

GREEN ACCOUNTING EDUCATION AND DIGITAL INNOVATION: THE ROLE OF ACCOUNTING EDUCATION STUDENTS IN ACHIEVING THE SDGs

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Abstract

The accelerating environmental crisis, marked by record-high greenhouse gas emissions and persistent ecological degradation, demands transformative action across sectors. Education, particularly in accounting, holds a strategic role in bridging economic practices with ecological responsibility. This conceptual paper presents perspective of the integration of green accounting education and digital innovation as a pathway to support the Sustainable Development Goals (SDGs). It highlights the role of Accounting Education students as future educators and change agents who can cultivate sustainability values through interactive e-modules and short educational videos. By embedding green accounting into curricula and leveraging digital tools, students are positioned to enhance environmental awareness, critical thinking, and pro-environmental behavior. The study underscores that awareness must be followed by concrete action, where every step from creating educational content to practicing environmentally responsible accounting contributes to a collective transformation toward a sustainable future.

INTRODUCTION

The world is at a critical point in terms of environmental crisis. The Emissions Gap Report 2023 by the United Nations Environment Programme (UNEP) notes that global greenhouse gas emissions reached a record high in 2022, amounted to 57.4 gigatons of CO₂ equivalent (UNEP, 2023). This surge in emissions reinforces concerns about accelerating climate change, global warming, and systemic ecological damage. To address these global challenges, education emerges as a crucial element in driving collective transformation. UNESCO (2017) emphasizes that Education for Sustainable Development (ESD) is key in shaping people's behavior and mindsets towards a greener, more inclusive, and fairer future. Meanwhile, the financial and business sectors are also moving towards green accounting and sustainability reporting, which are now gaining global attention through international standards such as GRI and IFRS Sustainability Disclosure Standards (GRI, 2021; IFRS Foundation, 2023). Chircop et al. (2023) have shown that consistency in accounting reporting supports environmental learning, reduces ecological violations, and highlights the value of standardized environmental accounting education. Similarly, Bebbington

et al. (2023) have emphasized the need for a conceptual transformation in environmental accounting to address both financial market demands and broader social and ecological concerns.

The reality shows that environmental problems and social inequality show no signs of abating; rather, they are becoming more entrenched, widespread, and severe (Lehtimäki et al., 2024). It indicates that the crisis is not only ecological but also systemic and multidimensional, reflecting a collective failure to integrate sustainability values into education, policy, and economic practices (Jessop, 2012). The ongoing deterioration of the environment, widening inequality, and the unpreparedness of the younger generation to address future challenges underscore the urgency of accelerating comprehensive social transformation (Vineis & Gambhir, 2023).

Indonesia serves as a tangible illustration of this escalation. In 2022, its national greenhouse gas emissions reached 1.71 gigatons of CO₂-equivalent, positioning it as the eighth-largest global emitter (Climate Watch Indonesia, 2023). This environmental strain is manifested in the loss of 104,000 hectares of primary forest (Global Forest Watch, 2023) and a plastic waste crisis exceeding 19 million tons annually, with a recycling rate of merely 10–15% (KLHK & World Bank, 2023).

In response to this situation, various global initiatives have been designed to promote more sustainable and inclusive development, namely the Sustainable Development Goals (SDGs), represent global agenda comprising 17 main goals to address economic, social, and environmental challenges fairly and evenly for all levels of society (The Sustainable Development Goals, 2023). All stakeholders, including Financial Services Institutions, issuers, and public companies, have a responsibility to support the achievement of the SDGs, as emphasized through OJK (Financial Services Authority Republic of Indonesia) Regulation (POJK No. 51/POJK.03/2017) and OJK Circular Letter (SEOJK No. 16/SEOJK.04/2021), which require the preparation and reporting of Sustainability Reports annually in a transparent and accountable manner.

