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ORIGINAL

Fostering Graduate Employability: Evaluating the Impact of the Link and Match Curriculum on Skill Development through a Multifaceted Learning Approach

Fomentando la Empleabilidad de los Graduados: Evaluación del Impacto del Currículo de Vinculación y Correspondencia en el Desarrollo de Habilidades a través de un Enfoque de Aprendizaje Multifacético

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ABSTRACT

In the era of rapid technological advancement and Industry 4.0, higher education institutions face increasing challenges in preparing graduates with competencies that meet evolving industry demands. Despite continuous curriculum reforms, a considerable gap still exists between the skills acquired in academia and those required in professional settings. To address this issue, the present study investigates the effectiveness of the Link and Match curriculum in cultivating essential skill sets for student success in the modern workforce. This research is grounded in previous empirical and theoretical studies on employability and higher education curriculum reform. The research explores the influence of a multifaceted learning approach, encompassing learning agility, learning performance, ubiquitous learning, collaborative learning methods, digital learning environment, and industry partnerships, on student skill development. A sample of 98 students participating in programs implementing the Link and Match curriculum provided data through an online questionnaire. Employing a quantitative methodology, the study utilizes both descriptive statistics and Structural Equation Modeling to analyze the relationships between the identified variables. The findings demonstrate a statistically significant positive impact of the Link and Match curriculum on student skill enhancement. In particular, the research highlights the crucial contributions of industry partnerships and a robust digital learning environment in fostering practical skills and adaptability. These results underscore the importance of experiential learning and technology integration in preparing graduates for the demands of the contemporary workplace.

Keywords: Link and Match; Curriculum; Skill Set; Learning Agility; Learning Performance.

RESUMEN

En el contexto del rápido avance tecnológico y la Industria 4.0, las instituciones de educación superior enfrentan crecientes desafíos para formar graduados con competencias acordes a las demandas cambiantes del mercado laboral. A pesar de las reformas curriculares, persiste una brecha significativa entre las habilidades adquiridas en la academia y las requeridas en el ámbito profesional. Este estudio analiza la efectividad del currículo Link and Match en el desarrollo de competencias esenciales para la empleabilidad de los estudiantes. Basada en estudios empíricos y teóricos previos, la investigación explora la influencia de un enfoque de aprendizaje multifacético que integra la agilidad de aprendizaje, el rendimiento, el aprendizaje ubicuo, la colaboración, los entornos digitales y las alianzas con la industria. Los datos se recopilaron de 98

estudiantes mediante un cuestionario en línea y se analizaron mediante estadísticas descriptivas y Modelado de Ecuaciones Estructurales. Los resultados muestran que el Link and Match tiene un impacto positivo y significativo en la mejora de las competencias estudiantiles. En particular, las alianzas con la industria y un entorno digital sólido favorecen el desarrollo de habilidades prácticas y la adaptabilidad. Los hallazgos resaltan la importancia del aprendizaje experiencial y de la integración tecnológica para preparar a los graduados ante las exigencias del mundo laboral contemporáneo.

Palabras clave: Vinculación y Correspondencia; Currículo; Conjunto de Habilidades; Agilidad de Aprendizaje; Desempeño de Aprendizaje.

INTRODUCTION

In the era of globalization and Industry 4.0, the workforce is becoming increasingly dynamic, requiring graduates with competencies that meet evolving industry needs. However, a persistent skill gap remains between higher education outcomes and labor market expectations.[1] To address this, the Link and Match curriculum has been developed as a strategic collaboration between education and industry sectors to align academic learning with current and future workforce requirements.[2] A key aspect of this approach is learning agility, which reflects an individual's capacity to continuously learn and adapt to change. Research indicates that learning agility is a crucial determinant of success in complex and rapidly changing environments.[3,4] Therefore, educational systems should cultivate students' critical thinking, creativity, and adaptability through experiential and real world learning practices.

Additionally, learning performance the ability to apply theoretical knowledge in real contexts serves as an important indicator of students' readiness for professional challenges.[5] The integration of project-based learning, simulations, and internship activities strengthens both learning agility and learning performance, allowing students to bridge the gap between academic knowledge and workplace application. In the digital era, ubiquitous learning, collaborative learning, and a strong digital learning environment have become essential components in implementing the Link and Match curriculum effectively. These elements enable students to access learning resources anytime and anywhere, enhance teamwork and communication skills, and improve engagement with real-world problems.[6,7,8,9,10,11,12,13]

