Synergy Between Education and Industry: A Competency Development Model for Graduates at Islamic Universities in Cirebon

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ABSTRACT

This study aims to explore the development of graduate competencies in Islamic universities, the implementation of the Merdeka Belajar (Freedom to Learn) curriculum, and collaboration with the workforce using a qualitative Grounded Theory approach. A multisite study was conducted at State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon, involving university leaders, lecturers, students, and other stakeholders. Data were collected through in-depth interviews, observations, documentation, and Focus Group Discussions, with triangulation techniques ensuring validity. Data analysis was carried out through open, axial, and selective coding to produce theories relevant to the research context. The findings reveal that both universities have unique approaches to preparing graduates for the workforce. State Islamic Cyber University of Syekh Nurjati Cirebon utilizes laboratory-based programs, fieldwork, and internships in relevant sectors. In contrast, Islamic University of Bunga Bangsa Cirebon emphasizes integrating theory and practice through collaboration with educational institutions and industries. Although the implementation of the Merdeka Belajar curriculum is not yet fully realized, progress has been made in providing flexible course options, community-based projects, and entrepreneurship initiatives. However, budget constraints and the socio-economic conditions of students pose significant challenges to competency development. The study also highlights the importance of strategic collaboration with the workforce to bridge the gap between education and industry needs. Programs such as Student Mobility, internships, and market-driven curricula contribute positively to graduates' readiness for employment. The transformation of State Institute for Islamic Studies Syekh Nurjati into a State Islamic Cyber University of Syekh Nurjati Cirebon demonstrates significant potential in integrating digital technology to support learning and the creative economy. In conclusion, despite implementation challenges, both institutions strive to enhance their graduates' competitiveness through adaptive curriculum development, industry collaboration, and technology-based competency strengthening. The study recommends strengthening institutional policies and strategic budget management to overcome barriers and maximize students' potential in addressing workforce challenges.

Keywords: Islamic University Graduate Competencies, Merdeka Belajar Curriculum, Collaboration with the Workforce, Cyber Islamic University Transformation, Strengthening Adaptive Curricula

INTRODUCTION

The synergy between education and industry presents a significant challenge in the development of graduate competencies in Islamic higher education, particularly in the face of the constantly evolving demands of the labor market.[1] Key issues include the gap between academic curricula and industry needs, the lack of industry involvement in the learning process, and the scarcity of internship programs or sustainable collaborations.[2] Data from the Central Statistics Agency indicates an increase in the open unemployment rate among higher education graduates. In 2023, the unemployment rate for university graduates rose from 4.80% to 5.18%, and for diploma graduates from 4.59% to 4.79%.[3] Additionally, limited supporting infrastructure, such as laboratories and industry-based technologies, exacerbates the situation.[4][5] Another challenge is the low level of digital literacy among students and faculty, which hinders the integration of technology into learning.[6] This is further compounded by the lack of strategic policies that support collaboration between Islamic universities and industry, resulting in graduates who are often unprepared to compete in the global labor market.[7]

One of the main issues is the gap between higher education curricula and industry needs. Some academics argue that Islamic higher education curricula need to be more relevant to technological advancements and the demands of the modern labor market. Proponents of this view emphasize the importance of integrating digital skills, entrepreneurship, and adaptive capabilities into the curriculum.[8][9] On the other hand, criticism comes from those who stress the need to preserve the identity of Islamic education based on spiritual and ethical values. They are concerned that an excessive focus on industry demands may overlook character building and Islamic values.[10][11][12] The Triple Helix model, which

[1] Dhoya Safira Tresna Lestari & Muhammad Hamdan Ainulyaqin, ''Program Industrialisasi Dalam Mengatasi Kesenjangan Ekonomi Di Masyarakat: Perspektif Ekonomi Islam', *Jurnal Ekonomi Islam*, 8.1 (2022), 288 <https://doi.org/10.29040/jiei.v8i1.4077>.

[2] Saepul Bahri Joko Rianto, Mustofa Kamil, Walla Astianty Putry, ''Relevansi Kurikulum Perguruan Tinggi Dalam Perkembangan Dunia Kerja Dan Sektor Industri: Kasus Universitas Islam Syekh Yusuf', *Society*, 10.1 (2022), 110–25 <https://doi.org/10.33019/society.v10i1.408>.

[3] Badan Pusat Statistik, 'Tingkat Pengangguran Terbuka Berdasarkan Tingkat Pendidikan, 2021-2023', 2024 <https://www.bps.go.id/id/statistics-table/2/MTE3OSMy/tingkat-pengangguran-terbuka-berdasarkan-tingkat-pendidikan.html>.

[4] M R Darmawan & H A Musril, 'Perancangan Sistem Pendaftaran Audiens Seminar Proposal Di Institut Agama Islam Negeri (IAIN) Bukittinggi', *Jurnal Teknologi Dan Informasi (JATI)*, 11.1 (2021), 26–39 <https://doi.org/https://doi.org/10.34010/jati.v11i1.3346>.