The environmental pillar (SDG 13) calls for concrete action on climate change, but public awareness, particularly among economic actors, of the environmental impacts of economic activities remains low and under-addressed (FEB UI, 2022). Many businesses focus on profit and efficiency, neglecting social and ecological costs (Ashari et al., 2020). Ashari et al. (2020) show that the majority of companies in Indonesia still prioritize profit and operational efficiency without considering the social and ecological costs incurred. In the corporate sector, out of 900 companies, only around 38% publish sustainability reports based on GRI (Global Reporting Initiative) or ESG (Environmental, Social, and Government) standards (OJK, 2023). This indicates their low awareness of environmental issues and sustainable development (Sunarto, 2024) because the lack of adequate knowledge from the outset makes it difficult to implement sustainable business practices.

Ironically, the growing urgency of sustainability issues is not matched by the readiness of education and professional sectors to respond systematically (O'Brien, 2017). Education is key to building environmentally aware and responsible generations, yet its integration into Indonesian curricula remains limited. Studies show that ecological topics are often treated as supplementary material without deep contextualization (Universitas Islam Kediri, 2023) and many teachers lack adequate training on environmental education (Kandini et al., 2025). As a result, only 31% of educational institutions actively incorporate sustainability and SDG topics (Kemendikbud, 2021).

SUSTAINABILITY IN ACCOUNTING EDUCATION CONTEXT

The absence of strong environmental education further exacerbates the low level of ecological awareness in real life, particularly in the economic sphere (Sonny, 2023). The lack of practice in critical thinking and problem-solving skills related to environmental issues students are ill-prepared to face future economic challenges that demand alignment with environmental considerations (Sunarto, 2024). Richomme-Huet & de Freyman (2014) found that students aspiring to become entrepreneurs are insufficiently prepared to think sustainably due to significant gaps in sustainability education and motivation.

Therefore, a paradigm shift is urgently needed. Del Baldo and Baldarelli (2017) suggest that education should undergo a transformation to integrate sustainability values and ecological awareness into the learning process. One approach is through strengthening accounting education by incorporating green accounting into the curriculum as a bridge between the economic sphere and environmental preservation (Soesanto, 2022). By fostering awareness from an early stage in education, future generations can understand that every economic decision carries ecological consequences that cannot be ignored (Wijaya et al., 2021).

In the context of education (SDG 4), green accounting has yet to become a core component of accounting curricula at schools and universities (Sari et al., 2024). Moreover, students show limited interest and curiosity in fully understanding the concept of green accounting (Sari et al., 2024). Consequently, learners are not accustomed to thinking critically about the relationship between business and its ecological impacts (Kopnina et al., 2024). In response to these challenges, integrating green accounting into the education system through adaptive technology-based solutions is essential (Juneja et al., 2024).

DIGITAL INNOVATION

One solution to current challenges is shifting from traditional to digital learning materials that adapt to technological advancements (Dung & Khanh, 2024). Formats such as e-books, e-modules, short educational videos, and interactive applications offer flexibility (Dung & Khanh, 2024), with e-modules and short videos being particularly effective in enhancing engagement and learning outcomes.

The creation of short videos can be utilized as a medium for educating green accounting and sustainability. Platforms such as TikTok, Instagram Reels, and YouTube Shorts have evolved beyond entertainment, becoming dynamic and accessible learning spaces for diverse audiences (Kayyali, 2024). The concise, fast-paced, and visual nature of short videos makes them well-suited for conveying complex concepts like green accounting in a simple yet meaningful way. According to Liang et al. (2021), short videos foster active engagement, creativity, and critical thinking among viewers, making them an ideal tool to facilitate the transformation of conventional learning toward more digital, interactive, and inclusive approaches. Furthermore, Md Ghani et al. (2023) show that platforms like TikTok have democratized access to education by delivering engaging and adaptable educational content that aligns with various learning styles, thus promoting knowledge acquisition and skill development in an enjoyable manner.

Beyond serving as a medium of information delivery, short videos possess social and psychological power to influence public behavior and perceptions on environmental issues. Molem et al. (n.d.) found that many users experienced shifts in perspective simply by watching videos they encountered unintentionally. Mahmoud (2024) further reported that exposure to climate change content through video reels correlated with an 89.4% increase in awareness, demonstrating the educational impact of concise yet impactful communication. Additionally, Boone (2024) highlighted an educational program that reached millions of viewers monthly through a consistent and engaging short-content strategy. Wang (2023) emphasized that knowledge-based educational content is most effective when developed with scientific integrity, strong narrative, and contextual relevance.

