The Role and Strategy of Islamic Higher Education in Improving Competence Student Face Revolution Industry Technology

Kardina Engelina Siregar

STIES Imam Asy Syafii Pekanbaru, Riau, Indonesia

email: dinazahsan@gmail.com

Abstrak: Tantangan yang dihadapi oleh dunia pendidikan semakin kompleks. Pendidikan harus mampu beradaptasi dengan kemajuan teknologi, mengintegrasikan teknologi dengan keterampilan manusia, dan mendorong inovasi yang dapat meningkatkan efisiensi sistem produksi, fleksibilitas, keberlanjutan, dan kesejahteraan. Oleh karena itu, Perguruan Tinggi Islam memiliki peran dan strategi yang krusial dalam menghadapi perkembangan teknologi saat ini. Penelitian ini bertujuan untuk mengidentifikasi peran dan strategi Perguruan Tinggi Islam dalam meningkatkan kompetensi mahasiswa dalam menghadapi revolusi teknologi. Metode penelitian yang digunakan adalah studi literatur, yaitu teknik pengumpulan data dan informasi dari berbagai sumber, seperti buku, penelitian terdahulu, makalah, jurnal, artikel, laporan, dan majalah yang relevan dengan topik penelitian. Peneliti mencatat, memahami, dan mengklasifikasikan literatur yang berkaitan dengan penelitian ini. Hasil penelitian menunjukkan bahwa modernisasi pendidikan Islam berbasis karakter merupakan sebuah keharusan untuk menciptakan pendidikan yang sesuai dengan kebutuhan generasi milenial.

Kata Kunci: Peran dan Strategi, Perguruan Tinggi Islam, Kompetensi Mahasiswa, Revolusi Industri Teknologi

Abstract: The challenges faced by the world of education are becoming increasingly complex. Education must be able to adapt to technological advances, integrate technology with human skills, and encourage innovations that can increase production system efficiency, flexibility, sustainability, and welfare. Therefore, Islamic Higher Education plays a crucial role and strategy in dealing with current technological developments. This research aims to identify the roles and strategies of Islamic Universities in improving student competence in facing the technological revolution. The research method used is a literature review, which is a technique of collecting data and information from various sources, such as books, previous research, papers, journals, articles, reports, and magazines relevant to the research topic. The researcher records, understands, and classifies the literature related to this research. The results show that the modernization of character-based Islamic education is a must to create education that suits the needs of the millennial generation.

Keywords : Role and Strategy, Islamic Higher Education, Student Competence, Industrial Revolution Technology

Introduction

Higher education makes a significant contribution towards enhancing a country's human capital (Nulhaqim et al., 2016). Islamic universities need to prepare themselves to face the challenges of the industrial era by focusing on their vision, mission, rules, governance guidelines, student community, human resources, infrastructure, implementation of the Tridharma of higher education, and cooperation.

Higher education, as a fundamental component of the National Education System, has the crucial role of instructing the populace and fulfilling Indonesia's Vision 2030 to confer progress, prosperity, autonomy, and an elevated level of competitiveness. To achieve a society with high competitiveness on the international stage, universities, including Islamic institutions, should generate high-quality graduates and offer solutions to diverse humanitarian and national issues (Mujahidah & Wekke, 2019).

One challenge facing education in the era of technological revolution is how to understand and explore educational roles and strategies, as well as how to utilize technology effectively. The transformation brought about by the technological revolution has changed people's way of life, from work to communication. It has made it possible to connect millions of people through devices with ever-increasing processing power and storage capacity, and to access knowledge in ways that were never before possible. Education must keep pace with these technological advancements and develop a unified and comprehensive global view of how technology is changing the lives of future generations and shaping humanity in the context of Islamic education. The breadth and speed of the industrial revolution built on top of the digital revolution and the amalgamation of diverse technologies is bringing about a paradigm shift and transforming entire systems across countries, industries, and society (Schwab, 2019).