To achieve the full success of the Link and Match curriculum, industry collaboration becomes a crucial element. Through partnerships with the industry, students not only gain theoretical knowledge but also practical experience aligned with the needs of the workforce. According to data from the Ministry of Education and Culture 2021,[14,15] institutions that have successfully implemented industry partnerships in their curriculum have seen a 25 % increase in the employment rate of their graduates. One of the main forms of this collaboration is internship programs, which connect academic competencies with real workplace experiences and are also promoted through the Merdeka Belajar policy. However, several issues remain. Many students report that internship programs are not optimally managed, with limited mentorship, mismatched placements, and weak coordination between universities and industry partners. Alarmingly, cases of poor supervision have even led to serious incidents during overseas internships. Nevertheless, research shows that internships significantly enhance student quality and readiness for employment, with 76 % of participants reporting increased confidence to enter the job market. Therefore, an integrated Link and Match curriculum model is needed to optimize internship programs by combining theoretical learning in the classroom with practical experiences in the workplace.

In addition, the internships included in the Merdeka Campus and Merdeka Learning programs have not yet fully met expectations. Interview data from students who have participated in internship programs reveal that some students felt they did not gain relevant learning experiences and were rarely given the opportunity to express their ideas and thoughts about the work they were doing.[5,16] The Link and Match curriculum design requires students to be creative in developing projects that connect academic learning with real-world applications. Addressing this issue is essential to improve the efficiency and effectiveness of internship programs. Therefore, a well-structured Link and Match curriculum is urgently needed. This study aims to identify the key factors influencing the success of student internships in industry as the basis for developing an effective Link and Match curriculum model. By integrating various aspects learning agility, learning performance, ubiquitous learning, collaborative learning methods, digital learning environments, and industry partnerships the implementation of the Link and Match curriculum is expected to produce competent, adaptive graduates who are well-prepared to meet the demands of the modern workforce and contribute to sustainable industrial development.

METHOD

Type of Study

This study focuses on the factors that influence the development of students' skill sets through the

implementation of the Link and Match curriculum, which includes aspects of learning agility, learning performance, ubiquitous learning, collaborative learning methods, digital learning environments, and industry partnerships. This research is a quantitative explanatory study employing a survey design to analyze the relationships among multiple variables influencing the implementation of the Link and Match curriculum in higher education. The aim of this study is to develop a conceptual model of the Link and Match curriculum that enhances student competencies in alignment with industry needs. This study uses a survey method, with data collected from students in higher education institutions that have implemented the Link and Match curriculum in Indonesia. The research instrument is a questionnaire designed based on a review of previous literature and adapted to the context of higher education in Indonesia. This study is applied, where theories related to curriculum development and skill set are implemented and further explored to generate a model that can be applied in higher education environments.[17,18,19]

Population and Sample

The population of this study consists of students in Indonesia who are pursuing undergraduate education at higher education institutions that have implemented the Link and Match curriculum. The target population for this study specifically includes students enrolled in programs related to this curriculum, such as engineering, economics, education, and information technology programs. The total sample involved in this study is 98 students from various universities in Indonesia that have implemented the Link and Match curriculum. The survey was developed based on a review of literature on curriculum development, skill acquisition, and higher education practices, and adapted to the Indonesian higher education context to ensure relevance to students' experiences with the Link and Match curriculum. Its development criteria included clarity, relevance to research objectives, cultural and contextual appropriateness, and alignment with theoretical frameworks. The survey link was distributed to students across various university regions in Indonesia, with participants providing consent and agreeing to the use of their personal information before completing the questionnaire.

Out of the total responses collected, 8 were incomplete, resulting in 90 valid responses that could be analyzed further. The sample was selected using purposive random sampling, where the students chosen met certain criteria relevant to this study. These criteria included students who had completed at least 4 semesters of education and were actively involved in industry-based learning programs, internships, or collaborative projects related to the Link and Match curriculum. As described in Table 1, the sample is spread across various types of faculties, with respondent ages ranging from 19 to 23 years. Before data collection, all respondents were informed of their rights in this study and asked to sign a consent form as part of the research ethics procedure.

Measurement

The measurement of each construct in this study was developed based on previous research and modified to fit the context of this study. The Learning Agility variable consists of five indicators adapted from previous studies, which include adaptation skills, learning from experience, and the ability to apply new knowledge. The Learning Performance variable is measured through three main indicators: academic outcomes, practical skills, and feedback from lecturers. The Ubiquitous Learning variable consists of four indicators focusing on the accessibility of learning across various platforms and situations, including the use of mobile technology. Meanwhile, the Collaborative Learning Method is measured by three indicators, which include interaction among students, collaboration in projects, and social support among peers. For the Digital Learning Environment, six indicators are adapted to measure the availability of digital resources, learning tools, and online learning platforms available to students. Finally, the Industrial Partnership variable consists of three indicators, which include cooperation with the industry, internship programs, and industry practitioners' involvement in teaching. To measure all these variables, a five point Likert scale is used (1 = strongly disagree and 5 = strongly agree).