[5] Mohamad Faizal Ahmad Zaidi, 'Propositions on the Relationships between Technology Complexity, Industry 4.0, and Halal Sustainability', *Journal of Engineering and Science Research*, 4.1 (2020), 52–58 <https://doi.org/10.26666/rmp.jesr.2020.1.9>.

[6] Sedya Santosa & Muhammad Fahmi Jazuli, 'The Digital Madrasah as an Idea of IT-Based Islamic Education', *Nazhruna*, 5.2 (2022), 379–91 <https://doi.org/https://doi.org/10.31538/nzh.v5i2.2121>.

[7] W. Wihardja, M. M., & Cunningham, *Pathways to Middle-Class Jobs in Indonesia* (The World Bank, 2021).

[8] Ntimi Mtawa Malima Patrobas1, Haruni J. Machumu, 'Digital Skills and Learning in Tanzania Secondary Schools: Students and Teachers' Influence', *QEIOS*, 2023, 1–22 <https://doi.org/https://doi.org/10.32388/QJU9PS>.

[9] Florent Michelot Thierry Karsenti, Bruno Poellhuber, Simon Parent, ''What Is the Digital Competency Framework?', *RITPU*, 17.1 (2020), 11–14 <https://doi.org/https://doi.org/10.18162/ritpu-2020-v17n1-04>.

[10] Md. Abdul Maleque Abdullah Al Mamun, Asan G. A. Muthalif, Zuraida Ahmad, Ahmad Faris Ismail, Kamsiah Ismail, 'Islamisation of Engineering Education – A Case at IIUM', *Universal Journal of Educational Research*, 8.2 (2020), 355–61 <https://doi.org/10.13189/ujer.2020.080204>.

[11] Umi Kulsum Abdul Mujib, Khoirurrijal, Agus Sujarwo, Yuyun Yunita, 'Islamic Religious Education Based on Life Skills Metro City Public High School', *Psychology and Education*, 59.1 (2021), 3276–85 <https://doi.org/https://doi.org/10.17762/pae.v58i1.1267>.

[12] Mohammad Hasan Haji Rahimian Tasuji Zahra Nasrollahi, Narges Eskandari, Mohsen Rezaei Adaryani, 'Spirituality and Effective Factors in Education A Qualitative Study', *Journal of Education and Health Promotion*, 9.1 (2019), 52 <https://doi.org/10.4103/jehp.jehp_430_19>.

involves collaboration between universities, government, and industry, is often seen as a solution to bridge this gap.[13] [14] [15] However, the implementation of this model faces challenges in Indonesia, including low trust between stakeholders and the lack of targeted policy support. In local contexts like Cirebon, where the industrial sector has not fully developed, the effectiveness of this model is also debated. Another dilemma is the balance between local needs and global demands. Some academics argue that Islamic universities in Cirebon should focus on empowering local competencies that align with the needs of the surrounding community, such as religious tourism and culture-based creative industries.[16] However, others emphasize the importance of a global orientation to enhance graduates' competitiveness in the international job market.[17]

The synergy between higher education and industry has become a focal point in the development of graduate competencies, but in-depth studies on the synergy models applied in Islamic universities, particularly in the Cirebon region such as State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon, remain limited. Previous research has largely discussed education-industry collaboration in general universities without highlighting the value-based approach that is the unique characteristic of Islamic higher education.[18] [19] Moreover, in the context of Islamic universities, the challenges of adapting to the needs of Industry 4.0 and 5.0, which involve integrating digital technologies with Sharia principles, have rarely been discussed holistically. The novelty of this research lies in exploring a digital-based synergy model that is not only relevant to industry needs but also aligned with Islamic values. This research also refers to recent findings, which emphasize the importance of collaborative project-based learning in building graduate skills to face the technology-driven labor market.[20] [21] [22] Therefore, this study maps the synergy approach through an analysis of models that integrate practical collaboration and technology in the context of Islamic higher education.

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[13] Åke E Andersson David Emanuel Andersson, 'The Impossibility of the Triple Helix', *Prometheus*, 36.3 (2020), 235–52 <https://doi.org/10.13169/prometheus.36.3.0235>.

[14] Rabeh Morrar & Husam Arman, 'The Transformational Role of a Third Actor within the Triple Helix Model – the Case of Palestine', *Innovation: The European Journal of Social Science Research*, 37.2 (2024), 340–60 <https://doi.org/https://doi.org/10.1080/13511610.2020.1828045>.

[15] A I Kermite and L I Voronina S M Nikitenko, E A Pakhomova, 'Triple Helix: From Theory to Realities', in *IOP Conference Series: Earth and Environmental Science 206 012001*, 2024, pp. 1–8.

[16] Irland Fardani and Riswandha Risang Aji Ina Helena Agustina, 'Cultural Substance Actualization in Spatial Planning: Case of Cirebon City, Indonesi', in *IOP Conf. Ser.: Earth Environ. Sci. 830 012088*, 2021, pp. 1–7 <https://doi.org/10.1088/1755-1315/830/1/012088>.

