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Contextual Experiential Learning in Higher Education - Competency in Forecast Patterns and New Demand Realization - SDG 4.7

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Abstract

As supply chains focus on creating value and reducing waste, the author intends to link the concepts of Supply-Chain Operations Reference model (SCOR) with SDG for contextual experiential learning design and management of demands from learners so as to increase value to stakeholders and reduce resources for sustainability. The Supply-Chain Operations Reference (SCOR) model is a widely accepted framework for managing and optimizing supply chain operations. It provides a structured approach to analyzing and improving supply chain performance across five key processes: Plan, Source, Make, Deliver, and Return. In this article, we will apply the SCOR model to the higher education industry with results of 21articles published from 2010 to 2021, that is, application of 1) Contextual Experiential Learning, 2) New Demand Realization, 3) Competency in Forecast Patterns into SCOR model for developing talents with higher demand skills in sustainability, AI application and wellness of self management skills to fulfill the gaps that arised from the pandemic.

Keywords: *Fintech, Green Finance, ASEAN, Moderator, Mediator*

Introduction

In 2019, Feeney highlighted that the green jobs summarise the 'transformation of economies, enterprises, workplaces and labour markets into a sustainable, low-carbon ecnomy providing decent work. After COVID-19, there are a few issues that education sector is currently facing. They are :1) applying the concepts of green jobs into curriculum for learning outcomes and 2) fulfilling the the rising demand for sustainability specialists and artificial intelligent mentioned the world econmic forum. Besides, Feeney (2019) echoed this shift in the job market leads to significant implications for higher education. It is time to explore curriculum design with AI elements which bring in transformattions in different disciplines with business opportunities and challenges.

'AI and big data' and 'leadership and social influence'. (World Economic Forum https://www.weforum.org/videos/future-of-jobs-valuable-skills/)

The programmes that students taking currently may be outdated in recent times. Teachers and students need to design real time curriculum with relevant assessments for students to develop new skills in sustainability and AI applications to meet the demands of the emerging green and sustainable job sectors. Traditional business programmes focused on management and marketing, human resources management and customer relationship management often lack a comprehensive integration with social, environmental and sustainability related elements for nurturing all-rounded talent development

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Besides, innovative business programmes with integration and application of AI are needed with transformative teaching and learning styles, for example, team research thinking mindset. There is a lack of trained faculty who have multi-disciplinary knowledge and real life practices to teach AI - related courses in business. Furthermore, the mental health and well - being of students and teachers under the transfomative ways of learning journey have becoming a hot issue that need to have solutions to release their pressure on top of achieving learning outcomes.

To address these challenges, a team research thinking mindset with spiritual and wellness elements are needed in a market-driven business programme with sustainability and AI elements. By incorporating spiritual values, such as SDG#16 harmony and compassion, respect for mother nature SDG#13-15 and human beings for equality SDG#5 and 10, and a sense of purpose SDG#4 mentioned by UN Principles for Responsible Management (UNPRME) into business programmes in higher education can help students develop a more holistic view of the world with wellness to their health during the learning process. In the past decades, psychology is a discipline separated from the business education in higher education institutions. After COVID-19, a lesson learnt we need to have learnt is to realise the importance of mental health, stress management, and resilience in study. This can help students better cope with the pressures of academic life and prepare them for the challenges of the job market

Wellness for branding services can also be a powerful tool. Higher education institutions can promote their commitment to student well - being as part of their brand image. By highlighting the availability of mental health services, wellness programs, and a supportive campus environment, they can attract more students. Additionally, this can also enhance the institution's reputation among employers, who are increasingly looking for graduates with strong mental health self-management skills. In terms of curriculum adaptation, higher education institutions should collaborate with industry practitoners in sustainability, AI and wellness to develop relevant and up - to - date programmes via team teaching and co-design meaningful assessments for new skills development. To summarise, the challenges facing higher education in the context of the growing demand for green jobs - sustainability specialists, and the rise of AI in sustainability related industries with focus on wellness elements have becoming more and more significant.

