



AL-WIJDÁN: *Journal of Islamic Education Studies*.
Volume III, Nomor 2, November 2018; p-ISSN: 2541-2051; online -ISSN: 2541-3961
Available online at <http://ejournal.uniramalang.ac.id/index.php/alwijdan>

Received: March 2018

Accepted: June 2018

Published : November 2018

ISLAMIC SUSTAINABILITY EDUCATION FOR ACCOUNTING STUDENTS IN HIGHER INSTITUTIONS

Muslichah

STIE Malangkucecwara Malang
Email: muslichahmachali@yahoo.com

Abstract

Environmental and social problems are already a global issue. The issue has raised the concept of sustainability and has received great attention from governments, companies, environmentalists and educational institutions. Many educational institutions have incorporated sustainability education into the curriculum. However, few scientists criticized that the institutions have proven failed in educating students making the right decision. Islamic sustainability education should be an important part of creating a good relationship between people and the environment. All accounting students studying in a higher institution should be equipped with sufficient knowledge to deal with sustainability. Education in higher institutions should not only emphasize the needed skills and knowledge, but it must also instill the religious standards and the commitment of students toward sustainability. The objective of Islamic sustainability education basically to encourage students to reflect on the kind of sustainability issues that they might encounter, so that they will be sensitive to situations that include a sustainability component. If Muslim accounting students are sensitive to sustainability issues, then they are likely to use Islamic moral dimensions in resolving the sustainability problems.

Keywords: Islamic sustainability, accounting, education, higher institutions.

Introduction

The environmental damage, causes, and impacts on human life in the present as well as future impacts caused the entire community to realize the importance of preserving the environment. Education plays an important role in changing student's attitude in seeing their relationship with nature and the environment. Therefore, it is important to include the concept of sustainability informal education of higher education.¹ Myers and Beringer found that sustainability education can shape the intellectual, moral, and development of student identity.² Furthermore, higher institutions can contribute significantly to fostering the transition towards a sustainable society due to their double role: 1) creating knowledge and transferring this knowledge to the society, and 2) preparing students for their future role in society.³

Accounting education at higher institutions puts more emphasis on economic motives or benefits in decision making and ignores the role of social and environmental factors. Previous research has found a lack of knowledge and importance of sustainability education among students.⁴ Previous study has assessed students' level of knowledge of sustainability and found that knowledge and understanding of issues and concepts of sustainability are still low.⁵

Research that examines the implementation of sustainability education in universities has been widely practiced. Researchers previously reviewed many aspects of the continuing education model (Stough, Tejedor, Charron), integration into formal education (Dmochowski, Rusinko), pedagogy (Myers and Beringer, Bowling, Redman), content (O'Byrne). Previous research agreed that sustainability education should be integrated into the formal education curriculum of higher education (Sharma & Monteiro, Muslichah & Ramadania). Myers and Beringer found that sustainability education can shape the intellectual, moral, and development of student identity.⁶ They further found that trans disciplinary pedagogy such as place-based case studies and project-based programs that use the campus as a place of learning can significantly support the individual growth dimension of the concept of sustainability. Redman examines the application of sustainability education through the integration of behavioral science. He found that to effectively sustainability education should move away from a natural-based approach and take into account the aspect of behavior, namely the social impact of social and environmental change.⁷ From the curriculum aspect O'Byrne et al., found a consistent lack of content in the course of sustainability at various higher education in

the UK.⁸

Although sustainability education has been included in the higher institutions curriculum, however, Blumstein and Saylan have criticized that the institutions have failed to link their actions and the environmental conditions.⁹ Due to the weakness of sustainability education, this paper suggests that the direction of education at universities should be based on the development and religious moral values in the sustainability education. Islamic values are fundamental as the basis of any profession. Yacoob as cited by Muslichah and Ramadania states that education in the modern world not only provides excellent intellectual students, but also must respond to and satisfy their social, emotional, and spiritual needs.¹⁰ Islamic Sustainability Education (ISE) does not distinguish between religion and knowledge. Both are complementary and supportive and are jointly studied in the educational system with the aim of achieving prosperity both in the world and in the hereafter. Islamic Sustainability Education (ISE) assumes that the role of general education courses that are delivering students to have the personal ability.

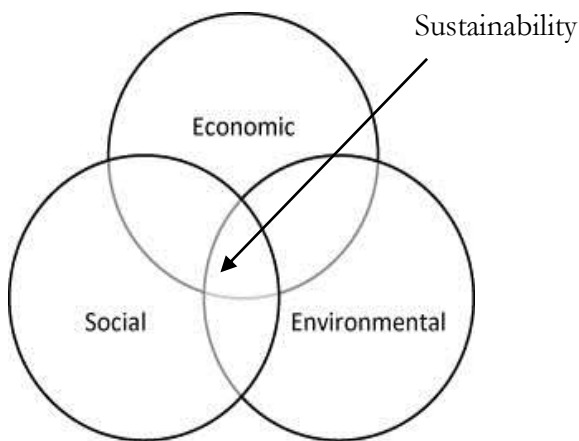
The purpose of this paper is twofold. First, this paper aims to discuss the possibility to incorporate ISE into formal education in

accounting program. Although sustainability education has become a research topic that many researchers studied before, there is still no research that examines sustainability research explicitly in accounting programs in higher institutions. Second, western models of sustainability education are secular education. They do not stress the importance of religious values in teaching students related to sustainability. This paper suggests that the Islamic worldview in ISE can provide some insights into the process of developing a sustainable world. Philosophy of Education that based on God's devotion to producing the individual that physically, emotionally, intellectually, spiritually and socially balanced.¹¹ People perceive spiritual growth as an essential part of their life, as it can affect not only their personality growth but also their professional life.¹²

