

HOW DO ACCOUNTING STUDENTS RESPOND TO INTEGRATED LEARNING IN SUSTAINABILITY ACCOUNTING?

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Abstract

The aim of this research is to analyze the content of the curriculum and the messages conveyed by students in order to adapt the integrated curriculum for sustainability accounting courses. The research method used is content analysis which uses information from key informants as research data. In addition, a survey was conducted on sixty students taking social and environmental accounting courses. The sampling technique was carried out using simple random sampling. The results of the research are that sustainability accounting is considered important to be implemented in the accounting education curriculum at bachelor's and master's levels. Students are interested in sustainability accounting because it is a new paradigm in the field of accounting which focuses on social and environmental transactions. The main contribution of the research is aimed at improving the accounting study program curriculum to adopt sustainability accounting as a separate course following the development of the accounting profession.

Keywords: Sustainability Accounting; Accounting Study Program Curriculum; Integrated Learning Methods; Social and Environmental Accounting

Abstrak

Tujuan dari penelitian ini adalah untuk menganalisis isi kurikulum dan pesan yang disampaikan mahasiswa dalam rangka mengadaptasi kurikulum terpadu pada mata kuliah akuntansi keberlanjutan. Metode penelitian yang digunakan adalah analisis isi yang menggunakan informasi dari informan kunci sebagai data penelitian. Selain itu, survei dilakukan terhadap enam puluh mahasiswa yang mengambil mata kuliah akuntansi sosial dan lingkungan. Teknik pengambilan sampel dilakukan dengan menggunakan simple random sampling. Hasil penelitian adalah akuntansi keberlanjutan dinilai penting untuk diterapkan dalam kurikulum pendidikan akuntansi jenjang sarjana dan magister. Mahasiswa tertarik dengan akuntansi keberlanjutan karena merupakan paradigma baru dalam bidang akuntansi yang berfokus pada transaksi atau peristiwa sosial dan lingkungan. Kontribusi utama penelitian ditujukan untuk penyempurnaan kurikulum program studi akuntansi untuk mengadopsi akuntansi keberlanjutan sebagai mata kuliah tersendiri mengikuti perkembangan profesi akuntansi.

Kata Kunci: Akuntansi Keberlanjutan; Kurikulum Program Studi Akuntansi; Metode Pembelajaran Terpadu; Akuntansi Sosial dan Lingkungan

Introduction

Based on the 2021 Asian Development Bank (ADB) report, Indonesia is still listed as one of the countries with a high risk of environmental disasters, especially floods and extreme heat. ADB also noted that in 2050, the temperature increase in Indonesia will range from 0.80 degrees Celsius to 1.40 degrees Celsius. Similar notes were also reported by NASA's Goddard Institute for Space Studies, namely that Earth's temperature has increased significantly over the last seven years. Therefore, sustainability has become a key topic to save the Earth (Almagtome & Abdlazez, 2022). The issue of sustainability has actually been initiated by the United Nations (UN) since 1987 by releasing a report entitled *Our Common Future* which is also called the Brundtland Report. The report highlights the issue of climate change globally (Žalėnienė & Pereira, 2021). To overcome climate change, the Brundtland Report emphasizes sustainable development action from the government in all aspects (Abbas, 2020).

The Brundtland Report basically prioritizes the role of government. Sustainability issues are directed at protecting the Earth. If our Earth is unhealthy, human basic needs will also be affected. Meanwhile, another report compiled by environmental analyst from the BBC, George Harrabin, found that a mobile lifestyle is one of the triggers for the global climate crisis (Johnstone & Newell, 2018). The reason is, this lifestyle has a significant impact on the energy crisis (Saputra, 2023). The traveling lifestyle increases fuel consumption which also has an impact on increasing the Earth's temperature (Teng et al., 2012). Unmitigated, carbon emissions from the transportation sector are the biggest contributor to climate change. As much as 70 percent of carbon emissions are contributed by air transportation. Meanwhile, only 10 percent of carbon emissions come from household waste. This condition will become increasingly worrying if it is not treated immediately (Zhao & Taghizadeh-Hesary, 2022). Everyone living on Earth is responsible for this issue. Climate change can be prevented by changing lifestyles to be sustainable (Saputra et al., 2023). For example, each individual can reduce their carbon footprint and start switching to using new and renewable energy. These two efforts are being promoted in Indonesia (Saputra & Widiansyah, 2022).