Understanding Contextual Experiential Learning and Research-Based Learning

Contextual experiential learning is grounded in the belief that knowledge is best acquired through engaging learners with reflection on ways to learn better with unique experiences and contextual situation. Student-oriented learning and teaching focuses on experiential learning techniques, getting students involved in the learning process to think, inquire and reflect with theories learnt and build their own knowledge.

Moreover, “Learning Gain in Higher Education” (2015) emphasizes the importance of measuring learning outcomes with comprehensive summative and formative learning in real-world settings. This aligns with the goals of Sustainable Development Goal (SDG) 4.7 – knowledge transfer which is active learning, instead of rote passive learning. Contextual learning and research team learning are two distinct approaches with unique characteristics, differences, and advantages, especially when considering the research team mindset.

Contextual learning emphasizes learning within real - world settings. It is firmly rooted in the

idea that knowledge is best acquired and understood when it is connected to the specific context in which it will be applied. For instance, students learning about urban planning by working directly in an urban community, observing existing structures, and interacting with local residents. The key difference here is that it often has a more individual - centric focus, where students engage with the context independently to make sense of the knowledge. This allows for a deep understanding of the specific context, as students can explore at their own pace and focus on aspects that interest them the most. However, it may lack the collaborative and diverse perspectives that come from working in a group.

In contrast, research team learning, as described in the study by Carlson et al., involves students actively participating in actual research projects. In a research team, students work together towards a common research goal. They bring different backgrounds, skills, and ideas to the table. For example, in a biology research team, students with expertise in genetics, ecology, and biochemistry can collaborate on a project related to the impact of environmental changes on a species. The advantage of this approach is the development of strong collaborative skills. Students learn how to communicate effectively, divide tasks, and build on each other's ideas. They also gain exposure to a wider range of knowledge and research methods than they would on their own.

In 2022, Carlson et al. mentioned that generic skills, such as information analysis and critical reflection are important elements in higher educatin. Their research findings highlighted that motivation for learning and experiences being part of professional life are crucial. "Wessels et al. (2020) present research-based learning as a means for acquiring cognitive and affective-motivational research dispositions. The development of cognitive dispositions is well described in previous studies…" (Carlson et al., 2022, p. 3). Another advantage of research team learning is the opportunity to engage with real - world problems in a more authentic way to trigger students to think and reflect. Students may pool group thinking techniques to identify solutions from different points of views to avoid subjectivity. The combination of contextual learning and research-team learning mode may benefit students for developing an open mindset with objective thinking and building a network of think-tank.

"Motivation to learn Students voiced their opinion that one benefit of participating in research-based learning was that the research environment was a strong motivator for learning. The dialogue with the supervisors and other researchers challenged the students to develop their arguments and reasoning skills to prove that their ideas were worthy and valuable to the projects. This was viewed as an inclusive learning environment where their ideas could actually be implemented. (Carlson et al., 2022, p.6)

"For students to achieve the goals set for each research team the support from the designated supervisors was seen as an invaluable resource which created student engagement and supported their learning." (Carlson et al/, 2022, p. 7)

"Feedback was seen as positive and necessary, and was clearly desired by the students who wanted their supervisors to be honest when things were about to go wrong. The students acknowledged that they usually knew what they needed to improve and feedback was a way for them to be able to understand not only what to improve but also how to improve. " (Carlson et al., 2022, p. 7)

".. Healey et al. (2016) introduce the idea of learning and working in partnership, for example by inviting students as active participants in research as a pedagogically robust strategy that facilitates the development of generic and subject-specific skills. They present a conceptual model for engagement through partnership (quoted text page 9) explaining how partnership implies a way of actively doing rather than focusing on a set outcome."