Sustainability In the Perspective of Islam

In the available sustainability research literature, there are many studies which cover the three Es of sustainability: environmental, economic and equity factors.¹³ Review of the prior literature shows that there are many ways in defining sustainability. Predominant models of sustainability include the "triple bottom line," coined by Elkington, in which the environmental, social and financial outcomes are taken into account (Figure 1).¹⁴ Thus, this

means sustainability requires integration of social and ecological thinking into all economic planning.



Figur 1. Environmental sustainability

A natural environment is a gift of God that we must preserve. We must be able to protect nature to be enjoyed by future generations. Excessive exploitation of environment can lead to the destruction of nature. As a Muslim, we must avoid that action to maintain the preservation of nature which is the gift of Allah SWT. In interacting and managing nature and the environment, human beings carry three mandates from God. First, *al-intifa* 'God invites mankind to take advantage and make the best use of natural products for prosperity and prosperity. Second, *al'tibar*. Humans are required to always think and explore the secrets behind God's creation while taking lessons from various events and natural events. Third, *al-islah*. Human beings are required to continue to maintain and preserve the environment. Islam teaches to love nature and to guard it and forbids any mischief on earth. Therefore Allah

created man as caliph in the earth. Allah says: It has been seen that the destruction on land and at sea is caused by the deeds of human hands, so Allah feels to them a part of their (consequence) deeds, that they may return to the right path (Ar Rum: 41).

Social Sustainability

Islam has a principle of equal responsibility in all its forms and scope, between soul and body, between individual and family, between individual and social, and between society and another society. Social responsibility refers to obligations an individual to contribute to the community. Examples of such duties range from activities that can improve community welfare, provision of scholarships for underprivileged children, provision of funds for the maintenance of public facilities, donations for village/community facilities that are social and useful to the public, especially the communities surrounding the company is located. Allah SWT commands his people to do good to others. To all people, whether distant or near, family or close relatives. Allah says in the Quran worship Allah and associates nothing with Him, and to parents do good, and to relatives, orphans, the needy, the near neighbor, the neighbor farther away, the companion at your side, the traveler, and those whom your right hands possess. Indeed,

Allah does not like those who are self-deluding and boastful (An Nisa: 36).

Economic sustainability

Islam promotes development and growth economically (Al-Quran, 8:53). In the view of Islam, poverty comes closer to disbelief (kufr). Islam has an effective way to improve the economy of the poor through zakat, sodaqah dan waqaf. Zakat is to set aside a small part of our wealth and give it to the needy poor by the provisions contained in Quran and hadith. Zakat can also be a way of empowering the poor who produce goods and services, but they have no access to formal financing. By giving zakat the poor not only empower themselves but also others. As mentioned in Alquran At-Taubah ayat 103, "Take alms from some of their property, with that charity you cleanse and purify them and pray for them. Verily, your prayer is serenity for them. And Allah is Hearing, Knower".

The Importance of Islamic Sustainability Education in Accounting Program

Islamic sustainability Education is sustainability education according to Shariah, or Islamic law. In ISE, the principal sources are the Qur'an, which is considered by Muslims to be the exact words of revelation from Allah to Prophet Muhammad, and the Sunnah (the acts

and sayings of the Prophet as transmitted through traditions known as hadith).

General Importance

Environmental problems faced today is the environmental damage that occurs due to the exploration of natural resources to meet human needs regardless of environmental sustainability. Islam provides an effective and comprehensive solution to overcome the current environmental problems faced by humans. The rules of Islam have ordered humans to protect and preserve the environment. The Holy Qur'an, environmental conservation is a religious duty as well as the social obligation, and not an optional matter. There are many Quranic verses and hadiths mentioned about the importance of avoiding the environmental destruction, for example, QS. Al-Baqarah [2] : 11 "And when it is said to them, " do not make mischief on earth," Allah does not like those who make mischief " (Al Ma'idah, verse 64), "But waste not by excess: for Allah loveth not the wasters" (Al An'am, verse 141).

There are three important reasons why ISE need to be included in the accounting program curriculum.¹⁵ First, higher education institutions are in many ways responsible for the education of our future leaders. Their graduates will be leaders of countries, companies, religious institutions, art thinking,

science, engineering. The task of ISE is to educate our world's future leaders on sustainability issues and teach them how to live and work sustainably based on Islamic teachings. Second, ISE helps students build personal fortitude to make informed decisions about social and environmental issues consistent with Islamic values. Third, ecological and social problems have been supposed to motivate higher institutions to integrate ISE into their curriculum. Students must understand that "maintaining the environment is not an option." Higher institutions should equip them with right Islamic moral decisions. The moral helps them to make right choices in the future.