However, this action alone is not enough to help. A carbon neutral lifestyle pattern has actually been proposed since COP-24 (24th Conference of the Parties to the United Nations Framework Convention on Climate Change). One example of applying this lifestyle is the carbon footprint project in the household sphere (Tweneboa Kodua et al., 2022). In the long term, this program can improve the condition of the Earth (Laksmi, Putra, et al., 2023). The business world and businesses are also obliged to contribute to handling climate change (Rogerson & Baum, 2020). The need for sustainable accounting is increasingly evident as industry's impact on the earth expands. With the increase in sustainability issues, accountants who are able to maintain sustainability values will be increasingly needed, as quoted from The Global Report Initiative (GRI) (Adams et al., 2014).

Sustainable accounting is one of the fields of modern accounting science. This field of science analyzes the impact of business on society and the environment. In the scientific field of sustainability accounting, an accountant is not only involved in recording and making financial decisions (Ahmad et al., 2018). Accountants must also take part in maintaining environmental and social conditions. These provisions are regulated in the International Accounting Standards Body (International Financial Reporting Standards/IFRS) as a reference to ensure accurate recording by accountants (Uyar, 2020). As is known, a company's environmental and social business operations also influence the company's reputation. This is proven in research by Merli et al. (2019) which

found that increasing a company's business reputation is influenced by disclosure of social and environmental actions. This effort to protect the Earth has received a good response from consumers. Companies can operate, but also keep the Earth well. Disclosure of social and environmental actions is carried out by companies through the Environmental, Social and Governance Report (ESG Report) which is prepared by accountants (Carol, 2017). This report contains information on social, environmental and corporate governance actions. When preparing ESG reports, actions to protect the Earth are prioritized over finances (Erhemjamts & Huang, 2019). In the ESG report, the company reveals the amount of carbon emissions produced in its business processes (Laksmi, Arjawa, et al., 2023). Disclosure of carbon emissions is indeed risky for companies. However, this can increase consumer confidence. From there, sustainable accounting functions as a guardian of business processes so that they continue to run optimally while also ensuring that the Earth is well maintained (Cakranegara & Sidjabat, 2021).

Accountants are drivers in the field of sustainable accounting science (Torres López et al., 2019). This type of accountant must be prepared from an early age by universities. That way, accountants in the future will not only be proficient in accounting recording and reporting, but will also be able to analyze and care about the impact of the company's business on the Earth (Nik Abdullah et al., 2020). Currently, many industrial sectors have a negative impact on the environment. On the other hand, globalization and digital business prioritize profit. Therefore, the role of sustainability accounting will become increasingly crucial (Rubio-Mozos et al., 2020). The company's business and non-business decisions must be looked after by accountants. The quality of the reports produced must also maintain the company's reputation, so it is necessary to improve the accounting education curriculum by adding an integrated sustainability accounting course (Chandra, 2017).

The concept of sustainability accounting has now become an interesting issue that has been discussed by professional accountants (Cho et al., 2020). The problem with conventional accounting is that conventional accounting cannot measure company activities that are not quantitative in nature, but these activities can add value to the company (Hörisch et al., 2020). The role of organizational stakeholders greatly determines the quality of implementing the sustainability accounting concept in an organization (Gil-Marín et al., 2022; Zyznarska-Dworczak, 2020). Research from Shen et al. (2020) shows that company stakeholders play an important role in implementing sustainability accounting, especially in the process of reporting social and environmental information, developing strategic plans and sustainability indicators, measuring sustainability performance, and preparing organizational sustainability reports (Ascani et al., 2021). The concept of sustainability accounting has begun to be socialized in universities to support the creation of accountants who concentrate on sustainability (Majidah & Aurora, 2023). The concept of sustainability accounting can be applied to organizations other than business organizations (Cho et al., 2020; Gil-Marín et al., 2022). One derivative of the practice of sustainability accounting is disclosing financial information, social information and environmental information in the form of a company sustainability report (Xaviolyn et al., 2023). Accounting graduates who have a foundation in sustainability can work in all companies by implementing their sustainability knowledge which is beneficial for the company and produces legitimacy which is important for the company (Shen et al., 2020; Zyznarska-Dworczak, 2020).