(Carlson Et al., 2022, p.7)

"A key feature from a constructivist theory point of view on educational methods is that learning should be active, allowing for problem-solving of real problems by group interaction during which the teacher or supervisor is there to guide and facilitate learning

(Hrynchak & Batty, 2012 in Carlston et al., 2022, p.7)

The Role of Teacher Quality in Facilitating Experiential Learning

For effective contextual experiential learning delivery, teachers need to have empathy and develop the techiques of apply five steps of design designing into the design and assessment ot learning outcomes of specific contextual experiential learning. The literature, including "An Empirical Analysis of the Relationship between Teacher's Quality and Student's Achievement" (Fang, 2014), stresses that teacher quality is closely tied to student outcomes.

"..the empirical results show that the impact of full-time teachers on student's long term academic performance is better than that on the short term performance while adjunct instructors have opposite effect. "(Fang, 2014, p.286)

Katal et al. (2022) mentioned that peer observation was seen as a beneficial tool for teachers' professional development. They highlighted that peer observation reduced teachers' worry, hesitancy, and pressure throughout the teaching process, making it more dependable and real. Hence, teachers are recommended to deploy effective and innovative pedagogical strategies , enabling students to engage deeply with the material, context, and the stakeholders in the designed environment. Furthermore, peer observation models, as discussed in "Enhancing Teaching and Learning through Peer Observation: An Indian Case" (2022), can enhance teaching quality. Such collaboration fosters a culture of continuous improvement, which directly benefits students' learning experiences.

Supply Chain Management (SCM), SCOR and Demand Realization

As the rationale for supply chain management can be applied to different kinds of industries, including the education sector – purchasing relevant materials and resources for curriculum production and programme delivery– educators should try to be flexible and open in developing a mindset with customer-, employee-, and society-orientations in a cross-functional context when identifying and measuring the performance of strategic partners. Lockamy and McCormick (2004) say that the "Supply Chain Operations Reference" (SCOR) model developed by the Supply Chain Council provides a framework for characterizing supply chain management practices and processes that result in best-in-class performance. Their findings show that planning processes are important in all SCOR supply chain planning decision areas. "Collaboration" with "Teaming" support was found to be the most important in the "Plan, Source, Make" planning decision areas. "Process Measures, Process Credibility, Process Integration, and Information Technology" were found to be most critical in supporting the "Deliver" planning decision area. Though there are five processes ("Plan, Source, Make, Delivery and Return") in

the SCOR Version 5.0 Model, this paper focuses on “Plan, Source, Make and Deliver”.

The four levels of the four processes are listed below:

Level-1: Defining the scope and content of the core management processes for the above-mentioned decision areas;

Level-2: Describing the characteristics associated with the following process types deployed within the core processes: planning, execution and enable;

Level-3: Providing detailed process element information for each Level 2 process category. Inputs, outputs, description and the basic flow of process elements are captured at this level of the SCOR model; and

Level-4: Implementing specific supply chain management practices at this level to achieve a competitive advantage and to adapt to changing business conditions. The literature (1999-2004) cited by Lockamy and McCormirk (2004) reveals the importance of a few supply chain activities, including partnership planning activities for promoting collaboration between supply chain partners, integrating cross-functional activities, coordinating supply chain processes, setting supply chain goals, developing strategic alliances, establishing information-sharing parameters, reviewing sourcing and outsourcing options, and defining supply chain power relationships between trading partners. Lockamy et al.