[17] K. Kastolani, 'Digital Reorientation of Islamic Higher Education in Indonesia', *Akademika*, 24.1 (2019), 151–64 <https://doi.org/DOI: http://dx.doi.org/10.32332/akademika.v24i1.1618>.

[18] & Norlinda Tendot Abu Bakar Hainnur Aqma Rahim, Salimah Yahaya, Amirah Hazimah Borhanordin, 'Transformation of Islamic Higher Education Institutions in Facing the Era of Industrial Revolution 4.0.', *International Journal of Academic Research in Business and Social Sciences*, 11.2 (2021), 311–319 <https://doi.org/10.6007/IJARBSS/v11-i2/8800>.

[19] Mohammed A. Alomari Ahmed Mohamed Najadat, 'The Extent to Which Teachers of Islamic Education Practice the Competencies of Using Instructional Technology in Teaching the Secondary Stage in Jordan', *International Journal of Academic Research in Business and Social Sciences*, 10.6 (2020), 675–95 <https://doi.org/10.6007/IJARBSS/v10-i6/7342>.

[20] Daniel Konings & Mathew Legg, 'Delivering an Effective Balance of Soft and Technical Skills within Project-Based Engineering Courses', in *IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE)*, 2020, pp. 157–64 <https://doi.org/10.1109/TALE48869.2020.9368493>.

[21] A. J. Diamonti Joyce Malyn-Smith, David Blustein, Sarita Pillai, Caroline E. Parker, Ellen Gutowski, *Building the Foundational Skills Needed for Success in Work at the Human-Technology Frontier* (Waltham, MA: EDC, 2017).

[22] Noriko Ward Andrew J. Rohm, Matt Stef, 'Future Proof and Real-World Ready: The Role of Live Project-Based Learning in Students' Skill Development', *Journal of Marketing Education*, 2021, 1–12 <https://doi.org/https://doi.org/10.1177/02734753211001409>.

This article focuses on exploring the development of graduate competencies in Islamic higher education through a collaborative approach between Islamic higher education institutions and the workforce. The research includes an analysis of strategic cooperation designed to support the implementation of the *Merdeka Belajar* curriculum in Islamic higher education, highlighting how such collaboration models can enhance the relevance of graduate competencies to industry needs. Additionally, this study focuses on identifying effective cooperation models between Islamic higher education institutions and the workforce as an effort to integrate Islamic values into the development of project-based and hands-on experience curricula. The challenges faced in implementing this model, such as the gap between industry needs and institutional capabilities, as well as cultural and structural barriers in the workforce, are also major concerns in this study, aiming to generate practical and contextual solutions.

Enhancing graduate competencies that align with industry needs is a primary challenge for higher education institutions, especially in the era of digital transformation and globalization. In the Cirebon region, State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon have strategic potential to develop a unique education-industry synergy model, given their role as institutions based on Islamic values. This research is crucial as it addresses the urgent need for graduates who possess not only technical competencies but also moral integrity in accordance with Sharia principles, while also being able to compete in the modern labor market. By exploring this synergy model, the research is expected to provide practical benefits for the development of industry-based curricula, improve graduates' competitiveness, and contribute significantly to building stronger connections between academia and the workforce. This is also relevant in encouraging Islamic higher education institutions to become centers of innovation focused on practical solutions for society.

RESEARCH METHODOLOGY

This study uses a qualitative approach with a Grounded Theory design, which allows theory to emerge from field data. [23] The research is conducted through a multisite study design at State Islamic Cyber University of Syekh Nurjati Cirebon, Indonesia and Islamic University of Bunga Bangsa Cirebon, Indonesia, collecting in-depth data from three different locations to generate cross-site conclusions.[24] The researcher acts as the primary instrument, conducting interviews, observations, and documentation, and utilizing triangulation techniques for data validity. The research subjects include the rector, faculty members, students, and other relevant stakeholders selected through snowball sampling. Research instruments include in-depth interviews, Focus Group Discussions (FGD), and Likert scale questionnaires. Data analysis employs the Grounded Theory approach with open, axial, and selective coding steps to build theory from the collected data.[25] Data validity is ensured through triangulation of data collection techniques, data sources, negative case analysis, peer debriefing, and member checking.

RESULTS AND DISCUSSION
1. Development of Graduate Competencies in Islamic Higher Education

The development of graduate competencies at State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon focuses on enhancing skills and knowledge relevant to the needs of the workforce. At both institutions, students are involved in various activities

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[23] John W Creswell, *Research Design Qualitative, Quantitative and Mixed Methods Approaches*, edisi 4 (Sage Publications.Inc, 2014).

[24] J. Miles, M.B., Huberman, A.M., Saldaña, *Qualitative Data Analysis: A Methods Sourcebook* (New York: Sage, 2020).

[25] G. H. Mead, *Mind, Self, and Society* (University of Chicago Press, 1934).

that support the development of both soft and hard skills, including internship programs, field practices, and extracurricular activities. These activities help students develop independence, discipline, and social awareness. Furthermore, practical experience in the workforce, such as internships and direct teaching, strengthens students' ability to apply the theories they learn in the classroom.