The goal of integral accounting education, namely after students have taken all the courses, is to achieve competency which is more of a mix of cognitive, affective and

psychomotor goals. The competency in question is competency as a beginner accountant (entry level accountant) (Du et al., 2018). At this goal level, accounting education graduates will have a common body of knowledge to become members of the accounting profession (Saputra, 2023). In several universities, there have been differences in the offerings of sustainability accounting courses. Some universities offer sustainability accounting courses in two semesters and separate social and environmental accounting courses from sustainability accounting (Bahuguna et al., 2023). Other universities only provide one sustainability accounting course (Ikpor et al., 2022). Universities that only provide one sustainability accounting course have differing opinions regarding the content of the course material (Vărzaru, 2022). The difference is that some are based on the triple bottom line and there are also those based on the pentuple bottom line. Both of these are based on the same principles, namely profit, people and planet. However, in the pentuple bottom line add phenotechnology and god (Carol, 2017). Some syllabi contain only social and environmental accounting, some contain environmental management accounting only, and some contain both (Paolone et al., 2020). Based on the basis of courses that have been accepted in semesters one to six, it is best to give sustainability accounting in semester seven (Ascani et al., 2021). Because in the seventh semester, students have matured with general and specific accounting theories and concepts in various contexts. In this seventh semester, students will take strengthening courses for writing scientific papers. Sustainability accounting can make them aware of environmental awareness, respect for social existence and the importance of energy conservation. Apart from that, it can also be used as inspiration in writing scientific papers on the latest topics regarding sustainability accounting. This sustainability accounting course provides students with problems that arise in the context of sustainability, namely profit, planet and people. Materials for discussion and discussion of problems that arise can be taken from professional magazines, both domestic and foreign (Ascani et al., 2021; Vărzaru, 2022; Vysochan et al., 2021).

The aim of this research is to test and analyze the extent of the importance of integrating sustainability accounting in the accounting curriculum at Warmadewa University, especially in the social and environmental accounting course given in the seventh semester of the accounting study program. Sustainability accounting is very important to study in accounting study programs, because it characterizes a sustainability-based curriculum and is the hope of universities in welcoming the era of sustainability. Prepare yourself starting from students, lecturers and education staff to be aware of the principles of sustainability.

Method

This research was conducted by reviewing the curriculum at the Accounting Study Program, Warmadewa University, Indonesia. The research method for general qualitative research is such that it incorporates theories relevant to the research problems (Gachie, 2020). In this section, an assessment is carried out regarding the concepts and theories used based on the available accounting education curriculum, especially from the basic considerations, uniqueness of the study program, superiority of the study program, and concentration of the study program (Hussain et al., 2019). The type of research used in this research is library

research based on a review of the accounting education curriculum. Judging from its nature, this research is descriptive research (Christ & Burritt, 2017; Velte, 2019). Descriptive research focuses on systematic explanations of facts obtained when research is conducted (Byun et al., 2021). However, the Warmadewa University accounting study program does not specifically offer sustainability accounting in its curriculum.

The data collection method for this research was taken from secondary data sources in the form of the accounting education curriculum at Warmadewa University, and data from interviews with key informants, namely the head of the study program, head of the curriculum compilers, and students taking social and environmental accounting courses (Bahuguna et al., 2023; Devedi et al., 2017). The number of informants who participated was five people consisting of key informants. The interview method was carried out using a closed and semi-structured system (Qorri et al., 2018). The interview instrument is in accordance with the results of the data analysis carried out previously. We conducted a simple survey via Google Form regarding the research topic, then the results of the Google Form-based data analysis were used for interview questions. Data analysis using content analysis (Skačkusienė & Smirnova, 2022). The strategic steps in content analysis research are as follows (Saputra et al., 2021): First, determine the research design or model. Here several media are determined, comparative or correlation analysis, whether there are many or few objects and so on. Second, search for main data or primary data, namely the text itself (curriculum). As a content analysis, text is the main object, even the most important. Searches can be carried out using certain observation forms which are deliberately created for the purpose of searching for data using data that is already available such as the accounting education curriculum. Third, search for contextual knowledge so that the research carried out does not exist in a vacuum, but is seen to be linked to other factors.