Additionally, another form of digital innovation is e-modules, which not only serve as an effective and relevant solution but have also been proven to enhance learning outcomes, motivation, and 21st-century skills such as scientific literacy and critical thinking (Nadir et al., 2022). The use of e-modules has even demonstrated significant improvements in academic achievement (Salwa & Firmantika, 2024). E-modules offer an

engaging and interactive learning experience, with 95% of students responding very positively to their use (Hardiyanti et al., 2023).

Furthermore, e-modules hold significant potential for broad application across disciplines, including in the context of green accounting education that integrates environmental and economic issues (Agshari et al., 2024). The use of e-modules has been shown to increase student engagement in understanding sustainability-oriented accounting practices (Agustian et al., 2024). Their strengths lie in flexibility, multimedia interactivity, and the ability to simulate real-world scenarios, encouraging learners to be more active, creative, and capable of applying theory into practice (Gunawan et al., 2023; Manggala et al., 2024). For example, an e-module might include a task such as: 'A car wash company purchases a water filter worth IDR 500,000 to treat soapy wastewater before disposal as part of its environmental responsibility. Prepare the corresponding journal entry.' This approach helps students understand that environmental protection costs are part of business activities that can be accounted for.

In reality, the adoption of e-modules in Indonesia remains limited (Dewi et al., 2023). This is supported by the findings of Haerullah and Hasan (2023), which reveal that 64.2% of students have never used e-modules in their learning, despite 75.1% expressing an urgent need for interactive modules. The high reliance on conventional textbooks and the lack of variety in technology-based learning media indicate that e-modules have not yet been widely implemented (Pebriantika, 2019).

THE ROLE OF ACCOUNTING EDUCATION STUDENTS

Accounting Education students are individuals who pursue studies that combine accounting and education, equipping them with technical accounting knowledge and pedagogical skills to become professional educators (Cakrawala University, 2025). Accounting education emphasizes the mastery of key competencies, including technical accounting skills and teaching abilities, enabling students to navigate digital transformation and advancements in information technology that impact the professional world (Nikolova, 2022). They are prepared as agents of change who understand the interconnection between accounting, technology, and sustainability, in line with the AASHE Call for Action, which emphasizes the importance of education in fostering sustainability awareness (Collison, Ferguson, & Stevenson, 2014).

Accounting students not only learn accounting principles and practices but are also equipped with pedagogical competencies and digital skills relevant to the needs of Industry 4.0 (Widayati et al., 2022). The primary role of accounting students encompasses three crucial aspects. First, mastery of technical accounting knowledge and skills, including computer-based accounting information systems, financial reporting, and digital data management, which are the foundation of the accounting profession in the digital age (Ayebofo, 2012). Second, they need to develop essential soft skills for the workplace, such as communication and team collaboration, which can be enhanced through a team-teaching approach (Pollock et al., 2023). Furthermore, the integration of emotional intelligence, time management, and professional motivation into the curriculum also contributes to students' readiness to face professional challenges more maturely (Kermis & Kermis, 2010). Third, students act as a bridge between theory and practice through engagement in active, reflective, and collaborative learning, which strengthens their understanding of the industrial context and real-world needs (Mahmudah, 2024).

In the context of the Sustainable Development Goals (SDGs), the role of accounting students is becoming increasingly strategic. Modern accounting education integrates sustainability principles into the curriculum to foster an understanding of the social and environmental impacts of business practices and shape student preferences for socially

responsible organizations (Halabi et al., 2024). Student engagement with sustainability issues also fosters a transformative learning process that changes attitudes, enhances self-efficacy, and fosters a commitment to positive change (Cho & Costa, 2024). Furthermore, students are trained to prepare sustainability reports, identify risks, and measure non-financial performance, as part of the technical competencies that support the achievement of responsible consumption and production within the SDGs (Pongtambing et al., 2024).