Special Importance

Social and environmental problems in Indonesia are increasing, and accountants have been accused by many parties to be responsible for the ever-increasing social and environmental crisis from time to time. So far financial reporting generated by accountants from the accounting process ignores social and environmental information that misleads stakeholders in decision-making. Conventional accounting does not facilitate an understanding of companies' environmental impacts.¹⁶ Accountants can contribute to the sustainability of an organization through sustainability reporting and accounting information useful for management for

decision making.¹⁷ The company's sustainability report prepared by the accounting department both represents a holistic picture of the company's sustainability activities and shows how and to what extent the company contributes to sustainable development.¹⁸

Social and environmental issues provide four essential impacts on the accounting field. First, with the implementation of sustainable concepts within the organization, management accounting should include non-financial performance as an integral part of the company's Key Performance Indicators (KPIs). KPI helps management accountants identify, measure and manage non-financial factors that affect financial performance (Investment Weekly News). Muslichah argues that management accounting role is to assist managers in problem-solving, leading to broader information presented, management accounting presents not only historical but also external and non-financial information,¹⁹ causing the need to change the management accounting curriculum.²⁰ Second, the accounting information system needs to provide relevant social and environmental information and integrate that information into the flow of information processes.²¹ Third, the role of the auditor becomes greater; the stakeholders need external verification (assurance) of the ongoing reports that have been presented to increase their

confidence in the quality of the sustainability report data. Fourth in the field of financial accounting the need to prepare a sustainable report. So far the focus of financial accounting courses is to make financial statements only. By applying the concept of sustainable students are required to be able to present a sustainable report that shows not only economic performance but also social and environmental performance. This report is essential to increase the level of transparency and accountability that stakeholders need.

Foundations of Islamic Sustainability Education

As a comprehensive religion, Islam lays down the nature of the relationship between the Creator and His creations, the nature of the relation between humanity and the universe, humans' relations with their society, different societies and humanity as a whole, and the relationship between humans and their souls. Islam reckons all activities of one's life as being in effect an act of worship. The major foundational principles for ISE in higher institutions can be summarized into the following three:

1. Amanah (Trustworthiness and custodianship) - The environment is one of the most critical parts of the earth, the environment plays a role in survival and for

all living things on this earth. Humankind is the holder of the trust to the wealth of Allah SWT and responsible in using it. The position of the caliph for man has explicitly been mentioned by Allah in many verses in the Qur'an. One of the verses about the human caliphate is verse 165 QS. Al-Anam; And He is the one who made you (human) as Caliph on earth, and He exalted your part on some (some) some degree.

2. The principle of vicegerency which denotes that human race is considered to be the *Khalifah* (trustee) of God on earth. As the trustee of God on earth, his/her actions must be by the conditions of that trust. The meaning of the caliph is that man is created to be the ruler who governs what is in the earth, such as plants, animals, forests, water, rivers, mountains, sea, fisheries and should be able to utilize all that is on earth for the common interest of all mankind. God's vicegerent can smoothly and undeterred carry out his honorable task of managing earth. "And it is He (God) who has made you successors (Khalifa) upon the earth and has raised some of you above others in degrees [of rank] that He may try you through what He has given you. Indeed, your Lord is swift in a penalty; but indeed, He is Forgiving and Merciful." (Qur'an 6:165).
3. *Mas'uliyah* accountability of stewardship. *Mas'uliyah* means responsibility the

framework of business ethics. Freedom must be balanced with human responsibility, after determining the choice between good and bad. The Prophet said, "... we are all responsible for whatever is in our care." [Bukhari]. In Islam, humans have an important role in preserving nature (environment). Islam is a religion that views the environment as an inseparable part of one's faith in his God, the manifestation of one's faith can be seen from the responsibility of the environment. Islam has a very detailed concept regarding the maintenance and preservation of nature (environment). In the Qur'an, humans are commanded not to do corruption on earth (Qur'an 7:56). Human beings have the authority to exploit what is on earth and everything that lives on it like the plants and animals that have been provided for free by Allah SWT. But to keep in mind is, humans must also be responsible and maintain it.

4. Adl (Justice) The Prophet S.A.W said in the hadith that, "The (whole) earth has been made a mosque (or a place of prayer), and a means of purification for me, so wherever a man of my ummah may be when the time for prayer comes, let him pray." (Sahih Bukhari, 335). "The (whole) earth has been made good for me, a means of purification and a mosque (or place of prayer); so wherever a man may be when the time for prayer comes, let him pray wherever he is."

(Sahih Muslim, 521). As a mosque, nature is a place of devotion to Allah SWT. Prayer is a sign of a servant's closeness to Allah. Prayer is done by bowing the head by kissing the ground as a symbol of low self in the presence of Allah SWT. Prayer will also lead the heart of man to know the origin of creation, that is the land. Prayer will radiate awareness of the essence of the human self-derived from the contemptible nature (land) and noble (spirit). Prayer can also lead a person to love the land, various animals, and plants.