At State Islamic Cyber University of Syekh Nurjati Cirebon, the development of graduate competencies is carried out through various programs, including laboratory training, field observations, and teaching practices at schools and madrasas. Students also gain experience at Islamic banking institutions and related organizations through the Faculty of Sharia and Islamic Economics. The *Merdeka Belajar* approach provides students with the freedom to choose courses based on their interests, while still following the established curriculum. Intensive foreign language programs, comparative studies, and laboratories are also introduced to enhance students' practical competencies, with faculty and lecturers supporting the development of their talents and interests. Although there are challenges in implementation, many alumni from State Islamic Cyber University of Syekh Nurjati Cirebon have successfully worked in their fields of expertise, demonstrating success in competency development.

Meanwhile, at Islamic University of Bunga Bangsa Cirebon, the Faculty of Tarbiyah focuses on developing students' skills and expertise in education through effective lectures and internship programs. The internship program at Islamic University of Bunga Bangsa Cirebon aims to bridge theory and practice in the field, providing direct experience in teaching and education management. However, the internship activities at Islamic University of Bunga Bangsa Cirebon still require improvements in coordination and clearer structure among the involved parties. Students are also engaged in Small and Medium Enterprises as a means of developing their talents outside of academics, although enthusiasm for participating in these activities is constrained by the age and employment status of the students.

Both institutions face challenges in maximizing students' potential, particularly due to limited budgets for practical activities and competitions. In addition, student involvement in extracurricular activities is also influenced by the social conditions and work status of older students, making it a unique challenge to develop students' achievements in this area. However, with various programs and support from faculty members as well as available facilities, both State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon continue to strive to produce competent graduates ready to face the workforce.

Budget limitations and the social conditions of students remain the primary obstacles for both institutions, State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon, in maximizing students' potential. Several studies indicate that budget limitations often restrict universities' ability to provide optimal facilities and training programs, which in turn affects students' preparedness for the workforce.[26][27][28] On the other hand, strategic budget management can reduce the impact of limited funding by prioritizing programs that have a direct impact on students'

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[26] Francisco Jonathan de Oliveira Araújo, Ligia Samara Abrantes de Lima, Pedro Ivo Martins Cidade, Camila Bezerra Nobre, Modesto Leite Rolim Neto, 'Impact Of Sars-Cov-2 And Its Reverberation In Global Higher Education And Mental Health', Psychiatry Research, 288 (2020), 11297. DOI: https://doi.org/10.1016/j.psychres.2020.112977)

[27] Dennis P. Jones & Sally M. Johnstone, 'Responding to the Challenge of Sustainability', *Change: The Magazine of Higher Learning*, 48.4 (2016), 27–33 <https://doi.org/https://doi.org/10.1080/00091383.2016.1198171>.

[28] Elina M. Amadhila and James Guest, ''Teach Outside Your Comfort Zone: A Qualitativestudy of Higher Education Students' Conceptionsin Namibia', *Amadhila & Guest, Cogent Education*, 9.2026189 (2022), 1–19 <https://doi.org/https://doi.org/10.1080/2331186X.2022.2026189>.

competency development.[29] [30]

The social conditions and work status of older students also act as limiting factors in their involvement in extracurricular activities. Other research shows that students with employment status tend to have limited time to participate in campus activities, resulting in lower involvement in soft skills development programs.[31] [32] However, this view contrasts with findings from other studies, which suggest that extracurricular programs designed flexibly, such as online-based ones, can increase student engagement even when they have work responsibilities outside of campus.[33] [34] Nevertheless, both institutions continue to strive to produce competent graduates who are ready to face the workforce. Support from faculty and the provision of relevant facilities remain key components, and the synergy between institutional policies and students' needs can yield better outcomes.[35] [36] [37]

2. Collaboration Between Islamic Higher Education Institutions and the Workforce

State Islamic Cyber University of Syekh Nurjati Cirebon, for example, has established partnerships with international universities such as the University of Malaya, Marmara University, and the International Islamic University of Malaysia. These collaborations include joint research, scientific publication training, and faculty and student exchange programs. Additionally, State Islamic Cyber University of Syekh Nurjati Cirebon implements programs such as internships, visiting lectures, and Student Mobility to enhance students' skills in Islamic law and digital technology. The Teacher Professional Education program, which offers certification for teachers in the fields of Qur'an Hadith and Fiqh, is also part of the institution's efforts to prepare its graduates with relevant skills. Through the *Merdeka* Campus initiative, students from the Faculty of Tarbiyah and Teacher Training are involved in internships at schools and *madrasahs*, which often lead to recruitment by the institutions where they interned.

One of the latest initiatives is the transformation of the institution into a Cyber Islamic University,

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[29] Josephine V. Acido & Dennis Anthony A. Kilongkilong, 'Resource Management Practices towards Sustainable Support System during Pandemic', *International Journal of Educational Management and Development Studies*, 3.4 (2022), 19–42 <https://doi.org/https://doi.org/10.53378/352930>.