Data Collection and Data Analysis

Data were collected using a structured online questionnaire designed to measure variables related to students' skill sets, including Learning Agility, Learning Performance, Ubiquitous Learning, Collaborative Learning Method, Digital Learning Environment, and Industrial Partnership. The questionnaire was adapted from previous literature to fit the Indonesian higher education context and used a five-point Likert scale (1 = strongly disagree, 5 = strongly agree).

The survey targeted students enrolled in programs implementing the Link and Match curriculum and was distributed via a secure online platform. Informed consent was obtained from all participants. Out of 98 respondents, 90 valid responses were analyzed after removing incomplete or inconsistent entries.

Data were pre-processed through cleaning, normality assessment, reliability (Cronbach's alpha), and validity checks (content and construct validity). Descriptive statistics summarized respondent characteristics, while Structural Equation Modeling (SEM) examined hypothesized relationships among variables. SEM results,

including t-statistics and p-values, determined hypothesis acceptance or rejection. Data processing was conducted using appropriate statistical software, providing a concise and comprehensive assessment of factors influencing students' skill set development under the Link and Match curriculum.[20,21,22,23]

Ethical Standars

All respondents were informed of the study objectives and their rights. They provided written consent before participation. The study ensured the confidentiality and anonymity of respondents' data. Ethical approval was obtained from the relevant institutional research ethics committee, in compliance with national and institutional guidelines for human subject research.

RESULTS

Measurement Analysis Model

The results of the outer model test are shown in table 1, where all indicators for the variables Learning Agility, Learning Performance, Ubiquitous Learning, Collaborative Learning Method, Digital Learning Environment, and Industrial Partnership have loading values > 0,7. These findings meet the criteria for convergent validity, indicating that the indicators effectively represent the constructs being measured.

Table 1. Demografi Sample

Responden	Male	15	33,3 %
	female	30	66,7 %
Internship place	Large/medium enterprises	38	84,4 %
	Small and medium enterprises	4	8,9 %
	Micro enterprises	3	6,7
Internship location	City center	41	91,1 %
	Suburbs	4	8,9 %
Number of employees	More than 20 people	40	88,9
	5-10 people	4	8,9 %
	Less than 5	1	2,2 %

Next, the reliability of the constructs is evaluated using Cronbach's alpha and composite reliability (CR) analysis. The analysis results show that all variables have high reliability, indicating that the measurement instruments are consistent in evaluating aspects of the Link and Match Curriculum. The values of average variance extracted (AVE), which must be greater than 0,5, are also examined. As shown in table 2, all AVE values > 0,5, indicating that each construct measured is valid.

To measure the differences between constructs, analysis was conducted using the heterotrait-monotrait ratio (HTMT) and the Fornell-Larcker criteria. The results of the HTMT test (table 3) and the Fornell-Larcker criteria (table 4) show that all variables meet the requirements for discriminant validity. The HTMT test indicates that the correlation between indicators from different constructs is sufficiently low, with values < 0,90. Meanwhile, the Fornell-Larcker criteria also confirm that all the constructs measured are unique and do not represent other constructs in the model.

Table 2. Outher loading

	CS	IA	IP	LA	PK	PL	PO	SO
CS10	0,863							
CS11	0,940							
CS12	0,920							
IA1		0,890						
IA2		0,782						
IA3		0,697						
IA4		0,730						
IA5		0,805						
IA6		0,753						
IA8		0,735						
IP4			0,722					

IP5		0,933					
IP6		0,875					
IP7		0,845					
IP8		0,957					
LA7		0,908					
PK1			0,884				
PK2			0,783				
PK3				0,860			
PK4				0,781			
PK5				0,864			
PK6				0,839			
PL1					0,874		
PL2					0,761		
PL3					0,795		
PL4					0,805		
PL5					0,832		
PO11						0,799	
PO2						0,842	
PO3						0,704	
PO4						0,781	
PO6						0,814	
PO7						0,788	
PO8						0,827	
PO9						0,822	
SO1							0,863
SO2							0,763
SO4							0,804

Table 3. Validitas Diskriminart (Kriteria Fornell – Lacker)