Islamic Sustainability Education and Accounting Students' Behavior

ISE has a significant influence on the way students conduct in their lives. ISE initiatives do not equip individuals with the technical knowledge needed to make. Complex sustainability decisions; however, the initiatives greatly affect awareness. Thus, it can be said that a higher level of awareness will lead to better sustainability behavior and ultimately sustainable development can be achieved. The purpose of environmental education is to provide students with knowledge so that students have rational attitudes and behaviors and are responsible for environmental issues.²² The aim of ISE not only to equip students general knowledge but also current issues in sustainability such as the complexity of behavior and decisions in a future-oriented, global

perspective of responsibility. Spemherd states that in accounting graduates need to: (1) know about sustainability issues, (2) have the skills to act sustainably if they wish to, (3) have the personal and emotional attributes that require them to behave sustainably.²³ Thus to have an impact on students' behavior, the ISE should equip the students with knowledge and understanding, skills, attributes. This paper emphasizes that education based on Islamic values can influence behavior. Islamic philosophy of education encourages the entire humans to consider and think of their act, as every action has its reciprocation from Allah. With a good understanding of Islamic sustainability, students will be able to make sustainability well to reach the desired social and environmental prosperity based on sharia principles then bring *maslahah* (benefit) were significant for all people

Issues in Islamic Sustainability Education

A myriad of studies has been carried out on the topic of sustainability the past decades. Researchers have attempted to study sustainability from various angles and research on it is still ongoing. Despite the rising concern on it, one cannot overemphasize its importance in Islam. This piece of work is a contribution to the existing literature on sustainability and more importantly an exploration of some issues to be addressed in

the course of the research. It is imperative that higher institutions have to incorporate Islamic sustainability as part of an integrated curriculum. From an Islamic perspective, students need to free themselves from the secular worldview which treats sustainability as an ulterior aspect of professional and worldly life. An Islamic process of educating students needs to humanize and elevate their role as an ethical human being. Islam indeed views the ISE as essential to ensure proper management of this world to achieve the ultimate blessing of God as vicegerents (*kehalifah*) on the earth. This paper proposes four crucial issues faced by higher institutions in integrating Islamic sustainability: (1) approach to sustainability, (2) curriculum design, (3) curriculum content, (4) learning method.

An approach of ISE: integrated into existing courses or taught as stand-alone courses.

According to Thomas and Nicita, when integrating sustainability into the education system, there are three types of approaches that can be taken, which are "modular," "incorporation" and "engagement" approaches.²⁴ The "modular" approach refers to the introduction of new subjects or modules that deal with sustainability concept that are relevant to the host discipline, while the "incorporation" approach refers to the practice of incorporating the sustainability themes into

existing relevant subjects. Thomas and Nicita argued that the “engagement” approach is the most comprehensive and effective method of delivering sustainability education as it integrates the sustainability component into most subjects of study programmes especially to those having the significant contribution to sustainable development.²⁵

Furthermore, currently, there is debate over whether sustainability will be implemented, as a single course integrated into courses that are available. (Sammalisto and Lindhquist, 2008; Lambrechts et al., 2013; Christensen et al., 2007; Tilbury et al., 2004). Stand-alone courses are needed for a more in-depth review. Single Islamic sustainability course allows the student to dig deeply into the individual case studies from which many sustainability lessons can be learned. The single course will nurture students to have understanding, awareness, attitude, and behavior that is rational and responsible for nature and the achievement of sustainable development.

Curriculum design: interdisciplinary versus discipline-based

By its nature, the many interrelated dimensions of sustainability defy containment and easy compartmentalisation into disciplinary silos (Selby, 2006). Interdisciplinarity is an approach that goes beyond a single discipline,

and the logic of interdisciplinary approaches to sustainability issues derives from the consensus that these issues cannot be sufficiently understood in isolation (Blewitt and Cullingford, 2004; Parker, 2010; Tilbury, 2004). Jones et al. define interdisciplinarity as disciplines working collaboratively by sharing their insights and methods in an attempt to go beyond their boundaries to address issues or questions.²⁶ On the other hand, multidisciplinary is mostly recognized in the literature as being the least integrated form of interdisciplinarity, where "disciplines might work together cooperatively but without sharing ideas, assumptions, and methodologies and without being influenced or changed by the other".²⁷ Jones et al. explored the relationship between sustainability and interdisciplinarity and suggested that sustainability has primarily ontological dimensions and normative dimensions, where sustainability presents an overarching and complex socioeconomic-ecological context, wherein interdisciplinarity – as a holistic mode of understanding, organisation of knowledge and inquiry – seems appropriate.²⁸

Curriculum content

Course content refers to the choice of topics and sequence of course content, the selection of issues should support the learning objectives for the Islamic sustainability

program. Research conducted by Stone and Baldoni on NZ sustainability education found that the level of sustainability education varied widely between different courses and institutions, and sustainability initiatives were driven more at an individual, rather than institutional, level.²⁹ Stone and Baldoni also identified that the ideal programme should:

1. include underlying values of respect, caring, and acceptance of responsibility;
2. be holistic, interdisciplinary, involve critical thinking and be transformative; and
3. have content which includes environment and society interaction, impacts, human values and culture, creative thinking, integrating social, economic, and environmental viewpoints.³⁰

The issue of sustainability involves a wide range of disciplines. It is intended to develop interdisciplinary thinking and skills in solving problems related to sustainability. The key concepts to be studied in the sustainability program focus on three aspects, namely social, environmental and economic, with the aim of maintaining a natural balance Sydow 2012, Charron 2013 and understanding the interrelationships of one another in social, environmental, and economic systems.³¹ Nolet as cited by Perry proposed nine themes of sustainability literacy: stewardship, respect for limits, systems thinking and interdependence, economic restructuring, social justice and fair

distribution, intergenerational perspective.³² Global citizenship, the importance of local place.