The research was carried out by combining survey techniques with a sample of 60 students taking social and environmental accounting courses with the aim of getting answers to various questions and perceptions about the aim of the research, namely analyzing the content of the curriculum and messages conveyed by students in order to adapt the integrated curriculum of the courses sustainability accounting (Moktadir et al., 2020; Williams et al., 2019). The survey was carried out simply during the classroom learning process with the help of a Google form. The survey instrument was created to suit the research objectives referring to students' questions during the previous curriculum preparation workshop (Saputra, 2019). The survey results were analyzed simply and were able to answer the research questions. What we mean by simple analysis is analysis based on the results of filling in questions on an Excel-based Google form. The results are in the form of diagrams and are able to answer survey questions.

Results and Discussion

Sustainability Accounting Standards and Their Application to Accounting Education

Several organizations that develop accounting systems, for example SASB (Sustainability Accounting Standard Board), have released standards or guidelines regarding the implementation of the concept of sustainability accounting for business organizations and non-business organizations (Klymenko et al., 2021; Vysochan et al., 2021). The existence of

standards or guidelines regarding sustainability accounting shows that more and more organizations are committed to applying the concept of sustainability accounting to organizational activities (Gil-Marín et al., 2022; Vărzaru, 2022). Policies regarding the implementation of sustainability accounting are not only prepared for business organizations, but later this policy can be used in non-business organizations (Shen et al., 2020). One thing that can be done so that the process of implementing the concept of sustainability accounting is widely implemented by organizations is to issue guidelines or standards regarding the implementation of the concept of sustainability accounting (Hörisch et al., 2020; Klymenko et al., 2021). The concept of sustainability accounting seems to be of concern to governments in countries that are committed to implementing the concept of sustainability accounting, including Indonesia (Cho et al., 2020).

The concept of sustainability accounting is considered important to be implemented in the accounting education curriculum starting at undergraduate level (first degree) (Cho et al., 2020; Sisaye, 2021). The current curriculum, especially at Warmadewa University, has not widely adopted sustainability accounting. The learning achievement of sustainability accounting is that students are expected to be able to interpret, compile and analyze sustainability reports in accordance with GRI or other guidelines in case studies (Ascani et al., 2021; Vărzaru, 2022). When compared with the existing curriculum, it needs to be readjusted so that sustainability accounting is taught independently and not integrated with social and environmental accounting courses.

Sustainability accounting courses are not yet considered important in the Warmadewa University accounting study program curriculum, so teaching staff or lecturers need creativity in integrating sustainability accounting material into social and environmental accounting courses (Ascani et al., 2021). In the table above it can be seen that elements of sustainability are reflected in social and environmental accounting courses (Adhikari et al., 2013). The author in this study analyzed the entire curriculum of the Warmadewa University accounting study program, and did not find courses that were identical to sustainability elements from semester one to semester six. And, in the seventh semester, a social and environmental accounting course was discovered.

Social and environmental accounting in the learning process uses a variety of literature. This literature comes from books, articles and real cases that occur in the world (Shen et al., 2020). In the context of learning social and environmental accounting, some material has touched on the position of sustainability accounting, but not much. In the course syllabus, it is reflected that this discussion was given only in two meetings. The policy direction for educational accountants in the field of sustainability accounting needs to place more emphasis on learning sustainability concepts, not just financial or monetary concepts (Berndtsson et al., 2020; O'Dwyer & Unerman, 2020). Sustainability accounting learning at Warmadewa University can only be integrated into social and environmental accounting courses. Because, if it is forced to be included in the curriculum, the curriculum will change and adapt in a relatively long time (Vysochan et al., 2021). Curriculum adjustments require a long process, starting from curriculum workshops, approval from all groups, reviewing the importance of curriculum adjustments, getting input on shared views regarding curriculum changes, to arriving at curriculum changes (Klymenko et al., 2021; O'Dwyer & Unerman, 2020). These processes are a long road and require struggle. However, this idea already exists and has been consulted with internal and external parties such as the Indonesian Accountants Association (IAI), ICSP