Digital transformation further strengthens students' role as agents of change in the accounting field. Their digital literacy skills, such as selecting, evaluating, and effectively utilizing digital information, are key competencies needed to navigate the dynamics of technology in the professional world (Widayati et al., 2022). With increasing awareness of the importance of ethics and environmental responsibility, the use of green technology is also beginning to be directed into accounting practices to support resource sustainability and efficiency (Harmain & Juliati, 2023). With a combination of technical competency, digital literacy, social awareness, and soft skills, accounting students will not only become successors to the teaching profession but also play a vital role in shaping a generation of accountants who are adaptive, ethical, and actively contribute to inclusive and sustainable economic and social development.

In line with this, Ivada, E., (2024) emphasizes that teachers play a crucial role in delivering knowledge and fostering sustainability awareness among students, as they are responsible for shaping sustainable awareness, knowledge, and behavior in future generations. Therefore, Accounting Education students are positioned not only as recipients of knowledge, but also as future educators and agents of change who can transform learning.

Accounting Education students contribute to promoting the implementation of social and environmental accounting in higher education institutions (Kusumawardani et al., 2018), developing environmental awareness, critical thinking, and self-efficacy to support environmentally friendly practices (Halabi et al., 2024). They also acquire sustainable accounting competencies that contribute to achieving the SDGs through ethical practices and applicable ecological awareness (Cho & Costa, 2024). Knowledge of environmental accounting and corporate social responsibility has been proven to significantly influence the formation of pro-environmental behavior among students (Jannah & Wulandari, 2024).

Accounting Education students are required to respond adaptively and progressively. The integration of accounting education and digital innovation is no longer an option, but a necessity in order to respond to the demands of the times. Through this integration, the next generation is expected to grow as competent, responsible individuals who play an active role in achieving the Sustainable Development Goals (SDGs).

To fulfill this role, Accounting Education students act as agents of change in facing global sustainability challenges. Concrete examples of this role is the use of digital technology through the development of interactive e-modules and short educational videos that are easily accessible and understandable to the public. These digital learning tools not only serve as a means of disseminating sustainability-based accounting knowledge but also as a tool to foster environmental awareness and encourage concrete actions in support of environmentally friendly practices. The integration of digital learning based on sustainability values demonstrates the transformation of accounting education from conventional methods toward a progressive and innovative approach, while also emphasizing the contribution of Accounting Education students in addressing global challenges and supporting the achievement of the SDGs.

CONCLUSION AND FUTURE STUDIES

The escalating environmental crisis and the pressing demand for sustainable development underscore the vital role of education, particularly through the integration of green accounting and digital innovation. Accounting Education students, as future educators and agents of change, hold a strategic position in bridging the gap between economic practices and ecological responsibility. By utilizing digital learning tools such as interactive e-modules and short educational videos, they can foster environmental awareness and equip future generations with the knowledge and skills necessary to address sustainability challenges.

However, awareness alone is not enough; what is needed now is real and collective action. Accounting Education students must take proactive steps, starting from instilling sustainability values in the learning process to actively participating in initiatives that support the achievement of the Sustainable Development Goals (SDGs). Every small step, whether through creating educational content, promoting environmentally conscious accounting practices supported by interactive e-modules, or setting an example in sustainable behavior, will contribute to a larger transformation.

In this critical situation, there is an urgent call to action for Accounting Education students who dare to think critically, act wisely, and utilize digital innovation to become the driving force for sustainability. As the Native American Proverb, "*We do not inherit the earth from our ancestors; we borrow it from our children.*" Therefore, the responsibility to care for and protect the earth is a trust we must uphold for the sake of future generations. The future of the earth is in our hands, and the best time to act is now. While this call to action emphasizes the need for immediate and concrete steps, it is equally important to substantiate these ideas with rigorous empirical research. This study is conceptual in nature, therefore, empirical evidence is needed to determine the extent to which the integration of green accounting learning supports the achievement of the SDGs in the digital era. The authors recommend conducting quantitative or experimental research to examine the effectiveness of interactive e-modules and short educational videos in enhancing the understanding of green accounting among university students as well as the general public.