Learning methods

There are many teaching and learning methods that can be used in teaching sustainability. But the suitable methods used for ISE are a case study, simulation, experience. A case study is a learning strategy used by utilizing the case encountered as a learning material; then the case is discussed together to obtain a solution. The case study allows students to be able to tackle problems that exist in realistic environments in the classroom, so they can implement the cognitive and intuitive skills they have. The use of case studies in the university can assist in decision-making related to sustainability issues.

Simulation in a learning method is meant as a way of explaining something (learning material) through a pretentious act or a process of imitation behavior or playing a role in action as if in actual circumstances. Simulation games can stimulate various forms of learning, such as learning about cooperation, empathy, social systems, concepts, skills, critical thinking skills, decision-making and so on. Simulations can develop students' creativity because through simulations students are given the opportunity to play roles according to simulated sustainability

topics. Simulation can be used as a guideline for students in facing the real situation of the future, both in the community and the world of work.

Experiential, interactive, or participatory activities enable students to engage with sustainability issues at some levels, not only about their discipline but also regarding reflecting on their values, attitudes and accepted social norms.³³ The experiential

approach uses individual student experience as a material in the learning process. This approach considered as a better method than the traditional way that uses text and knowledge imposed from above by the teacher. Georgopoulos et al. found that an experience-based sustainability education would be able to create active students in the future. Based on the explanation above a model of ISE can be presented in the Figure 2 below.³⁴