([Institute of Certified Sustainability Practitioners](#)) and other academics (Ascani et al., 2021; Paolone et al., 2020; Vysochan et al., 2021). Quotes from an interview with the head of the accounting study program, Warmadewa University, namely:

" We at Warmadewa University's accounting study program consider sustainability accounting courses to be important, considering current world conditions. A manifestation of our commitment as educational accountants regarding environmental conditions and social issues has been realized in the adoption of social and environmental accounting courses in the curriculum. And the sustainability accounting course is temporarily integrated into social and environmental accounting learning. The plan is that it will be included in the master's level curriculum."

Based on this statement, the Warmadewa University accounting study program shows its commitment to upholding sustainability and sustainable development proclaimed by the Indonesian government (Sanusi et al., 2020). As a form of Warmadewa University's commitment, it is shown in the institution's vision and mission, curriculum, and campus life processes both in terms of learning management, learning methods, and final assessment mechanisms or in final assignments (research) (Saputra, 2023). Strengthening the statement of the head of the accounting study program, the head of the curriculum preparation team also stated something similar, namely as follows:

"Preparing an integrated curriculum with sustainability accounting does not seem difficult. We need further studies before doing that. Based on open access to curriculum data from other campuses, we can use that reference. We will see the response of students and teaching staff who concentrate on sustainability accounting. "We have limited lecturers who understand sustainability accounting, so we need to strengthen the lecturers first, then then adopt the curriculum by including sustainability accounting in the curriculum content in the accounting study program."

High confidence emerged from the head of the curriculum development team that sustainability accounting needs to be included in the curriculum structure of the accounting study program. The importance of sustainability accounting since undergraduate education is the first step in realizing natural and social protection in Indonesia (Saputra, Subroto, et al., 2022). The aim of "forcing" integrating sustainability accounting into the accounting curriculum is to show the importance of protecting nature, social welfare and human prosperity in this world (Saputra et al., 2023a). The concept of sustainability accounting broadly covers various vital objects of life on earth. How to calculate, record and analyze the use of natural elements in production and the company's recycling efforts for production waste so that there is no environmental pollution is part of the learning objectives of sustainability accounting (da Silva Morales et al., 2022). For this reason, we need to see student responses as a form of the next generation who will protect nature with all their mechanisms (Ogbeide et al., 2021).

Student Interest in Taking Sustainability Accounting Lectures

In this research, we conducted a survey on students taking environmental social accounting courses to determine their interest in taking sustainability accounting material. The survey was conducted using Google Form on 60 students in class. Students answer questions and express their interests. The survey questions were designed to be simple with the aim of being easy to understand and getting adequate responses (Saputra, 2023). The following are answers to students' interest in receiving material or courses in sustainability accounting:

Is a sustainability accounting course important for you?

60 responses

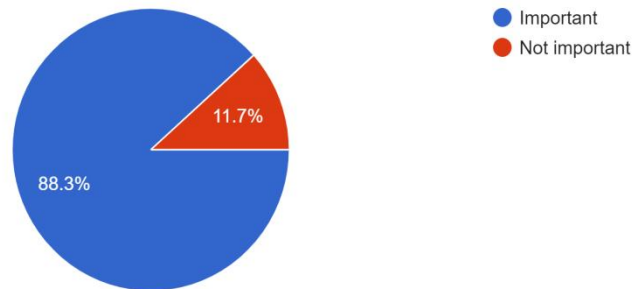


Figure 1. Diagram of Student Statements Regarding Interest in Sustainability Accounting
Source: Data analysis results (2023)

Based on the results of the analysis of this data, students enthusiastically show their interest in sustainability accounting. A total of 88.3 % of the 60 respondents stated they were interested in learning sustainability accounting. This number shows that sustainability accounting is an interesting and important material for current conditions. The results of the survey data analysis were confirmed by several students selected as key informants, namely:

"As a student, I consciously have a commitment to the environment, I personally show this by joining student organizations and launching sustainability programs. We hope that in the academic context there will be courses that concentrate on sustainability, namely sustainability accounting. This is very important for me for sustainable development in my village. In order to help the village, I need to develop myself by deepening the concepts of sustainability." (excerpt from an interview with a student named Agus).