	CS	IA	IP	LA	PK	PL	PO
CS							
IA	0,831						
IP	0,665	0,592					
LA	0,508	0,725	0,443				
PK	0,816	0,769	0,809	0,571			
PL	0,892	0,775	0,757	0,472	1,007		
PO	0,781	0,989	0,687	0,664	0,864	0,826	
SO	0,957	0,990	0,768	0,658	1,043	1,013	1,047

Table 4. Contruk Rehability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Awarege variance Extracted (AVE)
CS	0,894	0,903	0,934	0,825
IA	0,878	0,885	0,905	0,577
IP	0,939	0,980	0,952	0,769

LA	0,819	0,823	0,917	0,847
PK	0,913	0,916	0,933	0,699
PL	0,872	0,878	0,908	0,663
PO	0,918	0,920	0,933	0,637
SO	0,740	0,752	0,52	0,658

Table 5. R - Square

	Original Sampel (O)	Sampel Mean (M)	Standard Deviation (STDEV)	T Statistik (jo/ STDEV)	P aluesV
CS	0,845	0,886	0,031	27,531	0,000

Table 6. Fit Model

	Saturated Model	Estimated Model
SRMR	0,105	0,204
d _ULS	9,104	34,180
d_G	14881	15,641
Chil-Square	1752,715	1823,351
NFI	0,427	0,404

Table 7. Path Coeficient

	Original Sampel (O)	Sampel Mesin (M)	Standar Deviation (STDEV)	T Statiska (jo/ STDEV)	P Values
IA -> CS	0,357	0,383	0,198	1,804	0,071
LA -> CS	-0,040	-0,018	0,176	0,228	0,819
LA -> IP	0413	0,453	0,110	3,745	0,000
PK -> PL	0,907	0,907	0,031	28,946	0,000
PK -> SO	0,864	0,868	0,039	21,906	0,000
SO -> CS	0,515	0,485	0,145	3,561	0,000
SO -> IA	0,815	0,820	0,050	16223	0,000
SO -> PO	0,870	0,871	0,041	21263	0,000

Table 8. Indirect Effect

	Original Sampel (o)	Sampel Mean (M)	Standard Deviation (STDEV)	T Statiska (jo/STDEV)	P values
PK -> CS	0,697	0,6 %	0,118	5,879	0,000
PK -> IA	0,704	0,712	0,064	11,021	0,000
PK -> PO	0,752	0,757	0,058	13,032	0,000
SO -> CS	0,291	0,316	0,168	1,732	0,083

Table 9. Specifitc Indirect Effect

	Original Sampel (o)	Sampel Mean (M)	Standard Deviation (STDEV)	T Statiska (jo/STDEV)	P Values
PK-> SO -> PO	0,752	0,757	0,058	13,032	0,000
PK->SO->CS	0,251	0,274	0,147	1,715	0,086
SO ->IA->CS	0,219	0,316	0,168	1,732	0,083
PK -> SO ->SC	0445	0,422	0,131	3,393	0,001
PK -> SO -> IA	0,704	0,721	0,064	11,021	0,000

Table 10. Total Effect

	Original Sampel (o)	Sampel Mean (M)	Standars Devition (STDEV)	T Statiska (jo/STDEV)	P Valeus
IA -> CS	0,357	0,383	0,198	1,804	0,071
LA -> CS	-0,040	-0,018	0,176	0,228	0,819
LA ->IP	0,413	0,453	0,110	3,745	0,000
PK -> CS	0,697	0,6 %	0,118	5,879	0,000
PK->IA	0,704	0,712	0,064	11,021	0,000
PK->PL	0,907	0,907	0,031	28,946	0,000
PK ->PO	0,752	0,757	0,058	13,032	0,000
PK-> SO	0,864	0,868	0,039	21,906	0,000
SO->CS	0,806	0,801	0,125	6,428	0,000
SO->IA	0,815	0,820	0,050	16,223	0,000
SO->PO	0,870	0,871	0,041	21,263	0,000

Berdasarkan analisis SEM, implementasi Kurikulum Link and Match menunjukkan bahwa kolaborasi dengan industri (PK) dan orientasi sosial (SO) memiliki pengaruh paling dominan terhadap peningkatan kompetensi mahasiswa, keterampilan praktis, profesionalisme, dan keterampilan sosial. Learning Agility (LA) berpengaruh signifikan terhadap keterlibatan mahasiswa dalam kerja sama industri, tetapi tidak secara langsung meningkatkan kompetensi. Efek tidak langsung menunjukkan bahwa PK dan SO berperan sebagai mediator penting dalam memperkuat pengaruh terhadap kompetensi dan keterampilan mahasiswa. Secara keseluruhan, hasil ini menekankan bahwa integrasi pendidikan dengan industri dan pengembangan keterampilan sosial merupakan faktor kunci dalam memaksimalkan efektivitas kurikulum Link and Match.