New technological advances that integrate the physical, digital, and biological worlds affect all disciplines, economies, industries, and governments. Fields experiencing breakthroughs in new technological advances include artificial intelligence, robotics, nanotechnology, biotechnology, quantum computer technology, blockchains such as Bitcoin, internet-based technologies, and 3D printers (Riyadi, 2019). According to Hermann et al. (2016), there are four design principles for industry technology: interconnection, information transparency, technical assistance that includes the visual and physical, and decentralized decision-making (Yahya, 2018).

In college, students are seen as both agents of change and agents of social control who must be ready to adapt to every change. The intended change refers to the speed and scope of change because change is constant and eternal (Muqowim, 2018). Considering the development of the technological revolution, Islamic colleges must develop their own qualified roles and strategies to enhance the competence of their students in facing the technological revolution. As a result, high-quality Islamic colleges play a significant role in shaping the skills and knowledge of their students, empowering them to be competitive and resilient in the face of changing times.

Islamic education, both as institutions and processes, generally faces several challenges. These include political influences on education, the differentiation of rights, the issue of knowledge and its dichotomy, a low assessment of the system and its management quality, and a subjective evaluation of its role in society. Even at the highest

level of Islamic education, colleges have not yet achieved the desired quality.

The problem of imprecision and inaccuracy demands greater attention from all parties involved. This is because it presents a challenge that requires significant changes, making the public's engagement with both the processes and institutions more efficient. These changes should be undertaken boldly rather than resorting to mere superficial fixes. The goal is to position Islamic education to be more adaptable to change, align with competitive logic, and respond to the dynamics of empowerment (Usa, 1997).

For prepare graduate of students to be ready with coming revolution technology, then must provided with qualified competence. Competence is set action smart, full not quite enough answer you have somebody as condition For considered society can afford in carry out field assignments work certain (Ministerial Decree Education National, 2002). Graduate competency standards have a fundamental role in regulating the curriculum each year. Graduate competency is calculated from the thinking abilities and skills of each student which aims to evaluate their affective and psychomotor abilities (Musri et al., 2023).

Look in the mirror to study the positive influence of multimedia-based learning on increasing student competence (Soenarto, n.d). The writer has designed a college strategy that aligns with Islamic values to raise student competence. The use of fast-evolving technology is encouraged to facilitate student learning. Revolutionary technology has shifted the direction of the industry towards a cyber-physical system where components communicate and work seamlessly with one another, as well as with humans, through computing clouds. This has been investigated through literature research methods using several book references.

Ideally, an Islamic tertiary institution should be able to clearly present its role and importance in maintaining the quality of education in society without any doubt about its existence. Therefore, it is essential for every Islamic tertiary institution to identify suitable strategies for enhancing the quality of education and developing students' competencies in light of the rapidly evolving technological landscape. This will enable the alumni to demonstrate their competitiveness and value proposition to potential employers.

Previous studies relevant are: Firstly, Angriana (2023) explores how to enhance student preparedness for the challenges of the Industrial Revolution 4.0. Secondly, Riyanto et al. (2023) investigate hard skills as the dominant factor in preparing students for work in the Industrial Age 4.0. Lastly, Ayaturrahman and Rahayu (2023) analyze the impact of soft skills on student preparedness for work in the Industrial Era 4.0. From the numerous studies conducted above, the author was interested in writing on the topic of "The Role and Strategy of Islamic Higher Education in Improving Competence Student Face Revolution Industry Technology".

Research Methods

The author conducted library research for this study. Library research involves gathering information from various materials found in the library, including newspapers, books, magazines, manuscripts, documents and other relevant sources. This method allows for the collection of data through the examination of written literature such as books, previous research, papers, journals, articles, reports related to the research topic,

and magazines (Koentjaraningrat, 1983). The aim of this activity is to gather relevant information that is pertinent to the research topic and problem to produce scientifically sound work.