"I am enthusiastic about following the sustainability accounting material. In my opinion, the sustainability accounting material in the social and environmental accounting course is the most interesting material. "I understand the difficulties in adopting sustainability accounting in the curriculum, but integration like this is enough for me to satisfy my curiosity about sustainability concepts in an accounting context." (excerpt from an interview with a student named Sintya)

Sustainability accounting becomes important when examined from the perspective of social and environmental conditions (Li & Zhan, 2022). Students' interest in sustainability accounting material is because sustainability accounting is a new paradigm in the field of accounting which states that the focus of recognition, measurement, recording, summarizing, reporting, disclosure, accountability and transparency of accounting is not only focused on financial transactions or information, but also on social (*people*) and environmental (*planet*) transactions or events that underlie financial information (Ikpor et al., 2022; Paolone et al.,

2020; Vărzaru, 2022). The development of sustainability accounting has resulted in a reform of the accounting reporting format towards a Sustainability Reporting format (integration of financial, social, environmental and governance reporting) (Klymenko et al., 2021; Sisaye, 2021; Vysochan et al., 2021). Furthermore, the scope of reviews in sustainability accounting includes sustainability reporting, sustainability management, sustainability performance and sustainability governance (Hörisch et al., 2020; O'Dwyer & Unerman, 2020).

What is more interesting is teaching sustainability accounting material using a certain method that reviews case-based material (Cho et al., 2020). Sustainability Accounting lectures are carried out using a participatory approach, where students are expected to take an active role in the lectures (Ascani et al., 2021). On certain topics, students are asked to discuss in groups the topics that have been presented, then the results of the group discussions are presented in class (Shen et al., 2020). The lecture method used by the lecturer is a combination of short presentations, discussions, lectures and case study discussions (Inghirami & Scribani, 2016). The short presentation method is intended so that students have an initial understanding of the lecture material. The lecture method is used when delivering lecture material. The discussion method is intended so that lecturers and students can interact with each other (Klymenko et al., 2021). The case discussion method is intended to analyze problems and case examples related to the implementation of sustainability accounting, both in companies or government institutions (Jordão & Novas, 2017).

The learning objectives of sustainability accounting material are in line with the concept of tropical studies of sustainable development, including changes in conception, sustainable development in all fields, and the implications according to the science of sustainability accounting for management, utilization and development, especially in tropical rainforest areas, coastal areas, hills, mountains and so on (Ikpor et al., 2022). Therefore, at the end of the course, students are expected to be able to master, compile and analyze sustainability reports in accordance with GRI or other guidelines (Liu et al., 2022).

Position of Sustainability Accounting in the Curriculum

Based on the results of a survey of 60 student respondents taking social and environmental accounting courses, it was found that the majority of respondents agreed that sustainability accounting should be included in the accounting study program curriculum as a separate course. This was shown by 80 percent of respondents who agreed and were enthusiastic. The results of the survey data analysis are shown in the following diagram:

Figure 2. Sustainability Accounting Statement Diagram included in the Curriculum

Do you expect sustainability accounting to be included in the curriculum?