[30] Kilongkilong.

[31] Thomas Shaw, 'UK SMEs and Business Students: An Investigation into Perceptions of Employability for Entry-Level Positions in SMEs', *Fields: Journal of Huddersfield Student Research*, 6.1 (2020), 1–17 <https://doi.org/https://doi.org/10.5920/fields.678>.

[32] Patrick Rossmann, 'More Than a Paycheck: Applied Learning Within a Student Employment Context', *Applied Learning in Higher Education: Curricular and Co-Curricular Experiences That Improve Student Learning*, 188 (2019), 43–50 <https://doi.org/https://doi.org/10.1002/he.20344>.

[33] Mai Neo, 'The Merlin Project: Malaysian Students' Acceptance of an AI Chatbot in Their Learning Process', *Turkish Online Journal of Distance Education-TOJDE*, 23.1 (2022), 31–48 <https://doi.org/https://doi.org/10.17718/tojde.1137122>.

[34] Ann Vernallis Amreen Bashir, Shahreen Bashir, Karan Rana, Peter Lambert, ''Post-COVID-19 Adaptations; the Shifts Towards Online Learning, Hybrid Course Delivery and the Implications for Biosciences Courses in the Higher Education Setting', *Front. Educ.*, 6 (2021), 1–13 <https://doi.org/https://doi.org/10.3389/feduc.2021.711619>.

[35] Rudy Pramono Hardi Mulyono, Arief Hadian, Nelvita Purba, 'Effect of Service Quality Toward Student Satisfaction and Loyalty in Higher Education', *Journal of Asian Finance, Economics and Business*, 7.10 (2020), 929–938 <https://doi.org/10.13106/jafeb.2020.vol7.no10.929>.

[36] Mary Deane Neil Gopee, 'Strategies for Successful Academic Writing — Institutional and Non-Institutional Support for Students', *Nurse Education Today*, 13.12 (2023), 1624–31 <https://doi.org/https://doi.org/10.1016/j.nedt.2013.02.004>.

[37] Jennifer Masters & Casey Mainsbridge Si Fan, Allison Trimble, David Kember, Tracey Muir, Tracy Douglas, Yanjun Wang, 'Supporting Engagement and Retention of Online and Blended-Learning Students: A Qualitative Study from an Australian University', *The Australian Educational Researcher*, 51 (2024), 403–421 <https://doi.org/https://doi.org/10.1007/s13384-022-00605-5>.

aimed at developing digital technology for learning and creative economy at State Islamic Cyber University of Syekh Nurjati Cirebon. This study highlights that the transformation into a Cyber Islamic University is a new model of Islamic higher education that integrates digital technology into the learning process and the development of the creative economy.[38]

Meanwhile, Islamic University of Bunga Bangsa Cirebon places greater emphasis on implementing the *Merdeka Belajar* concept by strengthening collaboration with both educational and non-educational institutions. The Faculty of Tarbiyah collaborates with schools in Cirebon in the Islamic Primary School Teacher Education program, which includes internships in semesters 7 and 8. The Islamic Guidance and Counseling Department develops two types of cooperation: the "proactive" and "reactive" approaches, where they visit companies and schools to offer internship programs and collaborate with institutions such as BNI Syariah and BSI. The Sharia Banking Department at Islamic University of Bunga Bangsa Cirebon partners with financial institutions such as BSI, BNI, and Financial Services Authority to design a curriculum that meets industry needs, while the Communication and Islamic Broadcasting Department forms partnerships with local media such as Radar Cirebon newspaper and Rakyat Cirebon newspaper, offering students opportunities for internships and expanding their professional networks. Collaboration with government agencies is also undertaken for the Islamic Criminal Law program, providing direct experience in the legal field.

Through these various forms of collaboration, both State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon aim to ensure that their graduates not only possess strong knowledge but also practical skills needed to compete in the workforce. This approach not only enhances students' technical skills but also develops their ability to adapt to changes and challenges in the workplace.[39] [40] Both institutions continue to bridge the gap between education and industry through intensive collaboration, which also includes the development of curricula based on market needs and relevant internship opportunities. This strategy is crucial for improving graduates' job readiness. Such collaboration allows educational institutions to align their curricula with industry demands, ensuring that the skills taught match the needs of the labor market. Several recent studies highlight the benefits of collaboration between schools and businesses/industries in preparing students for future careers. Such collaboration provides students with the opportunity to gain practical skills and experience early on, which is vital in enhancing their readiness to enter the workforce.[41] [42]

3. Implementation of the *Merdeka Belajar* Curriculum in Islamic Higher Education

State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa

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[38] Aan Jaelani, 'Digital Technology for Learning and Creative Economy at IAIN Syekh Nurjati Cirebon', *Al-Amwal Jurnal Ekonomi Dan Perbankan Syari'ah*, 14.2 (2022), 263–85 <https://doi.org/10.24235/amwal.v14i2.11835.g4866>.