To conduct a library research study, it is necessary to conduct a comprehensive and purposeful examination of multiple references. This approach serves to improve the overall quality and credibility of the written work. The literature review serves several purposes, including identifying specific issues or topics, sourcing relevant information, reviewing pertinent theories, searching for foundational theories, and increasing the author's knowledge and understanding. The author sourced literature from academic journals, relevant books, and articles related to the subject matter at hand.

Discussion

The Role of Islamic Higher Education in Increase Competence Student

This strategy aims to accelerate and control the realization of the vision and mission of Islamic educational institutions. Strategic capabilities are based on the competency, knowledge, expertise, and experience of each manager (Siregar et al., 2023). Islamic colleges, as recognized institutions of higher education in the National Education System, have a responsibility to educate the nation's life (Daulay, 2014). Based on the lofty educational objectives set out in PP 60 of 1999 and the mission of the Ministry of Religion, the constitutional objectives of higher Islamic education include: (1) To prepare students to become members of society who have the academic and/or professional abilities to implement, develop, and/or enrich the treasury of science, technology, arts, and/or Islamic-inspired culture. (2) To develop and deploy knowledge, technology, and art that is imbued with Islam and/or Islamic culture to improve the quality of public life and enrich national culture. Skills training programs for varied and relevant teacher teaching methods in accordance with the independent learning curriculum, motivating teaching staff to improve educational progress, and introducing textbook writing are essential for achieving these objectives (Siregar, 2020a). It is also necessary to conduct an initial analysis of students' needs according to the juridical and theoretical basis contained in Ministerial Regulation Number 19 concerning National Education Standards (Siregar, 2020b). Finally, it is important to formulate and disseminate Islamic religious values so that they can be used by society as a behavioral parameter for life, serving as an inspiration and catalyst for development, as well as a motivator for the creation of a tolerant and harmonious life between people of different religions (Queiroz & Figueiredo, 2016).

College Islamic height is not just diversion or *transfer of knowledge*, but also helps students and the community in develop potential. College role of Islam in build intelligence and expand insight, build ethos work and apply curriculum active positive, as well do integration science. such thing become important in framework prepare participant educate For be source Power humans who have ability academics and sensitivity high social. College Islamic height must be oriented with implement the pillars of education true namely : *learning to know, learning to do, learning to be, and learning to live together* (Marjuni, 2017).

Application knowledge knowledge to be perfect, should accompanied with deepening

religious norms. College Islamic high has role in increase competence student To use face progress of time and technology. Knowledge knowledge without followed by understanding religious, will resulted rampant evil and cunning. Happening corruption in Indonesia to be example that No Enough only with knowledge knowledge course, will but need deepening faith and morals as the zoning.

Progress technology as sophisticated whatever without accompanied appropriate faith and morals with Islamic law, then will make man smart brain but lack empathy and morals. Here it is retreat civilization, values and roles education in humans, because essence studied and understood science is For make man as caliph and leader for himself at a minimum, for family, nation and religion. The hope is progress technology at the moment This compared straight with progress quality of Education, formation morals and character especially in college Islamic high as sharia principles.

Islamic Higher Education Strategy in Increase Competence Student

The strategy aims to expedite and manage the realization of the vision and mission of Islamic educational institutions. Strategic capability is based on the competence, knowledge, expertise, and experience of each administrator (Siregar et al., 2023). To become a competitive university, managerial readiness and strategies need to be developed systematically with careful planning and a programmatic approach. This approach places greater emphasis on both the quantity and quality of research outcomes, the efficacy of higher education institutions, and their readiness to compete in the job market. Factors such as the number of international students and faculty, the effectiveness of the campus website, and the implementation of good university governance are equally crucial.