REFERENCES

- Agshari, Z., Rismawati, R., & Supri, Z. (2024). Application of Green Accounting Concepts through Accounting Education in Support of Green Economy. *E-Jurnal Akuntansi*, 34(3), 689. <https://doi.org/10.24843/eja.2024.v34.i03.p10>
- Ayebofo, B. (2012). The role of Accounting Educators. *Journal of Finance and Accounting*, 3(10), 111.
- Agustian, D., Wardoyo, S., Amarta, A., Anjani, T. A., Wulansari, T., & Marsanda, E. (2024). The Role of E-Module in the Teaching and Learning Process in Vocational Secondary Schools (SMK): a Literature Review. *Al Hikmah*, 5(2), 211. <https://doi.org/10.54168/ahje.v5i2.345>
- Angraini, D., & Nugraheni, S. (2024). Menuju Pendidikan Berkelanjutan: Implementasi Tujuan Pembangunan Berkelanjutan (Sdgs) Dalam Mewujudkan Pendidikan Berkualitas Di Indonesia. *Jurnal Penelitian Pendidikan Indonesia (JPPI)*, 1(3), 189-197.
- Ashari, M. H., Muawanah, U., & Lisa, O. (2020). Keterkaitan Ukuran Organisasi dan Pemahaman Manajemen Terhadap Penerapan Akuntansi Hijau. *Jurnal Informasi, Perpajakan, Akuntansi, dan Keuangan Publik*, 15(1), 33-54. <https://doi.org/10.25105/jipak.v15i1.6186> [<https://doi.org/10.25105/jipak.v15i1.6186>]
- Bebbington, J., Laine, M., Larrinaga, C., & Michelon, G. (2023). Environmental accounting in the European accounting review: a reflection. *European Accounting Review*, 32(5), 1107-1128.
- Boone, C. S. (2024). Spreading optics awareness through short-form video on social media. *Optical Engineering*. <https://doi.org/10.1117/1.oe.63.7.071407>
- Cakrawala University. (2025). *Apa itu Jurusan Pendidikan Akuntansi? Simak info lengkapnya!* Finance dan Keuangan. <https://www.cakrawalauniversity.ac.id>
- Chipriyanova, G., Krasteva-Hristova, R., & Kudaibergenovna Kussainova, A. (2022). Contemporary Higher Accounting Education for Social Responsibility. 6(4), 27-36. <https://doi.org/10.31520/2616-7107/2022.6.4-3>
- Chircop, J., Tarsalewska, M., & Trzeciakiewicz, A. (2023). Learning to be green: Accounting comparability and environmental violations. *The British Accounting Review*, 101240.