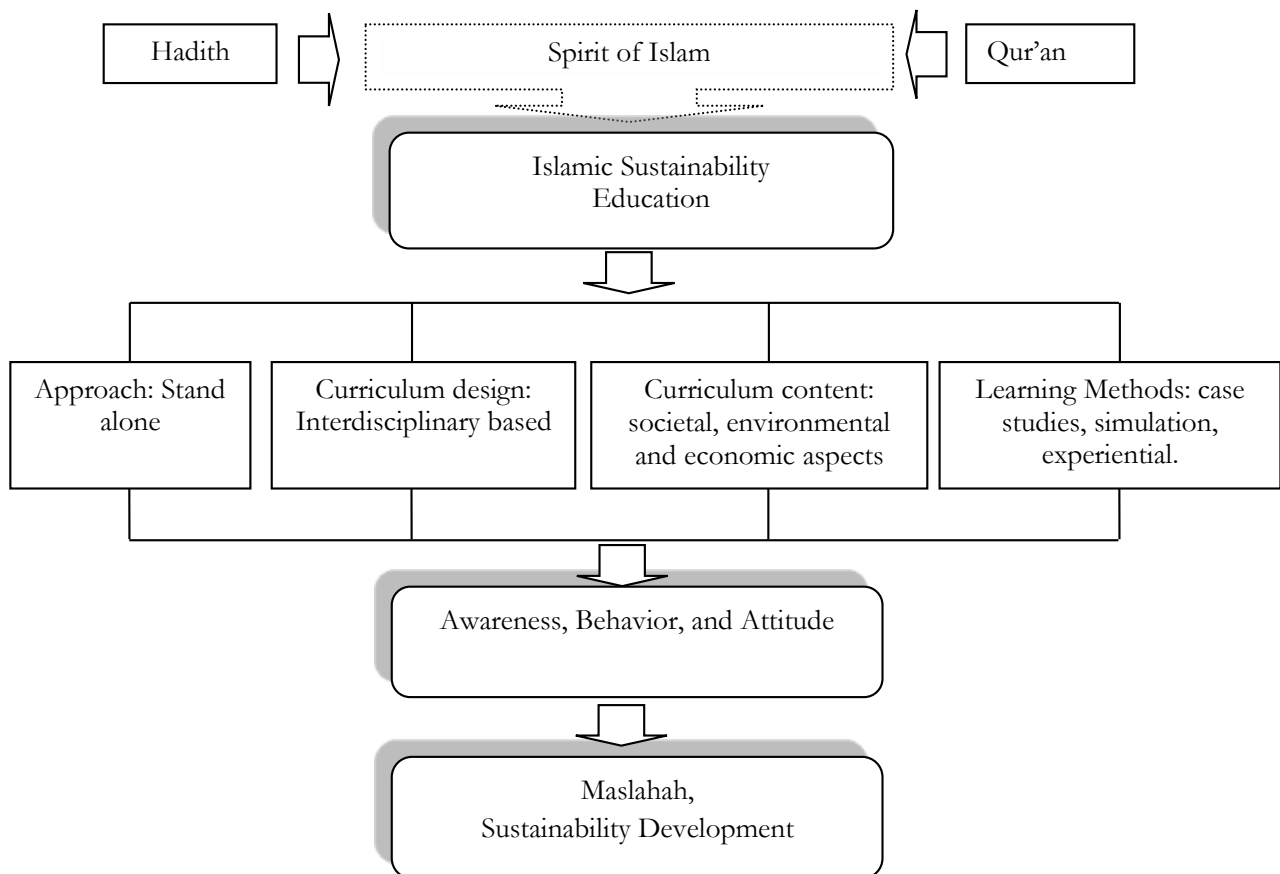


Figure 2. A Model of ISE

Conclusion

Muslim accounting students as future leaders face increasing challenges in the field of sustainability and, there is a strong push for accounting students to play a more significant role in the area. Given the importance placed on sustainability, the objective of this paper is to propose a model of ISE education for accounting students in higher institutions. Accounting program in higher institutions has particular responsibilities to prepare their graduates to make ethical and responsible economic and management decisions. This paper discusses the importance of ISE from an Islamic perspective and explains four critical issues faced by higher institutions in integrating ISE: (1) approach of sustainability, (2) curriculum design, (3) curriculum content, (4) learning method. With the right spirit of Islam, this contribution encourages debate, reflection, understanding, *Ijtihad* (a real effort) and a greater sense of Muslim accounting students' responsibility on sustainability.

References

- Bowling, Emily Erin. Coupled Pedagogy: A Study of Sustainability Education and Community-Based Learning in the Senior Capstone Program at Portland State University, *Thesis*, Portland State University, 2011.
- Ceulemans, K., De Prins, M., Cappuyns, V., De Coninck, W. Integration of sustainable development in higher education's curricula of applied economics: large-scale assessments, integration strategies, and barriers. *J. Manag. Organ.* 17 (5), 621-640, (2011).
- Christensen, L.J., Peirce, E., Hartman, L.P., Hoffman, W.M. and Carrier, J. Ethics, CSR and Sustainability Education In The Financial Times Top 50 Global Business Schools: Baseline Data and Future Research Directions", *Journal of Business Ethics*, Vol. 73 No. 4, pp. 347-68. (2007).
- Charron, Remi. Education for Sustainability: A Moral Framework, *Thesis*, University of Alberta, 2013.
- De Lange, D.E. How do universities make progress? Stakeholder-related mechanisms are affecting adoption of sustainability in university curricula. *J. Bus. Ethics* 118 (1), 103-116, 2013.
- Disterheft, A., Caeiro, S., Azeiteiro, U.M., Filho, W.L.: *Sustainability science and education for sustainable development in universities: a way for transformation*. In: Caeiro, S., et al. (Eds.), *Sustainability Assessment Tools in Higher Education Institutions*. 2013.
- Elkington, J. *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Capstone Publishing, Oxford, 1997.
- Georgopoulos, Alexandros, Maria Birbili, Anastasia Dimitriou. Environmental Education (EE) and Experiential Education: A Promising "Marriage" for Greek Pre-School Teachers, *Creative Education*, 2(2): 114-120, (2011).
- Hassan Aminuddin, Asmawati Suhid, Norhasni Zainal Abiddin, Habsah Ismail, Haziyah Hussin. The role of Islamic philosophy of education in aspiring holistic learning, *Procedia Social and Behavioral Sciences*, 5:2113–2118, (2010).
- Hovardas, T., & Korfiatis, K. Effects of an Environmental Education Course on Consensus Estimates for Proenvironmental Intentions. *Environment and Behavior*, 44(6), 760-784, (2012).
- Jawahar, G. Effects of spiritual training on the personal and professional growth of employees— a study in power grid corporation of India Ltd. G. Jawahar deputy general manager (HRD), power grid corporation of India Ltd, *A Journal of*

- Management Ethics and Spirituality*, Vol. 4 No. 2, pp. 27-37, (2012).
- Jones, P., Selby, D. and Sterling, S.R.. *More than the sum of their parts? Interdisciplinarity and sustainability*, in Jones, P., Selby, D. and Sterling, S. (Eds), *Sustainability Education: Perspectives and Practice Across Higher Education*, Earthscan Publications, London, Sterling, VA, pp. 17-37, (2010a).
- Jones, P., Selby, D. and Sterling, S.R. (Eds) *Sustainability Education: Perspectives and Practice across Higher Education*, Earthscan, London, Sterling, VA., (2010b).
- Muslichah, Shabrina Ramadania. Integrating Sustainability Education Into Higher Institutions. *International Journal of Business and Management Invention*. Vol. 6 Issue 3 PP—31-36, (2017).
- Muslichah. *Akuntansi Manajemen*, Penerbit STIE Malangkeucwara Malang, 2014.
- Myers, O. E., and Beringer, A. "Sustainability in higher education: Psychological research for effective pedagogy", *Canadian Journal of Higher Education*, Vol. 40 No. 2, pp. 51 - 77, (2010).
- Mok Soon Sang. Ilmu Pendidikan untuk KPLI (Komponen 3: Profesionalisme Keguruan) Sekolah Rendah. Subang Jaya: Kumpulan Budiman Sdn. Bhd, (2004).
- Nolet, V. Preparing sustainability-literate teachers. *Teachers College Record*, 111(2), 409-442, (2009).
- O'Byrne, David, Weston Dripps, Kimberly A. Nicholas, Teaching and learning sustainability: An assessment of the curriculum content and structure of sustainability degree programs in higher education, *Sustain Sci*, 10: pp43–59, (2015).
- Parker, J. Competencies for interdisciplinarity in higher education, *International Journal of Sustainability in Higher Education*, Vol. 11 No. 4, pp. 325-338, (2010).
- Perry, Robin K. A Case for Sustainability Pedagogical Content Knowledge in Multicultural Teacher Education, *Multicultural Education*, 21.1 (Fall): 46-51, (2013).
- QAA. Education For Sustainable Development: Guidance for UK Higher Education Providers, The Quality Assurance Agency for Higher Education, (2014).
- Redman, Erin. Development, Implementation, and Evaluation of Sustainability Education through the Integration of Behavioral Science into Pedagogy and Practice, *Dissertation*, Arizona State University, (2013).
- Ruy, H.-C., & Brody, S. D. Examining the impacts of a graduate course on sustainable development using ecological footprint analysis. *International Journal of Sustainability in Higher Education*, 7, 158–175, (2006).
- Rusinko, C.A. Integrating sustainability in higher education: a generic matrix, *International Journal of Sustainability in Higher Education*, Vol. 11 No. 3, pp. 250-259, (2010).
- Sharma, R, and Monteiro, S.R.. Creating Social Change: The Ultimate Goal of Education for Sustainability, *International Journal of Social Science and Humanity*, 6 (1) January (p. 72-76, (2016).
- Sammalisto, K., and Lindhqvist, T. Integration of sustainability in higher education: a study with international perspectives, *Innovative Higher Education*, Vol. 32 No. 4, pp. 221-233, (2008).
- Schaltegger, S. and Burritt, R.L. Sustainability accounting for companies: catchphrase or decision support for business leaders, *Journal of World Business*, Vol. 45, pp. 375-384, (2010).
- Shephard, K. Higher education for sustainability: Seeking affective learning outcomes. *International Journal of Sustainability in Higher Education*, 9(1), 87–98, (2008).
- Stone, L., and Baldoni, M. Progress and Pitfalls in the Provision of Tertiary Education for Sustainable Development in New Zealand, Parliamentary Commissioner for the Environment, Wellington, available at www.pce.parliament.nz/ (2006).
- Sydow Brooke C. Sustainability Design In Higher Education: Curriculum, Teaching