Strategic steps that need to be implemented include: 1. Enhancing the quantity and quality of published research outcomes by Islamic higher education institutions. 2. Delivering high-quality teaching services that meet stakeholder needs, including offering diverse and relevant training programs for teaching methods suitable for the independent learning curriculum. Motivating educators to contribute to the advancement of education and participating in the creation of instructional materials (Siregar, 2020b). 3. Conducting a preliminary analysis of the needs of students in accordance with the legal and theoretical foundations outlined in Ministerial Regulation No. 19 on National Education Standards (Siregar, 2020a). 4. Developing the institution's website. 5. Strengthening leadership within the institution. 6. Implementing good university governance. 7. Forming alliances and networks between Islamic higher education institutions and other institutions. 8. Emphasizing internationalization efforts at Islamic higher education institutions. 9. Cultivating a campus culture within Islamic higher education institutions. Effective planning and adequate campus infrastructure are not the sole factors supporting the competitiveness of Islamic higher education institutions. Input and support from stakeholders and the organizational commitment of faculty, staff, and students are the most critical factors for Islamic higher education institutions to attain international qualifications (Farid Fauzi, 2016). Success necessitates the use of strategies tailored to specific needs.

According to the Big Indonesian Dictionary (Kamus Besar Bahasa Indonesia or

KBBI), a strategy denotes a meticulously crafted plan of activities intended to accomplish specific goals. For the purposes of Islamic education advancement, it is imperative to incorporate faith, knowledge, and practice into domains of education that carry greater weightage than cognitive, affective, normative, and psychomotor factors (Hamami, 2006). One of the core principles of UIN Suska Riau is the integration of knowledge and Islamic principles, which is reflected in its vision to produce graduates equipped with the necessary skills, knowledge, understanding, and Islamic life competencies relevant to their chosen fields of study (Helmiati, 2015).

Each component of the UIN Suska Riau logo holds significant symbolic significance, contributing to its overall representation. The octagon symbolises stability, resilience, rationality, order, safety and well-being as pillars of Islam. In addition, the spiral represents the rotation of stars within the Andromeda Galaxy, the closest galaxy to the Milky Way. Furthermore, Andromeda portrays the grandeur and order of the universe, which is a focal point of scientific study and technology. The integration-connection concept merges religious knowledge with general knowledge focused on the Quran and the Sunnah. This scientific model is depicted by the Andromeda scientific spiral symbol as presented below.

Image of the Andromeda Spiral Logo of UIN Suska Riau

Sourced knowledge from the Qur'an and al- Hadith as central, and the sciences on the layers second and so on, one each other mutually interact with each other discussing and mutual respect or consideration and sensitivity to the presence of other knowledge. From this picture it is clear that dichotomy and all other forms of separation of knowledge are no longer recognized (Hamami, 2006). This is the initial foundation of the college strategy Islamic College to increase the capacity of its students.

Development progress revolution industry moment this should responded with fast and active by all field science, purpose For increase Power Education competitiveness. For That education tall must formulate policy strategic in various aspect start from institutional, field study, curriculum, resources power, as well cyber university development, and research and development until innovation. Here's a strategy that can implemented by the college deep Islamic increase competence student face technology industry revolution

Strengthening the Management and Leadership of Islamic Higher Education Institutions

Reconstructing institutional education policies that are adaptive and responsive to the technological revolution is necessary for the development of transdisciplinary knowledge and study programs, with religious guidance serving as a control tool. This ensures the elimination of any separation between faith education (religious sciences), general education (science), and moral education (ethics).

The consequence of failing to do so is a setback for Muslims in the field of science at all levels. Consequently, there has been a decline in religious knowledge, while general sciences have stagnated. Situations like these have led to a waning interest in religious sciences as they become detached from real-life applications. General sciences, on the other hand, continue to develop without the influence of religious ethics and spirituality, resulting in a loss of meaning and, in some cases, causing harm.

The science of religion that truly deserves emphasis is the study of monotheism as the foundation of an individual's faith. A strong faith, coupled with the awareness that Allah, as the creator, is the sole entity worthy of worship and that no one else can save or provide assistance other than Allah, should be instilled. Once the science of monotheism is studied, understood, and practiced, students can then delve into other religious sciences, such as fiqh, muamalah, munakahat, and general knowledge.