- Cho, C. H., & Costa, E. (2024). Sustainability accounting education: challenges and outlook. *International Journal of Sustainability in Higher Education*. <https://doi.org/10.1108/ijshe-02-2024-0152>
- Climate Watch Indonesia. (2023). Indonesia's greenhouse gas emissions. <https://www.climatewatchdata.org/countries/IDN>
- Collison, D., Ferguson, J., & Stevenson, L. (2014). *Sustainability accounting and education* (pp. 48–66). Routledge. <https://doi.org/10.4324/9781315848419-12>
- Del Baldo, M., & Baldarelli, M.-G. (2017). Educating for Sustainability: Perspectives and Critical Notes on Accounting Scholars' Role in Higher Education. *Scientific Annals of Economics and Business*, 64(4), 411–422. <https://doi.org/10.1515/SAEB-2017-0032>
- Dung, T. T., & Khanh, T. G. (2024). Solutions for developing and managing digital learning materials serving general educational innovation in the current period. *Viện Đại Học Mở Hà Nội*, 9. <https://doi.org/10.59266/houjs.2024.453>
- Fakultas Ekonomi dan Bisnis Universitas Indonesia. (2022). *Sustainable Development Goal 13: Climate action*. <https://feb.ui.ac.id/sdg-13-2022/>
- Global Forest Watch. (2023). Indonesia deforestation data. <https://www.globalforestwatch.org/>
- GRI. (2021). GRI Standards 2021. Global Reporting Initiative. <https://www.globalreporting.org/standards/>
- Gunawan, H., Pratikto, H., & Churiyah, M. (2023). E-module development computer based accounting work-based learning (wbl). *MARGINAL JOURNAL OF MANAGEMENT ACCOUNTING GENERAL FINANCE AND INTERNATIONAL ECONOMIC ISSUES*. <https://doi.org/10.55047/marginal.v2i3.635>
- Haerullah, A., & Hasan, S. H. (2023). Analysis of Needs for Biology E-Module Based on Local Wisdom North Maluku, Indonesia. *International Journal of Social Service and Research*, 3(6), 1551–1559. <https://doi.org/10.46799/ijssr.v3i6.395>
- Harmain, H., & Juliati, Y. S. (2023). Kedudukan Profesi Akuntan Dalam Perwujudan Sustainable Development Goals (SGD's) 2030 Berbasis Green Technology. *Religion, Education, and Social Laa Roiba Journal (RESLAJ)*, 5(6), 3540–3554. <https://doi.org/10.47467/reslaj.v5i6.3748>
- Halabi, A. K., Labas, A., & Hurley, C. (2024). Sustainability accounting education – a student's perspective. *Zeszyty Teoretyczne Rachunkowości*, 48(4), 33–52. <https://doi.org/10.5604/01.3001.0054.8688>
- Hardiyanti, L., Nugraha, V., & Sukawati, S. (2023). Pemanfaatan bahan ajar e-modul berbantuan aplikasi prezi pada materi teks eksplanasi untuk siswa smp kelas viii. <https://doi.org/10.22460/parole.v6i2.17963>
- IFRS Foundation. (2023). IFRS Sustainability Disclosure Standards. <https://www.ifrs.org/projects/completed-projects/2023/ifrs-sustainability-disclosure-standards/>
- Ivada, E. (2024). *Education for Sustainable Development in Preservice Teacher Program: A Bibliometric Method*. *International Journal of Recent Educational Research*, 5(5), 1290–1310. <https://doi.org/10.46245/ijorer.v5i5.689>
- Jannah, F., & Wulandari, A. (2024). The influence of environmental accounting knowledge, environmental sensitivity, and csr knowledge on accounting students environmental sustainability behavior. *Akurasi*, 7(1), 125–140. <https://doi.org/10.29303/akurasi.v7i1.493>
- Jessop, B. (2012). Economic and Ecological Crises: Green new deals and no-growth economies. *Development*, 55(1), 17–24. <https://doi.org/10.1057/DEV.2011.104>
- Juneja, G., Saraswat, P., & Kautish, S. (2024). Strategic Green Accounting and CSR Analytics. *Advances in Business Information Systems and Analytics Book Series*, 156–172. <https://doi.org/10.4018/979-8-3693-2823-1.ch007>
- Kermis, G. & Kermis, M. (2010). Professional presence and soft skills: A role for accounting education. *Journal of Instructional Pedagogies*, 2, 1–10.
- Kandini, G. S., Marselinda, D., & Rachman, I. F. (2025). Integrasi Sustainable Development Goals dalam Kurikulum Merdeka: Tinjauan literatur atas peluang dan tantangan implementasi. *Madani: Jurnal Ilmiah Multidisiplin*, 3(4), 187–198. <https://doi.org/10.5281/zenodo.15429002>
- Kayyali, M. (2024). E-Learning Platforms and Their Influence on Lifelong Learning. *Advances in Educational Technologies and Instructional Design Book Series*, 155–176. <https://doi.org/10.4018/979-8-3693-1854-6.ch006>
- Kemendikbudristek. (2021). Integrasi pendidikan berkelanjutan dalam kurikulum. Pusat Kurikulum dan Perbukuan, Kemendikbudristek.
- Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK). (2023). Status sampah nasional tahun 2022–2023. <https://sipsn.menlhk.go.id/>
- Kopnina, H., Hughes, A. C., Zhang, R., Russell, M. A., Fellingner, E., Smith, S., & Tickner, L. (2024). Business education and its paradoxes: Linking business and biodiversity through critical pedagogy curriculum. *British Educational Research Journal*. <https://doi.org/10.1002/berj.4048>