In order to prepare students for the modern workforce under post COVID-19, higher education institutions need to pre-plan competency measurements for learners, allowing graduates to respond to the needs of the potential employers and meet the emerging trends of sustainability specialists and AI in solutions in different fields. The capacity to forecast patterns is essential in various sectors. However, —be it in education, business, healthcare, or technology. As indicated in “Measuring Value-Added in Higher Education: Conditions and Caveats” (2011), the measurement of learning gains should also consider how well students are prepared to tackle future challenges. Liu (2009) mentioned that “The Commission on the Future of Higher Education in the USA emphasises accountability in higher education as one of its key areas of interest. A programme, called the Voluntary System of Accountability, was developed to evaluate the effectiveness of general public college education. This study examines how students progress in college, indicated by the performance difference between freshmen and seniors after controlling for admission scores, can be measured using the Measure of Academic Proficiency and Progress™ (MAPP™) test.” (Liu, 2009, p. 1)

Besiders academic proficiency and progress assessment, experiential learning environments, such as internships, project-based learning, team-to-solve critical challenges, and community engagement initiatives, provide students with valuable opportunities to apply what they have learnt, practice on what they believe in, reflect on understanding their learnng style, and develop their in predicting the outcomes in a certain situation. In 2020, Woodcock discussed the term 'gig economy', short-term arrangements (2020, p.3) and work with digital platform in the labour market, 'tools to bring together the supply of, and demand for labor'', including the app. digital infrastrucutre and algoriths for managing the work." (2022, p.3/4). Under the influence of gig economy and availability of digital platform, we may need to rethink the role of spiritual elements, for example, faith –based personal development in the curriculum design. Based on the author’s previous study on the analysis of existing programmes on divinity and religious studies, Hong Kong, the key findings of the analysis are presented below:

1) The need of mission-driven curriculum to drive personal development;

2) Integration of spiritual education into professional programmes for talent development with values in task completion with faith;

3) Provision of diversed learning opportunities, for example, internship and indnustry site visits, allowing students to apply theorical and conceptual knowledge into real-world settings;

4) Fulfilment of the rising demand for religious leaders: "The Report on Manpower Projection to 2027 for Hong Kong projects a growth of 0.7% in the social and personal services sector. This trend underscores the increasing demand for local church leadership and community engagement, aligning with Sustainable Development Goals (SDGs) such as Wellness, Gender Equality, Reduced Inequality, Peace, and Partnerships, like Caroline Nobel Prize Winner 2022, Chemistry; and

5) Building a supportive community to serve the society, contributing to personal and organisational growth.

Based on the above findings, it is realised that spiritual and wellness, proactive and predictive in the needs of talents are important in contextual experiential design.

PSMDR into Contextual Experiential Learning

Plan (Design)

In the Plan process, curriculum designers may define their supply chain strategy on teaching and learning materials / contextual design with technology, for example, the use of AI design in context for real business environment with innovative services needed after COVID-19.

For example, the real estate services industry in Hong Kong was already facing challenges and applied 360 degree AI for site visits to improve their competitiveness in the market.

Source (Sourcing)

The Source process involves identifying and evaluating potential curriculum designers/ personal AI teaching assistants and contextual green and environmental suppliers with technology to improve the teaching and learning process.

Make (Manufacture/Produce)

The Make process involves transforming traditional teaching materials, for example, powerpoint and notes in "word" copies into animation video and informatics with interactive quizzes to make the learning situational with tasks to be completed on a real time basis.

Deliver (Deliver/Customer Service)

The Deliver process involves the mobility of teaching and learning process(es) or services from the curriculum designers (manual / AI) or service providers (teachers or videos) to the students.

Return (Returns)

The Return process involves handling returns or reverse logistics of teaching materials, videos, games and situational tasks with cards…etc. to redesign for another context to suit the needs of the subject matter.

Methodology

A research was performed to analyze factors possibly related to values in higher eduction with a foucs on competency building (1591). 21articles published from 2010 to 2021 were discovered. By thoroughly dwelving into the articles, various relatable factors are identified to the topic, including Contextual Experiential Learning, New Demand Realization, Competency in Forecast Patterns, Cultural Compliance, and Trends of Regulations. To further determine their relationship to the topic, by using Nvivo, a text search was performed for the mentioned keywords. The search result showed that the key three factors are Contextual Experiential Learning, New Demand Realization, Competency in Forecast Patterns were cited relatively more frequently with 1591, 331 and 138times correspondingly, while other two factors cited less frequently. (Table 1).