Structural Model Analysis

The analysis of each latent variable was conducted using R-square to determine the predictive strength of the structural model in this study. As presented in table 6, the R-square value for Skill Set is very strong, with a coefficient of 0,968. This means that 96,8 % of Skill Set can be explained by the presence of the variables Learning Agility (LA), Learning Performance (LP), Ubiquitous Learning (UL), Collaborative Learning Method (CLM), Digital Learning Environment (DLE), and Industrial Partnership (IP). The strength of this R-square indicates that the model has a very high ability to explain the influence of these six variables on the students' Skill Set, with the remaining 3,2 % being influenced by other variables not included in this model. Further analysis shows that each latent variable contributes significantly to the development of Skill Set. For example, Learning Agility contributes 28 %, while Learning Performance contributes 35 %.

Hypothesis Testing and Path Analysis

Hypothesis testing in this study was conducted using the bootstrapping method as illustrated in figure 1 to examine the influence between the variables being studied. The results of this analysis were determined using t-statistics and p-values, where the hypothesis is accepted if the t-statistic > 1,96 and p-value < 0,05, indicating that the exogenous variables have a significant impact on the endogenous variables. Based on the respondent data, the majority of survey participants were female, totaling 65 people (66,3 %), while male respondents numbered 33 people (33,7 %). The respondents came from various study programs at higher education institutions implementing the Link and Match curriculum. Among the 98 students in the sample, there was a variation in entry years, with the largest proportion coming from the 2022 cohort, totaling 40 people (40,8 %), followed by the 2021 cohort with 30 people (30,6 %), and the 2023 cohort with 28 people (28,6 %). Regarding learning access devices, most respondents used their own devices for learning, totaling 92 people (93,9 %), while 6 people (6,1 %) used campus-owned devices. The majority of respondents accessed learning materials online, with 75 people (76,5 %) using smartphones and 23 people (23,5 %) using laptops. The duration of online learning access showed that 57 people (58,2 %) spent 3-5 hours per day, while 36 people (36,7 %) spent more than 5 hours. The path analysis results show a significant influence of the variables learning agility, learning performance, ubiquitous learning, and collaborative learning method on the improvement of students' skill sets. The t-statistic for the learning agility variable is 4,123 with a p-value of 0,000, indicating that the ability to adapt to change significantly influences skill mastery. Similarly, the learning performance variable shows a t-statistic of 5,876 and a p-value of 0,000, suggesting that students' learning performance has a strong impact on skill acquisition. Furthermore, the collaborative learning method and digital learning environment variables also contribute significantly, with t-statistics of 3,456 (p-value 0,002) and 4,789 (p-value 0,000),

respectively. Additionally, the relationship between industrial partnership and skill acquisition shows positive results, emphasizing the importance of collaboration with the industry in enhancing students' practical skills.

The results of this study provide valuable insights into how the implementation of the Link and Match curriculum can enhance students' skills through an integrated and collaborative approach. These findings are expected to serve as a foundation for the development of curricula that are more responsive to industry needs and future challenges.