- Methods and Program Integration, *Dissertation*, University of South Dakota, (2012).
- Stough, T, K. Ceulemans b, W. Lambrechts c, 1, V. Cappuyns, Assessing sustainability in higher education curricula: A critical reflection on validity issues, *Journal of Cleaner Production*, 172 (2018) 4456-4466, (2018).
- Tejedor, Gemma, Jordi Segal_as, Martí Rosas Casals, Transdisciplinarity in higher education for sustainability: How discourses are approached in engineering education. *Journal of Cleaner Production*, 17, pp. 529-37, (2018).
- Thomas, I., & Nicita, J. Sustainability education and Australian universities. *Environmental Education Research*, 8(4), 475-492, (2002).
- Tilbury D. Environmental education for sustainability: defining the new focus of environmental education in the 1990s. *Environ Educ Res*, 1(2):195–212, (1995).
- Tilbury, D. *Environmental education for sustainability: a force for change in higher education*, in Corcoran, P.B. and Wals, A.E.J. (Eds), *Higher Education and the Challenge of Sustainability: Problematics, Promise, and Practice*, Kluwer Academic Press, Dordrecht, pp. 97-112, (2004).
- Tilbury, D., Crawley, C. and Berry, F. Education about and for Sustainability in Australian Business Schools, report prepared by the Australian Research Institute in Education for Sustainability (ARIES) and Arup Sustainability for the Australian Government Department of the Environment and Heritage, Canberra, (2004).
- Williams, B.R., Wilmshurst, T.D. and Clift, R.C. The role of accountants in sustainability reporting – a local government study, paper presented at APIRA, Sydney, July, available at: <http://apira2010.econ.usyd.edu.au/>. (2010).

(Endnotes)

- ¹ Stough, T, K. Ceulemans b, W. Lambrechts c, 1, V. Cappuyns. Assessing sustainability in higher education curricula: A critical reflection on validity issues, (*Journal of Cleaner Production*, 172, 2018). 4456-4466. Hal. Lihat juga Tejedor, Gemma, Jordi Segal_as, Martí Rosas Casals, (2018). Transdisciplinarity in higher education for sustainability: How discourses are approached in engineering education. *Journal of Cleaner Production*, 17, pp. 529-37. Hal 78. dan Perry, Robin K. (2013). A Case for Sustainability Pedagogical Content Knowledge in Multicultural Teacher Education, *Multicultural Education*, 21.1 (Fall): 46-51.
- ² Myers, O. E., and Beringer, A., "Sustainability in higher education: Psychological research for effective pedagogy", *Canadian Journal of Higher Education*, Vol. 40 No. 2, 2010 pp. 51 -77.
- ³ De Lange, D.E., (2013). How do universities make progress? Stakeholder-related mechanisms are affecting adoption of sustainability in university curricula. *J. Bus. Ethics* 118 (1), 103-116
- Disterheft, A., Caeiro, S., Azeiteiro, U.M., Filho, W.L., (2013). *Sustainability science and education for sustainable development in universities: a way for transformation*. In: Caeiro, S., et al. (Eds.), *Sustainability Assessment Tools in Higher Education Institutions*.
- ⁴ Sydow Brooke C. (2012). Sustainability Design In Higher Education: Curriculum, Teaching Methods and Program. Hal. 28
- ⁵ Ruy, H.-C., & Brody, S. D. Examining the impacts of a graduate course on sustainable development using ecological footprint analysis. *International Journal of Sustainability in Higher Education*, 2006. 7, 158–175.
- ⁶ Myers, O. E., and Beringer, A., "Sustainability in higher education,... hal 68.
- ⁷ Redman, Erin. Development, Implementation, and Evaluation of Sustainability Education through the Integration of Behavioral Science into Pedagogy and Practice, *Dissertation*, Arizona State University. 2013) hal. 90.
- ⁸ O'Byrne, David, Weston Dripps, Kimberly A. Nicholas, *Teaching and learning sustainability: An assessment of the curriculum content and structure of sustainability degree programs in higher education*, *Sustain Sci*, 2015. 10: pp43–59.
- ⁹ Blumstein and Saylan (2007). 210.
- ¹⁰ Yacoob (2013). Hal. 2
- ¹¹ Mok Soon Sang. Ilmu Pendidikan untuk KPLI (Komponen 3: Profesionalisme Keguruan) Sekolah Rendah. (Subang Jaya: Kumpulan Budiman Sdn. Bhd. 2004), hal. 26
- ¹² Jawahar, G., Effects of spiritual training on the personal and professional growth of employees– a study in power grid corporation of India Ltd. G. Jawahar deputy general manager (HRD), power grid corporation of India Ltd, *A Journal of Management Ethics and Spirituality*, Vol. 4 No. 2, 2012. pp. 27-37. 9.
- ¹³ Saha and Paterson, 2008. Hal.45