Furthermore, character building and formation play a crucial role in every Islamic tertiary institution. They prepare students to make wise use of technological advancements, as these advances provide freedom to technology users, with no inherent restrictions on accessing information via the internet.

Curriculum Design Describe Monotheism, Character, Bilingualism and Discipline according to the business

The main problem in our education is actually not only in the curriculum, but also in the teaching staff. So, no matter how well the curriculum is designed, it will not be optimal when educators do not optimally empower themselves and the potential of their students. Educators at universities Islamic height must be capable read and understand development fast technology moment this. High competition between countries, between institution education, force circumstances and people For fast adapt. So need done guarantee quality in maintenance education especially education Islamic high

At the beginning of the lecture semester, preferably college the height of Islam should be teach sciences Islamic especially first. Curriculum Islamic expected more dominant and become standard quality education. because in essence progress and development of the times will be always happened and changed, but who made happy world and hereafter, eternal and eternal just science religious. In principle, if knowledge religious has invested in each line education in college Islam is high, he hopes intelligence, skill and excellence student will more easy sharpened, aside it is also necessary emphasized knowledge vocational and national.

Explanation curriculum in form syllabus can centered attention to aspects majesty and majesty area God's knowledge of nature and man, position human and responsibility he replied to God and others creature. Problem eschatological, and the issues of worship contained in pillars of Islam can given through assistance, however must related

organically (Usa, 1997).

College education the height of Islam should be not minimal in understanding and practice Islamic teachings, so when face he advanced technology, man become more wise and prudent in use riches nature, as well each other honor man other. Face demands of time and development every technology moment can change, then the guarantee Quality must pay attention to alumni services. The intended alumni service process is to form strong alumni ties and help channel graduates into the industrial world. Some of the activities that can be proposed include holding regular meetings with alumni and departments to share knowledge. Alumni can play a role in conveying the story of their struggle to success to their younger classmates, so as to create external motivation for students.

Field Taught Studies

College learning tall is development from level education before. Development the refers to policy specified education. In formulation policy education, there is two the approach used, namely : a. *Social Demand Approaches* is approach in formulation policy base education themselves on aspirations, demands, as well diverse the interests of society. b. *The Man-Power Approach* is a more approach drip focus on consideration rational in framework create availability source Power Adequate human resources in society. Approach *man-power* no see there is request from the market or no, society demand For made something policy education certain or no. But most importantly is according to considerations rational and visionary of corner view taker policy (Rusdiana Ahmad, 2015).

Tri Dharma College tall is matter absolutely mandatory done by each college tall For measure existence. Expected with realization Tri Dharma College tall this will produce generation that has Power struggle, thought critical, creative, independent, and innovative.

Education and teaching, leads to system good and comprehensive education in college Which height, of course no only just transfer knowledge from lecturer to his students course, but role educate too still must become not quite enough answer lecturer as power educator at college tall the. Deep role form assistance and also guidance, so that students always are on the proper rails with vision mission college tall as well as based on the Qur'an and Sunnah.

Revolution technology demanding that college tall prepare his students in accordance with *bargaining power* that has various type *soft skills*. IQF (Framework Indonesian State Qualification) is a stimulus in the sector of increasing student professionalism. Focus on science religion, majors, and nationalism.

Research and development, signifies that college tall No only as confined in theory only. Students are expected to be able to research and develop the knowledge they already have. With research and development so student capable develop science and technology with intelligent, critical and creative in run role as *agent of change.*

Community service, of which one form of application is Community Service Program (KKN). Students are faced with the social reality of people's lives, in order to be able to implement all the knowledge they already have. In fact, theory is not always the same as reality on the ground. This is a form of adaptation and preparation for students to be involved in society.