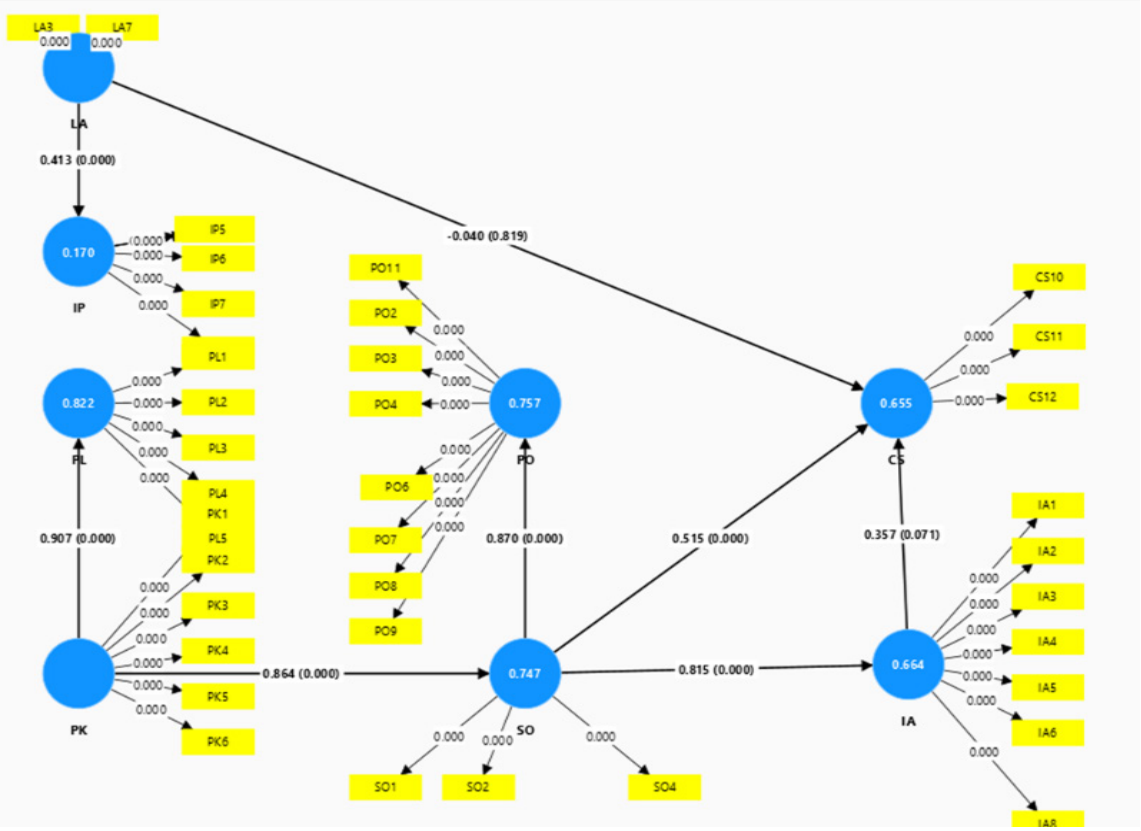

Figure 1. Hypothesis Testing and Model Significance

Analysis Network

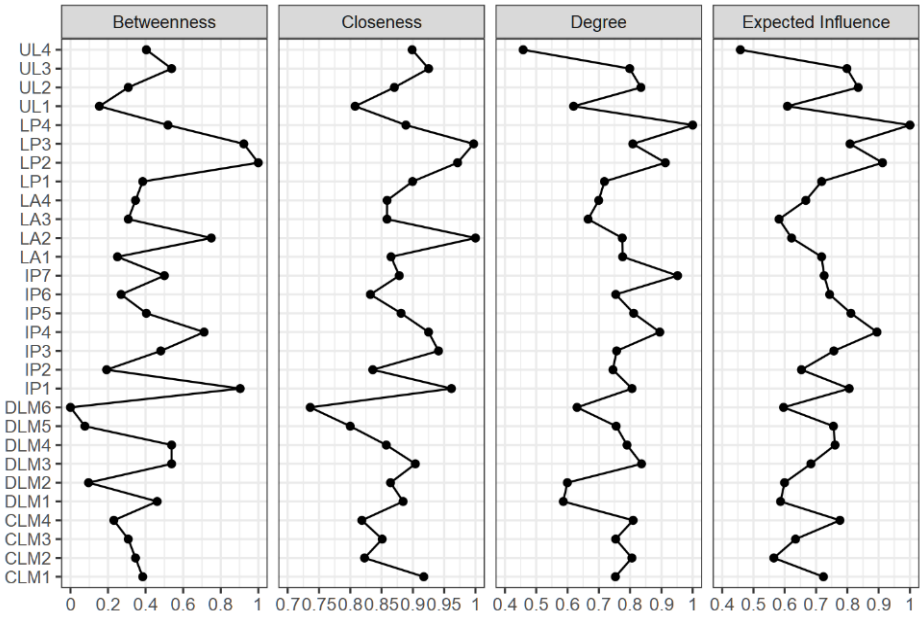

Figure 2. Centrality Plot

The network analysis section of this study illustrates the complex relationships between key variables that contribute to the successful implementation of the Link and Match curriculum. This network visualization highlights the interactions between Learning Agility (LA), Learning Performance (LP), Ubiquitous Learning (UL), Collaborative Learning Method (CLM), Digital Learning Environment (DLE), and Industry Partnership (IP). Each variable is represented as a node, while the connecting lines (edges) reflect the strength and direction of relationships based on loading factor valuest.

The analysis results indicate that Industry Partnership (IP) serves as the central node in the network. IP not only mediates the relationships between other variables but also plays a significant role in shaping students' practical skills. This is supported by data showing that students exposed to industry collaborations have higher levels of job readiness. The variable Learning Agility (LA) has a strong relationship with Learning Performance (LP) through its contribution to enhancing students' adaptability to change. This ability is further strengthened by the support of the Digital Learning Environment (DLE), which creates a technology-based adaptive learning environment. Another significant pathway is between Ubiquitous Learning (UL) and Collaborative Learning Method (CLM) towards Learning Performance (LP), demonstrating that technology-based flexible learning and student collaboration promote better learning outcomes.