[39] Igor Miladinovic Sigrid Schefer-Wenzl, 'Developing Complex Problem-Solving Skills: An Engineering Perspective', *International Journal of Advanced Corporate Learning (IJAC)*, 12.3 (2019), 82–88 <https://doi.org/https://doi.org/10.3991/ijac.v12i3.11067>.

[40] Alhamzah Alnoor Sally Saad Fadhil, Ramlee Ismail, 'The Influence of Soft Skills on Employability: A Case Study on Technology Industry Sector in Malaysia', *Interdisciplinary Journal of Information, Knowledge, and Management*, 21 (2021), 255–83 <https://doi.org/https://doi.org/10.28945/4807>.

[41] Ismaela M. Bawica, 'The University Internship Program and Its Effects on Students' Employability Readiness', *International Journal of Academe and Industry Research*, 2.3 (2021), 90–107 <https://doi.org/https://doi.org/10.53378/348731>.

[42] Sharanappa Achappa and Gururaj Tennalli Zabin K. Bagewadi, Shivalingsarj V. Desai, Uday M. Muddapur, Deepak Yaraguppi, Basavaraj Hungund, Laxmikant Patil, Veeresh Hombalimath, Anil R.Shet, 'Industry-Internship Program for Biotechnology Under-Graduates- Enabling the Student-Workforce for Better Employability', *Journal of Engineering Education Transformations*, 33 (2020), 233–39.

Cirebon are actively designing curricula and learning approaches aimed at preparing students for the workforce with relevant skills. Although the *Merdeka Belajar* policy has not yet been fully implemented at both institutions, they have adopted its principles through the introduction of new programs, curriculum development tailored to market needs, and enhanced learning quality.

For instance, State Islamic Cyber University of Syekh Nurjati Cirebon has designed a curriculum based on the Indonesian National Qualifications Framework, providing flexibility for students to study outside their major for three semesters, both on and off-campus. New programs such as Indonesian Language Education, Islamic Education Management, and Sharia Economics have been launched to meet the demands of the job market, while postgraduate programs offer concentrations in Sharia Economics and Family Law. Although the full implementation of *Merdeka Belajar* is still limited, activities such as internships and community development projects have been carried out, and a student-centered learning approach has been applied to encourage students to develop creativity and skills through field research, discussions, and seminars. The entrepreneurship program is also an essential part of the curriculum, with students encouraged to develop their businesses under the guidance of experienced faculty.

Meanwhile, Islamic University of Bunga Bangsa Cirebon has adopted elements of *Merdeka Belajar* by designing a curriculum that integrates Indonesian National Qualifications Framework curriculum and workforce needs. Internship programs, field practices, and thematic community service are recognized as credits, and the Faculty of Tarbiyah conducts teaching practices in schools/*madrasahs*. Although student exchange programs are limited, the curriculum at Islamic University of Bunga Bangsa Cirebon also integrates entrepreneurship and requires community service as a form of community service. The curriculum is continuously adapted to developments in science, technology, and workforce needs, with students encouraged to foster creativity and independence through practical activities such as observation, research in legal institutions, and involvement in humanitarian projects and entrepreneurship. Digital technology has also been implemented through the E-Campus platform for hybrid learning, although students do not have full freedom in selecting courses due to pre-scheduled timetables.

In both institutions, student-centered learning is applied, although in some cases, faculty still play a central role in the learning process. Research indicates that the role of faculty as facilitators in student-centered learning is crucial for fostering student independence and creativity. Faculty should provide a variety of learning strategies that allow students to choose, discover, and organize knowledge, as well as develop their skills.[43] [44]

Islamic University of Bunga Bangsa Cirebon, with the adoption of digital technology since 2016, has provided space for students to develop creative products and participate in mentoring programs in halal standards. Meanwhile, at State Islamic Cyber University of Syekh Nurjati Cirebon, activities that link theory with practice, such as field trips and fieldwork, are designed to ensure the curriculum aligns with industry standards and enhances graduates' competencies.

Overall, both State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon are striving to prepare their graduates with the practical skills needed in the workforce, although full implementation of *Merdeka Belajar* still requires more time and further

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[43] Ma Zhanqiang, 'Strategies for Cultivating Creative Thinking Ability of Students Majoring in Educational Technology', *Frontiers in Educational Research*, 6.19 (2023), 62–66 <https://doi.org/10.25236/FER.2023.061911>.
[44] Stella-Maria Stamouli Konstantinos Antonis, Petros Lampsas, Ioannis Katsenos, Spyros Papadakis, 'Flipped Classroom with Teams-Based Learning in Emergency Higher Education: Methodology and Results', *Education and Information Technologies*, 23 (2023), 5279–5295 <https://doi.org/https://doi.org/10.1007/s10639-022-11339-3>.

evaluation. Graduates from both institutions demonstrate a strong connection to the workforce, whether in education, entrepreneurship, or other sectors, with the ability to apply their knowledge according to industry interests and needs. Recent studies indicate that market-driven programs, such as internships and adaptive curriculum development, enhance graduates' job readiness. This article emphasizes the importance of collaboration between education and industry to produce competent graduates who are relevant to market demands.[45] [46]