Enhancement Educator Competency

Uswatun Khasanah, or role model is important in learning. Lecturers should improve their status and role professionally. Apart from being an educator, lecturers should also participate in observing problems that arise in social institutions which are part of society. Therefore, education should be a vehicle for social reconstruction.

This kind of learning strategy can later be used in providing rationalist learning accompanied by empiricism. For example, Biology in the discussion of living things, can be related to the matter of Allah's power and wisdom in creating living things, or physics which discusses the matter of earth's attraction/gravity can be related to the occurrence of day and night and all movements on earth because of Allah's permission (Irfan, 2009).

Instilling values is an urgency in increasing student capacity. Learning is not only on the surface. A lecturer must be able to explore a scientific discipline down to its *values*

Education Policy Reform with the Aim of Forming a Superior Generation (Competitiveness, Creative, Innovative, Characteristic, Independent, Love for the Motherland and Religion).

Ability in see odds and opportunities will make college tall capable put the right strategy target. Creativity and innovation naturally something that is very much needed in the era of revolution technology moment this. Convenience and benefits for anyone at the time capable elaborate and design something activity. The hope college tall Good lecturer his students capable see opportunity this, so presenting people who believe, practice religion accordingly Islamic law, creative and innovative.

For cultivate intellect students, a culture of reading and discussion is needed. Libraries 2.0 can as a strategy for utilise opportunity development technology with version use web technology that is participatory and user centered. Libraries 2.0 is service and collection library use application technology interactive, collaborative, multimedia, web - based participatory, and user - centered. Masroer, 2013). Example application the wiki apps, blog apps, apps facebook, app youtube, and the google docs app.

College challenge The next Islamic university is Cyber-Physical Technology, for example be marked with emergence of the Autonomous Vehicle, the car without crew. Innovation and creativity are important factors in serving the community. In this era, students must also be able to direct the mindset of society towards technological developments. So that later when facing Revolution 4.0 you will not be amazed and stuttered by technology. Therefore, previously higher education institutions had to equip their students with a deep understanding of technology and its use to be productive and innovative.

Conclusion

Development revolution technology must addressed with positive and confident development This bring kindness. this will happen If every stakeholders interest has prepare self Good from knowledge, faith and skills technology with ok. Competition between countries, between institutions and between individual is thing that isn't Can dodged. So college tall as institution level education highest must can produce students who have competence Empower competitive. Competence student Good in matter understanding faith, knowledge technology, vocational, skills and knowledge national.

Change revolution industry must accompanied with change pattern thoughts and patterns work, if No so will eroded and left behind. Lots of work man who will replaced by technology, and this the more push man For Can adapt and survive life in a manner elegant without must blame technology.

Resilience and the role of Education will tested at the time college Islamic high able produce students who are competent in their fields, because actually end from struggle college tall is How make student can received, ready wear and power use in the middle society. Ability college tall see opportunity is the key to success in achieving achievements quickly. With armed quality system institutional, which can forgive whole future market needs, expected college Islamic high can make student aware will hurry time and dynamics continuing life changed. Institutional characteristic innovative and objective are not go out from the religious zone.

Determination field studies in accordance policies that have determined become aspect important in enhancement competence student. Theory that is applicable, very necessary For welcome revolution technology, so student capable adapt and also use all the opportunities exist. Creativity and innovation is key important in this era. College Islamic height must be Jelly in see opportunity with make breakthrough new in improve intellectual skills or softkill student.