- ¹⁴ Elkington, J., *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Capstone Publishing, Oxford. 1997). Hal 79.
- ¹⁵ Muslichah, Shabrina Ramadania. Integrating Sustainability Education Into Higher Institutions. (International Journal of Business and Management Invention. Vol. 6 Issue 3 2017). PP—31-36.58.
- ¹⁶ Schaltegger, S. and Burritt, R.L., Sustainability accounting for companies: catchphrase or decision support for business leaders, (*Journal of World Business*, Vol. 45, 2010), pp. 375-384.
- ¹⁷ Williams, B.R., Wilmshurst, T.D. and Clift, R.C., The role of accountants in sustainability reporting – a local government study, paper presented at APIRA, Sydney, July, 2010, available at: <http://apira2010.econ.usyd.edu.au/>.176.
- ¹⁸ Ibid..Hal. 167.
- ¹⁹ Muslichah. Akuntansi Manajemen, (Penerbit STIE Malangkeucwara Malang, 2014), hal.257
- ²⁰ Stough et al., 2018 ... Assessing sustainability 44-45
- ²¹ Williams et al., 2010. The role of accountants in sustainability,... 75.
- ²² Hovardas, T., & Korfiatis, K. Effects of an Environmental Education Course on Consensus Estimates for Proenvironmental Intentions. (*Environment and Behavior*, 2012). 44(6), 760-784.
- ²³ Shephard, K. Higher education for sustainability: Seeking affective learning outcomes. (*International Journal of Sustainability in Higher Education*, 2008). 9(1), 87–98.
- ²⁴ Thomas, I., & Nicita, J. Sustainability education and Australian universities. (*Environmental Education Research*, 2002). 8(4), 475-492.
- ²⁵ Ibid.. 477.
- ²⁶ Jones, P., Selby, D. and Sterling, S.R. *More than the sum of their parts? Interdisciplinarity and sustainability*, in Jones, P., Selby, D. and Sterling, S. (Eds), *Sustainability Education: Perspectives and Practice Across Higher Education*, Earthscan (Publications, London, Sterling, 2010a). VA, pp. 17-37.
- ²⁷ Ibid. hal. 77.
- ²⁸ Jones, P., Selby, D. and Sterling, S.R. (Eds), *Sustainability Education: Perspectives and Practice across Higher Education*, Earthscan, London, Sterling, VA. 2010b).
- ²⁹ Stone, L., and Baldoni, M. Progress and Pitfalls in the Provision of Tertiary Education for Sustainable Development in New Zealand, Parliamentary Commissioner for the Environment, Wellington, (available at www.pce.parliament.nz/2006). 20.
- ³⁰ Ibid. hal 40.
- ³¹ Sydow Brooke C. Sustainability Design In Higher Education: Curriculum, Teaching Methods and Program Integration, *Dissertation*, (University of South Dakota, 2012). 58-59. Lihat juga di Charron, Remi. Education for Sustainability: A Moral Framework, *Thesis*, University of Alberta 2013). Hal 72. Dan Tilbury D. Environmental education for sustainability: defining the new focus of environmental education in the 1990s. 1995). *Environ Educ Res*, 1(2):195–212.
- ³² Nolet, V. Preparing sustainability-literate teachers. *Teachers College Record*, 111(2), 2009). 409-442. 294
- ³³ QAA. Education For Sustainable Development: Guidance for UK Higher Education Providers, The Quality Assurance Agency for Higher Education, 2014).
- ³⁴ Ibid., 297.
- ³⁵ Georgopoulos, Alexandros, Maria Birbili, Anastasia Dimitriou,. Environmental Education (EE) and Experiential Education: A Promising “Marriage” for Greek Pre-School Teachers, *Creative Education*, 2 (2) 2011: 114-120.