Table 1. Findings of the keywords search

Name	Sources	References
'Contextual Experiential Learning	**21**	**1591**
'Competency in Forecast Patterns	**15**	**138**
'Cultural Compliance	13	107
'New Demand Realization	**20**	**331**
'Trends of Regulations	12	70

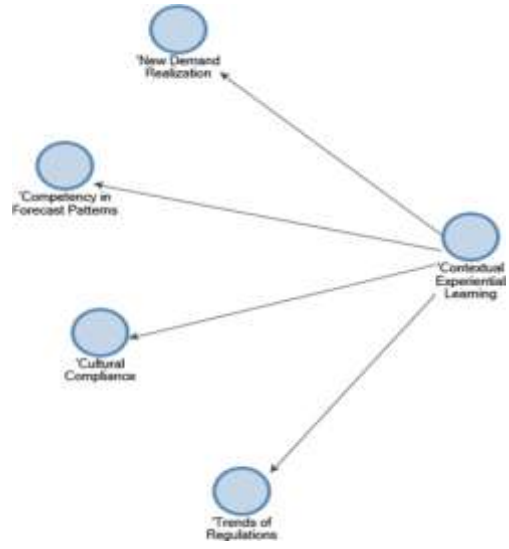

Figure 1. Model on the factors of Contextual Experiential Learning

Table 2 Literature on Values in Higher Education for Text Search

(1)	Ediger, M. (2000). *Assessing teaching quality in higher education*. ERIC.

	https://eric.ed.gov/?id=ED440985
(2)	Dwyer, C. A., Millett, C. M., & Payne, D. G. (2006). *A culture of evidence: Postsecondary assessment and learning outcomes*. Educational Testing Service. https://files.eric.ed.gov/fulltext/ED500004.pdf
(3)	Steedle, J. T. (2010). *Improving the reliability and interpretability of value-added scores for post-secondary institutional assessment programs*. ERIC. https://files.eric.ed.gov/fulltext/ED509952.pdf
(4)	Liu, O. L. (2011). *Value-added assessment in higher education: A comparison of two methods. Higher Education*, 61(4), 445–461. https://doi.org/10.1007/s10734-010-9340-8
(5)	Liu, O. L. (2011). *Measuring value-added in higher education: Conditions and caveats – results from using the Measure of Academic Proficiency and Progress. Assessment & Evaluation in Higher Education*, 36(1), 81–94. https://doi.org/10.1080/02602930903197917
(6)	Steedle, J. T. (2012). *Selecting value-added models for postsecondary institutional assessment. Assessment & Evaluation in Higher Education*, 37(6), 637–652. https://doi.org/10.1080/02602938.2011.563277
(7)	Douglass, J. A., Thomson, G., & Zhao, C. M. (2012). *The learning outcomes race: The value of self-reported gains in large research universities*. Higher Education, 64(3), 317–335. https://doi.org/10.1007/s10734-011-9496-x
(8)	Kinzie, J., Baker, G. R., Jankowski, N. A., & Provezis, S. (2012). *Using assessment results: Promising practices of institutions that do it well. National Institute for Learning Outcomes Assessment*. Retrieved from https://www.learningoutcomesassessment.org/wp-content/uploads/2019/02/UsingAssessmentResults.pdf
(9)	Kim, H. H., & Lalancette, D. (2013). *Literature review on the value-added measurement in higher education*. OECD. https://www.oktemvardar.com/articles/Value%20added%20in%20HE.2013.%20OECD.pdf
(10)	Li, F., Zhang, C., & Feng, Q. (2014). *An empirical analysis of relationship between teacher's quality and student's achievement*. In Proceedings of the 2014 International Conference on Education Reform and Modern Management (pp. 286–290). Atlantis Press. https://doi.org/10.2991/ermm-14.2014.78
(11)	McGrath, C. H., Guerin, B., Harte, E., Frearson, M., & Manville, C. (2015). *Learning gain in higher education*. RAND Corporation. https://doi.org/10.7249/RR996
(12)	Kornell, N., & Hausman, H. (2016). *Do the best teachers get the best ratings?* Frontiers in Psychology, 7, Article 570. https://doi.org/10.3389/fpsyg.2016.00570
(13)	Türk, K. (2016). *Performance management of academic staff and its effectiveness to teaching and research – Based on the example of Estonian universities*. Trames, 20(1), 17–36. https://doi.org/10.3176/tr.2016.1.02