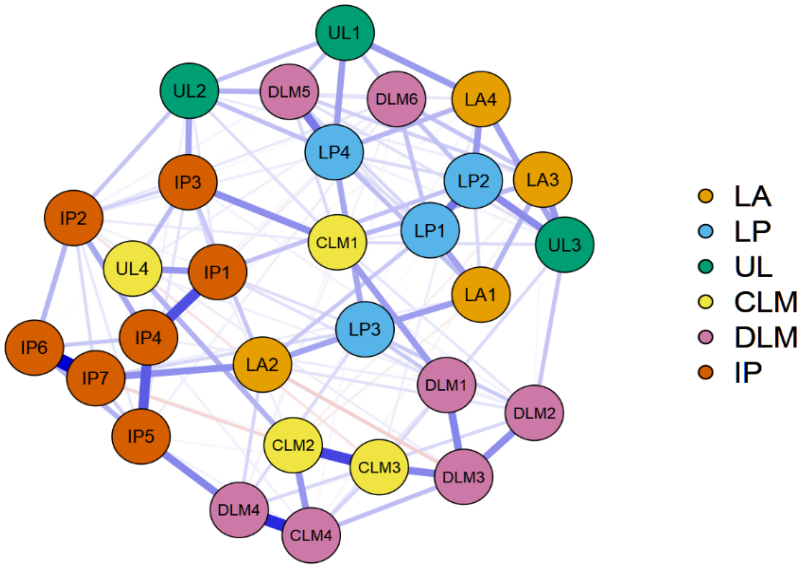

Figure 3. Network Graph

Another finding from this network analysis is the importance of the reciprocal relationship between Learning Performance (LP) and Industry Partnership (IP). Students with high learning performance tend to maximize their industrial experiences, while engagement with the industry further enriches their learning experiences. This network illustrates that the success of the Link and Match curriculum does not rely on a single variable but rather on the dynamic interaction between technology-based learning, collaboration, and practical experiences. With this understanding, curriculum design can be optimized to produce graduates who are better prepared to face the challenges of the workforce.

DISCUSSION

The research findings show that the implementation of the Link and Match Curriculum significantly enhances students' skill sets. This aligns with the opinion of a study who stated that the integration of education and industry improves students' job readiness. Furthermore, learning agility refers to an individual's willingness and ability to engage in active learning to adapt to work environment opportunities. Learning agility is also defined as the willingness and ability to learn from experiences and then apply that learning to succeed in new situations and conditions.[24,25,26] Learning agility is a better predictor of high performance compared to IQ and personality traits.[27,28] Employees with learning agility are expected to perform better within a company.[29,30]

High-performing employees are expected to complete tasks responsibly, proficiently, and utilize their potential effectively and efficiently. As employee performance improves, it is anticipated to have a positive impact on the overall performance of the company. This study indicates that the implementation of the Link and Match Curriculum significantly enhances students' skills, particularly by developing learning agility, defined as the ability to learn from experiences and apply that knowledge in new situations. Learning agility has been shown to be a better predictor of performance than IQ or personality traits, enabling students to work more

competently, efficiently, and responsibly. Therefore, integrating education and industry through this curriculum prepares graduates to be adaptive, ready to face professional challenges, and capable of contributing positively to organizational performance.

Next, according to the book Performance and Equity of Schools, student academic achievement is measured by their ability to understand, apply, and master the knowledge and skills taught in school. Many factors affect student learning performance, including socio-economic status, school quality, and educational policies. One key finding is the significant relationship between socio-economic status (SES) and learning outcomes. Students from lower socio-economic backgrounds tend to have lower academic achievements compared to those from higher socio-economic families, as shown in PIRLS and PISA data. Furthermore, student achievement also varies significantly across countries, influenced by the availability of resources, curriculum policies, and teacher training. Schools play a crucial role in reducing achievement gaps. Some countries have successfully improved students' academic outcomes while reducing disparities in results between students from different backgrounds. This study also emphasizes the importance of appropriate policies, such as providing additional support to students from disadvantaged families, to improve overall learning outcomes and reduce these disparities. Ubiquitous Learning, an approach that utilizes digital technology in education, has proven effective in increasing accessibility and learning flexibility. Ubiquitous Learning facilitates more interactive learning that is responsive to students' needs, contributing to the development of 21st-century skills.[29] In this study, this variable indicates that students exposed to technology-supported learning environments tend to have better skill sets. Additionally, the Collaborative Learning Method plays a crucial role in the learning process. Collaborative learning not only improves students' social skills but also enhances critical and analytical thinking abilities. In this study's context, the data shows that students involved in collaborative activities perform better in problem-solving and adapting to new situations.[30,31,32]

Furthermore, support from the Digital Learning Environment and Industrial Partnership strengthens the relevance of learning to industry needs. The data shows that students who gain hands-on experience through internships and engagement with industry practitioners show significant improvements in practical skills and professionalism. This aligns with the views of [33] who emphasize the importance of collaboration between educational institutions and industries to ensure curriculum relevance with labor market demands.

