a method for utilizing design thinking. This could be valuable in assisting Christian education. Previous studies have also interpreted ESG from a Christian standpoint, emphasizing the recognition of humans as stewards created in the image of God, responsible for preserving the created world. Kim(2022) mentions the similarity between ESG values and theological directions pursued by Christianity. Jang and Park (2023) cite scripture to highlight God's role in creation and emphasize the responsibility of Christians to serve.

This study analyzes the background and definition of ESG, ESG practices in corporations, and the current status and values of ESG education in university education. Through this analysis, it seeks to explore possibilities and directions for applying ESG core values. The study aims to explore possibilities and directions for applying ESG core values through the design thinking process. The expected effects of utilizing design thinking in ESG education include facilitating creative problem-solving through team activities, generating results through brainstorming, and iterating through empathy and prototyping stages. The study also emphasizes the importance of using design thinking to acquire ESG subjects as it aligns with experiential learning theories. Therefore, this study could serve as foundational material for professors contemplating integrating ESG into Christian liberal arts classes, providing learners with a better understanding and active learning methods.

Limitations of this study include its focus on exploring possibilities and directions for ESG education in Christian university liberal arts education through the design thinking process. Subsequent research may focus on implementing systematic teaching models for ESG and gathering expert opinions for comprehensive reviews.

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