(14)	Ambrose, M., Rivas, R., Rose, N., & Zubillaga, A. (2018). *Halal demand in Hong Kong*. Worcester Polytechnic Institute.
(15)	McGrath, S., Alla-Mensah, J., & Langthaler, M. (2018). *Skills for decent work, life and sustainable development: Vocational education and the sustainable development goals* (ÖFSE Briefing Paper No. 18). Austrian Foundation for Development Research (ÖFSE). https://www.oefse.at/publikationen/briefing-papers/detail-briefing-paper/publication/show/Publication/Skills-for-decent-work-life-and-sustainable-development/
(16)	Singh, V. K., Katal, A., Choudhury, T., & Imran, F. (2022). *Enhancing teaching and learning through peer observation: An Indian case study*. Education Research International, 2022, Article ID 7825178. https://doi.org/10.1155/2022/7825178
(17)	Carlson, E., Stigmar, M., Engberg, M., Falk, M., Stollenwerk, M. M., Gudmundsson, P., & Enskär, K. (2022). *Students' experiences of participation in a research team: Evaluation of a research-based teaching activity in higher education*. Malmö University. https://hdl.handle.net/10419/182458
(18)	Triansyah, F. A. (2023). *Focus research on halal food marketing*. Universitas Pendidikan Indonesia. https://hdl.handle.net/10419/182458
(19)	Financial Services and the Treasury Bureau. (2024). *Roadmap on sustainability disclosure in Hong Kong: Ambition, assurance, enablement*. Hong Kong Special Administrative Region Government. https://www.fstb.gov.hk/fsb/en/publication/report/docs/FSTB_Roadmap2024_eBooklet_EN.pdf
(20)	Hong Kong Exchanges and Clearing Limited (HKEX). (2024). *Implementation guidance for climate disclosures under HKEX ESG reporting framework*. HKEX. https://www.hkex.com.hk
(21)	Alimehmeti, G., Fia, M., & Paletta, A. (2024). *The sustainability-to-employment pipeline: The impact of SDG-related curricula on graduates' employability*. Studies in Higher Education, 49(12), 2328–2342. https://doi.org/10.1080/03075079.2023.2299328

Table 3 – Text Search on Contextual Experiential Learning (1591)

Name	References	Coverage
(2000) Assessing Teaching Quality in Higher Education (2)	18	0.30%
(2006) A Culture of Evidence_ Postsecondary Assessment and Learning Outcomes	185	0.75%
(2010) Improving the Reliability and Interpretability of Value-Added Scores for Post-Secondary Institutional Assessment Programs	9	0.13%
(2010) Value added assessment in higher ed, comparison of 2 methods	37	0.26%
(2011) Measuring value-added in higher education_ conditions and caveats	31	0.29%