4. Model of Cooperation Between Islamic Higher Education Institutions and the Workforce in Developing Graduate Competencies as an Implementation of the Merdeka Belajar Curriculum

The model of cooperation between State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon aims to produce graduates with competencies that align with the needs of the workforce through the design of programs and the determination of graduate profiles tailored to the institutions' vision and mission. Graduate profiles, such as Islamic Education Management, are designed to produce competent educational administration professionals who are ethically Islamic and up-to-date in their fields, with learning outcomes that encompass attitudes, knowledge, and skills. This is illustrated in the following diagram:
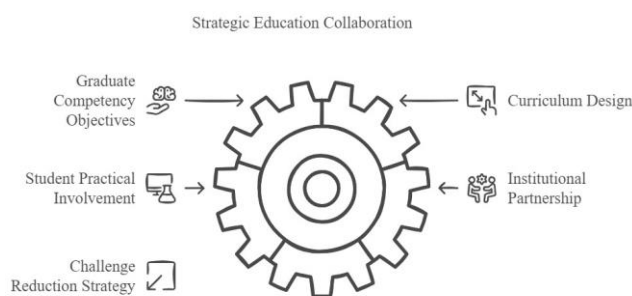
Figure 1. Model of cooperation between Islamic religious higher education institutions and the world of work in developing graduate competencies as an implementation of the independent learning curriculum

The curriculum used is based on the National Qualifications Framework curriculum, integrating national competencies with the flexibility of the *Merdeka Belajar* curriculum. Students are involved in field practice, internships, foreign language enhancement, and scientific activities. Collaboration with government and non-government institutions is strengthened to support the absorption of graduates into the workforce.

Challenges in implementing collaboration include a lack of regulations, misunderstandings with the workforce, and cultural differences between academia and the professional world. These challenges are addressed through government oversight strategies, international training, and collaboration in curriculum design.

Recent research reveals that the challenges of collaboration between education and industry can be overcome through the development of policies that support regulations, enhanced global-based training, and curriculum integration that meets industry needs. This approach enables both parties to

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[45] Bawica.

[46] Ma. Jamine J. De Guman, 'Academe-Industry Partnership: Basis for Enhanced Learning of BSBA Students in One State University', *Universal Journal of Educational Research*, 8.12 (2020), 6574–84 <https://doi.org/10.13189/ujer.2020.081222>.

reduce misunderstandings and adjust the work culture between education and industry.[47] [48] At Islamic University of Bunga Bangsa Cirebon, the cooperation model involves a "proactive" approach by visiting institutions, as well as a "reactive" approach by accepting visits from organizations in need of human resources. The close relationship between faculty, students, and the rector also contributes to the success of this collaboration.

At State Islamic Cyber University of Syekh Nurjati Cirebon, the School Field Practice program allows students to directly practice teaching in schools or madrasahs, often leading to direct recruitment by the institutions where they interned. This collaboration aims to produce graduates who are both qualified and adaptable to the needs of the workforce.

5. **Challenges of the Collaboration Model between Islamic Higher Education Institutions and the Workforce in Graduate Competency Development as the Implementation of the *Merdeka Belajar* Curriculum**

State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon face similar challenges in preparing students to compete in the workforce, both at the national and international levels, especially in the context of the increasingly open labor market with the ASEAN Economic Community (AEC). Both institutions are working to enhance the competitiveness of their graduates through improved education quality, the development of relevant curricula, and strengthening the skills needed in the workforce. One of the main focuses is foreign language proficiency, particularly English, and the enhancement of information technology literacy, which is deemed crucial for navigating the era of globalization and Industry 4.0. Mastery of foreign languages, especially English, and information technology skills are vital for improving graduate competitiveness in the globalized world. An adaptive curriculum and strengthening these skills enable graduates to be better prepared to meet the demands of the rapidly evolving industry.[49] [50]

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[47] Tomasz Nitkiewicz and Zuhal Ayen, 'Identifying Key Criteria in Development of Industrial Engineering Education', in *12th International Conference Quality Production Improvement – QPI 2018*, 2018, pp. 1–4 <https://doi.org/https://doi.org/10.1051/matecconf/201818304008>.

[48] A Scotti Ma Valiente Bermejo, M Eynian, 'University–Industry Collaboration in Curriculum Design and Delivery: A Model and Its Application in Manufacturing Engineering Courses', *Industry and Higher Education*, 36.5 (2022), 615–622 <https://doi.org/https://doi.org/10.1177/09504222211064204>.

[49] Bashir Idris Bashiru Lawal, Aliyu S. Rafi, 'Perceptions of Academics in Nigerian Higher Education Institutions on Graduate Attributes in Computing Disciplines That Are Desirable for Employability and Entrepreneurship in Nigeria', *Global Journal of Engineering and Technology Advances*, 8.1 (2021), 19–27 <https://doi.org/https://doi.org/10.30574/gjeta.2021.8.1.0097>.