60 responses

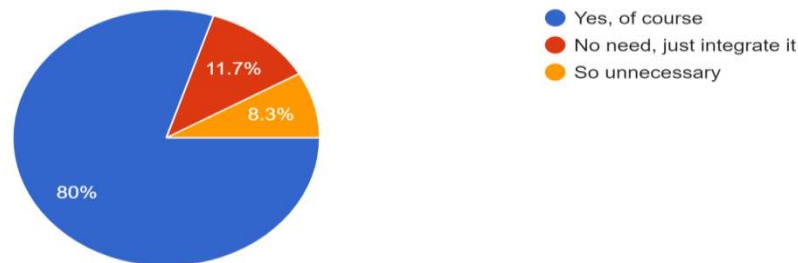


Figure 2. Sustainability Accounting Statement Diagram included in the Curriculum
Source: results of data analysis (2023)

In accordance with the survey results, it can be stated that the majority of students want sustainability accounting to be included in the accounting curriculum (Saputra, 2023). This provides input for accounting study programs to consider making curriculum adjustments so that student aspirations are met. This is in line with the statement from The Intergovernmental Panel on Climate Change (IPCC), the United Nations body responsible for assessing the impact of science on climate change, released the Working Group II report, *Climate Change 2022: Impacts, Adaptation and Vulnerability*, in February 2022 which states that responsible leaders agree that time is running out to address climate change risks and that management accountants must step up to provide leadership and expertise to address the challenges (Cho et al., 2020; Hörisch et al., 2020; Zyznarska-Dworczak, 2020). And to meet this challenge, higher education must integrate sustainability accounting into the accounting curriculum (Ascani et al., 2021).

Management accountants understand how to integrate sustainability accounting strategy with finance and accounting to address innovation, risk management, and resource allocation decisions, the keys to effective sustainability accounting initiatives (Gil-Marín et al., 2022; Ikpor et al., 2022; Shen et al., 2020). But to best prepare students, sustainability accounting needs to be included in the accounting curriculum to a greater degree. In fact, there are increasing calls for higher education to include sustainability accounting in the accounting curriculum (Vysochan et al., 2021). The Association to Advance Collegiate Schools of Business (AACSB) includes sustainability in its accreditation standards and emphasizes the importance of including sustainability accounting in its members' business and accounting curricula (Paolone et al., 2020; Värzaru, 2022).

Learning sustainability accounting can be done using various models. Sustainability accounting content is suitable for undergraduate and graduate accounting programs (Abdulhak et al., 2018). Course delivery methods include traditional classroom, online, and hybrid models (Astuty et al., 2022). A hybrid class with several classroom meetings and the balance online provides a seminar environment. Classroom meetings provide facilitated discussion of topics, interaction with guest speakers, collaboration on in-class assignments, and student

presentations (Aprilisa, 2020). All can be achieved in online courses depending on the instructor's online teaching experience and skill level (Mambu, 2022).

Student Perspectives on Accountants' Involvement in Sustainability Accounting Practices

For accounting students, it is very important to be able to understand the importance of the role of system technology in sustainability practices to help reduce waste in the environment and to be able to provide information that is reliable, relevant, timely, complete, understandable and tested in the context of decision making (Ascani et al., 2021; Ikpor et al., 2022). It is hoped that accounting students will not only graduate in the accounting profession, but also become professional accountants in their field. A professional accountant is an accountant who can contribute to sustainable information technology practices (Paolone et al., 2020; Shen et al., 2020). Universities and lecturers play an important role in supporting students to understand what contributions they make as professionals in their fields, in understanding the role of information systems technology in sustainability practices so that universities can provide soft skills and hard skills that can produce competent graduates (Gil-Marín et al., 2022). The following are the results of a survey of students regarding perspectives in translating sustainability accounting learning:

What is your interest in learning sustainability accounting?

60 responses



Figure 3. Perspective of Student Expectations After Following Sustainability Accounting Material

Source: data analysis results (2023)

Based on the research results, it was found that the empirical findings were that respondents' motivation to study sustainability accounting was the highest in wanting to work as a professional sustainability accountant (18.3 percent) (Cho et al., 2020). Another answer stated that respondents wanted to take sustainability accounting courses to prepare to become professional accountants in general and have the advantages of being a sustainability accountant (15 percent), caring about social and environmental issues (15 percent), and carrying out their profession based on the triple bottom line concept (15 percent) (Ascani et

al., 2021; Hörisch et al., 2020; Shen et al., 2020). Research respondents argued that sustainability accounting is a tool used by organizations to become more sustainable. The most well-known and widely used measurements are Corporate Sustainability Reporting (CSR) and triple bottom line accounting (Abbas, 2020; Ardito & Dangelico, 2018). This recognizes the role of financial information and shows how traditional accounting is being expanded by increasing transparency and accountability through profit, people and planet-based reporting (11.7 percent) (Vărzaru, 2022).