Acknowledgements:

Bibliography

Ahmad, R. (2015) Education *Policy "From Philosophy to Implementation ”*, Bandung: Loyal Reader

Angriana, W. (2023) Influence Competence To Readiness Student Facing the Industrial Revolution Era 4.0, *Thesis, University Structure, Faculty Economy, Economy Accounting,* http://repository.untad.ac.id/id/eprint/8615

Ayaturrahman, JD. & Rahayu, I. (2023) The Impact of Soft Skills on Readiness Work Students in the Industrial Age 4.0, *Procceding of the National Conference on Accounting & Finance,* 5(1)

Decree of the Minister of National Education No. 045/u/2002 concerning curriculum education tall chapter 1

Fauzi, F. (2016). Building a Strategy for a State Islamic Religious College (PTKIN) Towards a World Class University, *As-Salam Journal,* 1(1)

Hamami, T. (2016). *Basic scientific framework & curriculum development at State Islamic University (UIN) Sunan Kalijaga Yogyakarta,* Yogyakarta, Academic Working Group.

https://deepublishstore.com/blog/studi-pustaka/ , accessed on 14 May 2020

https://www.gramedia.com/dinding/universitas/universitas-islam-negeri-sulthan-syarif-kasim-riau/ , accessed 15 May 2023

Irfan. (1993). Competence of Private Islamic Higher Education in the Second Stage of Long - Term Development, Yogyakarta : Tiara Discourse

Koentjaraningrat. (1983). *methods Community Research*. Jakarta: Gramedia

Marjuni, A. (2017). Actualization of Roles and Challenges Islamic Higher Education in Enlightenment and Intelligence, *Al- Ulum,* 17(2)

Masroer. (2013) *Students and the Future Nations,* Student Affairs Section of UIN, Yogyakarta

Mujahidah & Wekke, I. S. (2019). *Transformation Indonesian Islamic Religious College,* Presentation In the National Leadership Seminar Transformative Indonesian Lecturer Forum DPD West Papua & Post Bachelor of STAIN Sorong shove.

Musri, A., Putra, S., & Siregar, K. E. (2023). *Challenges and Opportunities for Madrasah in Improving The Competence of Graduate Students*. 07(02), 492–505.

Nulhaqim, S.A., Heryadi, R.R., Pancasilawan, R., Ferdyaansyah, M. (2015). Role Inner College Increase Quality of Education in Indonesia for Face Asean Community 2015, Study Case: University of Indonesia, Padjadjaran University, Institute Bandung Technology, *Social Work Journal,* 6(2)

Riyanto. F. Astuti, SD. Mahmud. Panjaitan, R. (2023). Hard Skills As Factor Dominant Readiness Work in the Industrial Age 4.0, *Journal of Nusantara Applications Management Business,* 8(1)

Rosyadi, S. *Revolution Industry 4.0: Opportunities and Challenges For Alumni of the Open University, Faculty Knowledge Social and Politics, General University Sudirman*

Schwab, K. (2019) *Revolution Industry Fourth,* Jakarta, PT. Main Library Gramedia.

Siregar, K. E. (2020b). Pelaksanaan Metode Pembelajaran yang Menyenangkan dan Variatif di SMAIT Imam Asy Syafii Pekanbaru. 1(2), 121–131. http://dx.doi.org/10.31599/jabdimas

Siregar, K. E., Musri, A., & Putra, S. P. (2023). INVEST : Jurnal Inovasi Bisnis dan Akuntansi Bermanhaj Salaf Islamic Educational Institutions Strategi Ali Musri Semjan Putra Dalam Pengelolaan Lembaga Pendidikan Islam Bermanhaj Salaf. 4(1), 12–25.

Soenarto, S. *Learning multimedia- based as effort increase competence results learning and perception student,* Electrical Engineering Education, FT YSU.

The Chancellor of UIN Suska Riau, represented by Dr Hj Helmiati, M.Ag., *Opening of Socialization and Seminar about Curriculum based Framework Indonesian National Qualifications (KKNI) sponsored by the Academic Section of UIN Suska Riau* Monday (7/9/2015). Located at Hotel Ibis Pekanbaru, accessed on 15 May 2023.

Usa, M. (1997). *Islamic Education in Industrial Civilization,* Yogyakarta: Aditya Media.

Yahya, M. (2018) *Era Industry 4.0: Challenges and Opportunities The Development of Indonesian Vocational Education,* Presented at the Extraordinary Open Session of the Makassar State University Senate