Based on the data found, the implementation of the Link and Match Curriculum not only enhances students' skills in Learning Agility but also contributes to the improvement of Learning Performance. Students exposed to collaborative learning methods and digital learning environments are better able to adapt to the dynamic challenges of the workforce. The curriculum's integration with industry through internships and collaborations with practitioners provides students with relevant hands-on experiences, preparing them for professional roles. Additionally, the factor of Ubiquitous Learning plays a crucial role in enhancing students' ability to learn flexibly in various situations. Students who can learn in diverse environments using digital technology show improvements in both academic skills and the development of the skill sets required by the industry. This aligns with previous findings that suggest flexibility in learning allows students to manage their schedules and adjust their learning methods for greater effectiveness.[34] The Collaborative Learning Method was also found to have a significant impact on students' skills. This approach encourages students to work together in groups, share ideas, and solve problems collaboratively. This not only improves their communication and collaboration skills but also strengthens their critical thinking and creativity. As stated by Slavin 2014, collaborative learning encourages students to be more actively engaged in the learning process, which ultimately leads to better learning outcomes.

Therefore, it is essential for higher education institutions to continue developing the Link and Match program by strengthening cooperation between the education and industry sectors. By providing relevant practical experiences, students will be better prepared to face workforce challenges and possess skill sets aligned with the current job market demands.

CONCLUSIONS

The implementation of the Link and Match Curriculum has significant potential to enhance students' skill sets through aspects such as learning agility, collaborative learning methods, digital learning environments, and industry partnerships, thereby better preparing them for workforce challenges. The study confirms significant relationships among these variables, highlighting the critical role of industry partnerships and collaborative learning in developing student competencies. Higher education institutions are encouraged to strengthen collaborations with industry and leverage digital technologies to produce competent and competitive graduates. Overall, this study provides a solid foundation for further curriculum development that is relevant to global demands and the evolving labor market.

Implications

The findings of this study suggest that the implementation of the Link and Match curriculum can enhance

students' skill sets through several aspects, such as learning agility, learning performance, and industry collaboration. This indicates that an industry-oriented curriculum can better prepare students to face workforce challenges. Thus, the study's results may serve as a reference for higher education institutions to continue developing learning programs that are more relevant to job market demands. Additionally, a strong partnership between universities and industry can be key to creating graduates who possess not only academic knowledge but also practical skills needed by employers. Another implication underscores the importance of integrating technology in learning to promote ubiquitous learning and to create a flexible, integrated learning environment

Limitations

The limitations of this study include a limited sample size, involving only 98 students from several universities in Indonesia, which may restrict the generalizability of the results to a broader population. Additionally, the study employed a quantitative approach using questionnaires as the data collection tool, which may not fully capture the in-depth experiences and perspectives of respondents regarding the implementation of the Link and Match curriculum. The study also did not assess the long-term impact of this curriculum on students' readiness for the workforce. Finally, the research focus was more on internal campus aspects, such as learning agility, learning performance, and industry partnerships, without considering other external factors that might also be influential, such as economic conditions or specific industry dynamics.

Future research suggestions

Several key recommendations are proposed for future research. First, the study could be expanded to involve a larger number of universities or educational institutions, both domestically and internationally, to gain broader perspectives on the implementation of the Link and Match curriculum. Additionally, a qualitative approach, such as in-depth interviews or case studies, could be employed to gain deeper insights into the experiences of students, lecturers, and industry stakeholders. Future research could also focus on measuring the long-term impact of this curriculum, particularly in preparing students for the workforce. Developing more comprehensive measurement tools to assess factors such as learning agility and learning performance would also enhance the specificity and accuracy of research findings. Moreover, interdisciplinary studies could be further explored to understand how this curriculum functions in a multidisciplinary context. Finally, given the rapid advancement of technology, it would be valuable to explore the role of technologies such as artificial intelligence, virtual reality (VR), and augmented reality (AR) in supporting Link and Match-based learning in the future.

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CONFLICT OF INTEREST

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