Sustainability accounting has become increasingly popular in recent decades. Many companies are adopting new methods and techniques in disclosing their finances and providing information about their core activities and their impact on the environment (Zyznarska-Dworczak, 2020). Therefore, stakeholders, suppliers and government agencies want a better understanding of how companies manage their resources to achieve their goals of achieving sustainable development (Hörisch et al., 2020). This is an opportunity for accountants to concentrate on the concept of sustainability through the sustainability accounting profession (13.3 percent respondent's answer) (Ascani et al., 2021). Some respondents also believed that they agreed to commit to sustainable development or the implementation of development goals sustainability that has been planned (Klymenko et al., 2021). And, some respondents (11.7 percent) had an opinion that was committed to supporting sustainable development goals. Sustainable Development Goals is an international action plan which is a continuation of the Millennium Development Goals (MDG) (Sisaye, 2021). The Sustainable Development Goals consist of 17 (seventeen) global goals with 169 (one hundred and sixty nine) goals which will guide policy and finance for the next 15 years and are expected to be achieved by 2030 (Alvino et al., 2021; Fitriyanti et al., 2021; Shah et al., 2022). These goals include three dimensions of sustainable development, namely environmental, social and economic. Also, 11.7 percent of respondents thought that taking sustainability accounting courses was a current trend by adapting to environmentally based world business conditions (O'Dwyer & Unerman, 2020).

Students also realize that one of the main challenges for accountants is involvement with sustainability issues related to the presentation of non-financial reporting (Vărzaru, 2022). Information technology/digitization has an important and critical role in carrying out accountants' duties and supporting real time financial insight to achieve business goals/success (Shen et al., 2020). So, based on the results of this research which refer to the importance of knowledge and skills in sustainability accounting, it is necessary to integrate sustainability accounting into the higher education curriculum in the field of accounting (Ikpor et al., 2022; Shen et al., 2020; Vysochan et al., 2021).

Conclusion

The research results show that referring to sustainability accounting standards, the concept of sustainability accounting is considered important to be implemented in the accounting education curriculum at bachelor's and master's levels. Students are interested in sustainability accounting because it is a new paradigm in the field of accounting which states that it focuses on social (*people*) and environmental (*planet*) transactions or events that underlie financial information. Most students want sustainability accounting to be included in

the accounting curriculum. The hope of accounting students is not only to graduate in the accounting profession, but to become a professional accountant in their field. A professional accountant is an accountant who can contribute to sustainable information technology practices. The students' desire to study sustainability accounting is to work as a professional sustainability accountant, prepare to become a professional accountant in general and have advantages as a sustainability accountant, care about social and environmental issues, carry out their profession based on the triple bottom line concept, recognize the role of financial information and show how traditional accounting works. expanded by increasing transparency and accountability through profit, people and planet-based reporting. Students also hope to have the opportunity to become accountants who concentrate on the concept of sustainability through the sustainability accounting profession, as well as current trends by adapting to environmentally based world business conditions.

The use of the concept of sustainability accounting is an embodiment of the SDGs which is useful for companies to encourage their ability to minimize the environmental and social problems they face. The implementation of sustainability accounting is not only required for companies that are directly related to the use of natural resources, but also for all types of businesses, including industry, trade and services. In fact, in its development the concept of sustainability has also become an important issue for government and non-profit institutions, so this needs to be introduced and provided in college so that graduates have job opportunities in the field of sustainability.

The implications of this research are aimed at improving the accounting study program curriculum, especially at Warmadewa University to make sustainability accounting a separate subject. The accounting study program at Warmadewa University is unique in focusing on the field of sustainability accounting. The limitation of this research is that it only examines the accounting study program at one university. Further research can be developed across all accounting study programs and increase population coverage. It is important to know that this research is for the purpose of evaluating the accounting study program curriculum, Warmadewa University.

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