[50] Joost Vennekens Wouter Groeneveld, Brett A. Becker, 'Soft Skills: What Do Computing Program Syllabi Reveal About Non-Technical Expectations of Undergraduate Students?', in *ITiCSE '20: Proceedings of the 2020 ACM Conference on Innovation and Technology in Computer Science Education*, 2020, pp. 287–93 <https://doi.org/https://doi.org/10.1145/3341525.3387396>.
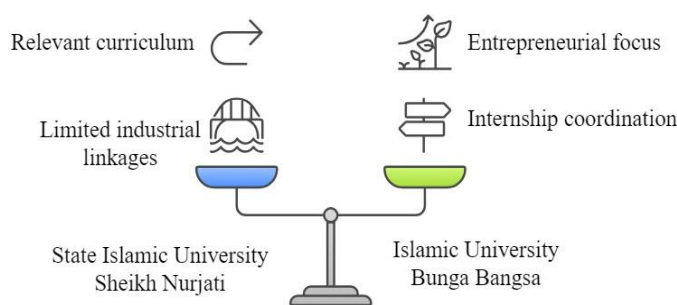
Comparing education challenges and industry collaboration strategies.

Figure 2. Challenges of the collaboration model between Islamic Institutes and the world of work in developing graduate competencies as an implementation of the independent learning curriculum

However, the challenges faced by both institutions are related to the gap between formal education and the needs of the workforce. At State Islamic Cyber University of Syekh Nurjati Cirebon, for example, although efforts have been made to align academic policies with international standards and develop a relevant curriculum, there are still barriers in terms of the connection between higher education and the industrial world. This is reflected in the limited relationship with the workforce, the absence of workforce certification, and the low capacity of the industry to accommodate collaboration programs. Additionally, students also face difficulties in developing soft skills that meet the demands of the labor market, which leads to a higher unemployment rate among educated graduates.

On the other hand, Islamic University of Bunga Bangsa Cirebon is also working to prepare students with entrepreneurial skills to create job opportunities. However, the main challenge is the lack of coordination between the campus and the workforce, particularly regarding internship schedules that conflict with the work commitments of many students who are already employed. Furthermore, there are difficulties in finding internship placements that align with students' interests, as well as limited internship quotas in companies. The *Merdeka Belajar* program implemented at Islamic University of Bunga Bangsa Cirebon has not yet been fully optimized, with some lecturers requiring time to adapt to changes in the curriculum and learning media, and students not yet fully free to choose courses outside their study programs.

Both institutions recognize the importance of collaboration with the industrial sector and the development of study programs that align with market needs to enhance students' competencies, as emphasized by several studies.[51] [52] At State Islamic Cyber University of Syekh Nurjati Cirebon, this is manifested in the introduction of new programs that are more relevant to the workforce, such as Tadris Bahasa Indonesia, Islamic Education Management, and Islamic Economics. Meanwhile, Islamic University of Bunga Bangsa Cirebon continues to promote synergy with the workforce through the development of internship programs, field practices, and entrepreneurship integrated into the

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[51] Jingyu Zhao, 'Establishing a "Dual-Teacher" Teaching Team as an Implementation Path for Cultivating High-Quality Technical and Skill Talent within the Visionary Talent Development Framework', *Journal of Education and Educational Research*, 3.2 (2023), 233–36 <https://doi.org/https://doi.org/10.54097/jeer.v3i2.9311>.

[52] R F Hendrawan and D Daryanto, 'Employability Skills: Industry Perspective and Achievement of Student of Employability Skills', *4th Annual Applied Science and Engineering Conference: Journal of Physics: Conference Series*, 1402.2 (2019), 1–6 <https://doi.org/10.1088/1742-6596/1402/2/022049>.

curriculum. However, these obstacles need to be addressed so that both institutions can produce graduates who are ready to compete in the global market and meet the ever-evolving demands of the industry.

CONCLUSION

The development of graduate competencies at State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon demonstrates a strong commitment to producing graduates who are ready to face the challenges of the workforce. Through a combination of theory and practice, both institutions integrate innovative programs such as internships, field practices, soft skills development, and collaboration with the labor market. The implementation of the *Merdeka Belajar*-based curriculum, although not yet fully optimized, has opened opportunities for students to explore their interests while strengthening skills relevant to industry needs. Intensive collaboration with local and international institutions is one of the strengths, providing students with practical experience and a broad professional network. The "proactive" and "reactive" approaches at Islamic University of Bunga Bangsa Cirebon, as well as the Introduction to the School Field program at State Islamic Cyber University of Syekh Nurjati Cirebon, reflect a strategic approach to bridging the gap between education and the workforce. Despite facing challenges such as limited budgets and coordination issues, both institutions continue to innovate in developing curricula, utilizing digital technologies, and strengthening partnerships. Overall, graduates of State Islamic Cyber University of Syekh Nurjati Cirebon and Islamic University of Bunga Bangsa Cirebon possess not only solid academic knowledge but also relevant practical skills. This demonstrates their success in preparing a generation that is competent, ethically Islamic, and capable of competing in the modern workforce.

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