- Kusumawardani, A., Irwansyah, I., Setiawati, L., Ginting, Y. L., & Khairin, F. N. (2018). Urgensi Penerapan Pendidikan Akuntansi Berbasis Akuntansi Sosial Dan Lingkungan. *EKUITAS (Jurnal Ekonomi dan Keuangan)*, 2(1), 65-82.
- Lehtimäki, H., Lyra, M. G., & Taylor, S. S. (2024). Art in Sustainability Transitions (pp. 1–9). Springer International Publishing. https://doi.org/10.1007/978-3-031-44219-3_1
- Liang, X., Tao, X., & Wang, Y. (2021). Impact Analysis of Short Video on Users Behavior: Users Behavior Factors of Short Video Evidence from Users Data of Tik Tok. International Conference on E-Business. <https://doi.org/10.1145/3457640.3457651>
- Mahmudah, N. (2024). Mengungkap Kesadaran Peran Akuntan Pendidik: Perspektif Teori Tindakan Hannah Arendt. *Jurnal Ilmiah Raflesia Akuntansi*, 10(2), 551-565.
- Mahmoud, D. K. (2024). The effectiveness of short videos (Reels) on social media in raising awareness about climate change: A case study on Egyptian Gen-Z & millennial. *Journal of Media and Interdisciplinary Studies*, 0(0), 0. <https://doi.org/10.21608/jmis.2024.337976.1056>
- Md Ghani, M., Mustafa, W. A., Alhafis Bin Hashim, M. E., Hanafi, H. F., & Alzubaidi, L. H. (2023). Beyond Trends: Tiktok's Educational Symphony by Unmasking the Digital Revolution. <https://doi.org/10.1109/icteasd57136.2023.10585108>
- Molem, A., Makri, S., & McKay, D. (n.d.). Keepin' it Reel: Investigating how Short Videos on TikTok and Instagram Reels Influence View Change. 317–327. <https://doi.org/10.1145/3627508.3638341>
- Nadir, M. H. B., Arthur, R., & Daryati, D. (2022). Literature review: the role of e-modules in improving vocational students' scientific literacy skills. *Jurnal Pensil*, 11(3), 197–205. <https://doi.org/10.21009/jpensil.v11i3.28673>
- Nikolova, B. (2022). Accounting Education – Training Professionals Ready for the Future. *Profesionalno Obrazovanie*, 24(5), 460–473. <https://doi.org/10.53656/voc22-511scet>
- O'Brien, K. (2017). Climate Change Adaptation and Social Transformation. 1–8. <https://doi.org/10.1002/9781118786352.WBIEG0987>
- Otoritas Jasa Keuangan. (2017). Peraturan Otoritas Jasa Keuangan Nomor 51/POJK.03/2017 tentang Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik. Jakarta: OJK.
- Otoritas Jasa Keuangan. (2021). Surat Edaran Otoritas Jasa Keuangan Nomor 16/SEOJK.04/2021 tentang Bentuk dan Isi Laporan Tahunan Emiten atau Perusahaan Publik. Jakarta: OJK.
- Otoritas Jasa Keuangan. (2023). Laporan Keberlanjutan Emiten dan Perusahaan Publik Indonesia 2022. <https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik>
- Pebriantika, L. (2019). Needs analysis for the development of e-modules as teaching materials. *Asia Proceedings of Social Sciences*, 4(3), 49-51.
- Pollock, M., Coetzee, S., & Schmulian, A. (2023). Accounting Students in the Role of Equal-Status Team Teacher for the Purpose of Knowledge and Competency Development. *Neveléstudomány*. <https://doi.org/10.3390/educsci13111134>
- Pongtambang, Y. S., Uksi, R., Manapa, E. S., Sampetoding, E. A. M., & Pitrianti, S. (2024). Kontribusi Akuntan dalam Implementasi Sustainable Development Goals (SDGs) di Indonesia. *Jurnal Ilmiah Dan Karya Mahasiswa*, 2(5), 16–24. <https://doi.org/10.54066/jikma.v2i5.2399>
- Richomme-Huet, K., & de Freyman, J. (2014). What Sustainable Entrepreneurship Looks Like: An Exploratory Study from a Student Perspective (pp. 155–177). Springer International Publishing. https://doi.org/10.1007/978-3-319-01396-1_7
- Salwa, A. R. P., & Firmantika, L. (2024). PENGEMBANGAN BAHAN AJAR IPS BERBASIS E-MODUL DALAM MENINGKATKAN PEMAHAMAN SISWA SMP/MTs. *Dinamika Sosial Jurnal Pendidikan Ilmu Pengetahuan Sosial*, 3(4), 355–365. <https://doi.org/10.18860/dsipips.v3i4.13102>
- Sari, D. I., Isyanto, P., & Lukita, C. (2024). Literasi Mahasiswa Terhadap Konsep Green Accounting dan Dampaknya Pada Kualitas Lulusan Mahasiswa Akuntansi. *Jurnal Riset Akuntansi Politala*, 7(2), 431–441.
- Sari, S. E., & Anwar, L. (2020). The Use of E-Modules to Improve Students' Understanding of Concepts and Independent Attitudes Through Google Classroom. 70–77. <https://doi.org/10.2991/ASSEHR.K.201230.085>
- Soesanto, S. (2022). Akuntansi Lingkungan Menuju Ekonomi Hijau Perspektif Relasi Natural Sustainability Dengan Keberlanjutan Bisnis. *Account: Jurnal Akuntansi, Keuangan dan Perbankan*, 9(1).
- Sonny, R. (2023). Need of the Environmental Education for Students in Global Scenario. *International Journal of Science and Research*. <https://doi.org/10.21275/sr23401144209>

- Sunarto, A. (2024). Mengintegrasikan SDGs dalam kurikulum di CLC: Persiapan Generasi Z sebagai pembelajar berkelanjutan. *TING: Jurnal Pengajian Umum*, 16, [tanpa halaman]. Community Learning Centre, Sabah, Malaysia.
- The Sustainable Development Goals* (pp. 310–320). (2023). Edward Elgar Publishing eBooks. <https://doi.org/10.4337/9781803920924.00054>
- UNEP. (2023). Emissions Gap Report 2023. United Nations Environment Programme. <https://www.unep.org/resources/emissions-gap-report-2023>
- UNESCO. (2017). Education for Sustainable Development Goals: Learning Objectives. <https://unesdoc.unesco.org/ark:/48223/pf0000247444>
- United Nations. (n.d.). *Take urgent action to combat climate change and its impacts (Goal 13)*. The Global Goals. <https://globalgoals.org/goals/13-climate-action/>
- Universitas Islam Kediri. (2023, 5 Juni). *Pendidikan berkelanjutan: Integrasi kesadaran lingkungan*. UNISKA Kediri. <https://uniskakediri.ac.id/?p=140>
- Vineis, P., & Gambhir, A. (2023). Social inequalities and the environmental crisis: need for an intergenerational alliance. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1226961>
- Wang, Q. (2023). Case Analysis of the Status and Effect of Knowledge Short Video Communication Based on 5W Model: TikTok. *BCP Education & Psychology*, 8, 100–106. <https://doi.org/10.54691/bcpep.v8i.4290>
- Wijaya, W. B., Prathiwi, K. J. R., & Muliani, N. M. (2021). Pengembangan literasi ekologi siswa sekolah dasar. *Adi Widya: Jurnal Pendidikan Dasar*, 6(1), 46.
- World Bank. (2023). Plastic waste discharges in Indonesia: Pathways and policies. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/090224b0847fd0380>
- Widayati, A., Wibawa, E. A., Septiana, Y., & Johari, R. J. (2022). Industrial Revolution Era 4.0: Digital Literacy of Accounting Education Students. *Dinamika Pendidikan*, 17(1), 107–116. <https://doi.org/10.15294/dp.v17i1.36645>