(2012) Selecting value-added models for postsecondary institutional assessment	33	0.27%
(2012) The learning outcomes race_ the value of self-reported gains in large research universities	106	0.72%
(2012) Using Assessment Results_ Promising Practices of Institutions That Do It Well	208	1.05%
(2013) Lit Review on the VAM in Higher Ed	47	0.13%
(2014) An Empirical Analysis of Relationship between Teacher's Quality and Student's Achievement	5	0.07%
(2015) Learning gain in higher education	608	0.92%
(2016) Do the Best Teachers Get the Best Ratings	94	0.73%
(2016) PERFORMANCE MANAGEMENT OF ACADEMIC STAFF AND ITS EFFECTIVENESS TO TEACHING AND RESEARCH	3	0.02%
(2018) IQP_Final_Report	3	0.01%
(2018) Meaningful Job 2018 SDG 1030834075	12	0.08%
(2022) Education Research International - 2022 - Katal - Enhancing Teaching and Learning through Peer Observation An Indian Case	72	0.42%
(2022) EJ1373301	92	0.78%
(2023) FOCUS_RESEARCH_ON_HALAL_FOOD_MARKETING (1)	3	0.04%
(2024)	2	0.01%
(2024) FSTB_Roadmap2024_eBooklet_EN	3	0.03%
(2024)The sustainability-to-employment pipeline the impact of SDG-related curricula on graduates employability (1)	20	0.14%

Table 4 – Text Search on New Demand Realization (331)

Name	References	Coverage
(2000) Assessing Teaching Quality in Higher Education (2)	2	0.01%
(2006) A Culture of Evidence_ Postsecondary Assessment and Learning Outcomes	13	0.02%
(2010) Improving the Reliability and Interpretability of Value-Added Scores for Post-Secondary Institutional Assessment Programs	20	0.12%
(2010) Value added assessment in higher ed, comparison of 2 methods	8	0.02%
(2011) Measuring value-added in higher education_ conditions and caveats	5	0.02%
(2012) Selecting value-added models for postsecondary institutional assessment	29	0.09%
(2012) The learning outcomes race_ the value of self-reported gains in large research universities	9	0.03%
(2012) Using Assessment Results_ Promising Practices of Institutions That Do It Well	7	0.02%
(2013) Lit Review on the VAM in Higher Ed	13	0.02%
(2015) Learning gain in higher education	14	0.01%

(2016) Do the Best Teachers Get the Best Ratings	7	0.02%
(2016) PERFORMANCE MANAGEMENT OF ACADEMIC STAFF AND ITS EFFECTIVENESS TO TEACHING AND RESEARCH	9	0.02%
(2018) IQP_Final_Report	31	0.07%
(2018) Meaningful Job 2018 SDG 1030834075	37	0.10%
(2022) Education Research International - 2022 - Katal - Enhancing Teaching and Learning through Peer Observation An Indian Case	13	0.04%
(2022) EJ1373301	9	0.04%
(2023) FOCUS_RESEARCH_ON_HALAL_FOOD_MARKETING (1)	9	0.10%
(2024)	55	0.04%
(2024) FSTB_Roadmap2024_eBooklet_EN	26	0.10%
(2024)The sustainability-to-employment pipeline the impact of SDG-related curricula on graduates employability (1)	15	0.07%

Table 4 – Text Search on Competency in Forecast Pattern (138)

Looking deeper into the relationship among the factors, it was apparent that Contextual

Name	References	Coverage
(2000) Assessing Teaching Quality in Higher Education (2)	8	0.18%
(2006) A Culture of Evidence_ Postsecondary Assessment and Learning Outcomes	12	0.07%
(2010) Value added assessment in higher ed, comparison of 2 methods	1	0.01%
(2011) Measuring value-added in higher education_ conditions and caveats	2	0.02%
(2012) The learning outcomes race_ the value of self-reported gains in large research universities	7	0.05%
(2013) Lit Review on the VAM in Higher Ed	3	0.01%
(2014) An Empirical Analysis of Relationship between Teacher's Quality and Student's Achievement	1	0.01%
(2015) Learning gain in higher education	24	0.05%
(2016) Do the Best Teachers Get the Best Ratings	1	0.01%
(2016) PERFORMANCE MANAGEMENT OF ACADEMIC STAFF AND ITS EFFECTIVENESS TO TEACHING AND RESEARCH	3	0.02%
(2018) Meaningful Job 2018 SDG 1030834075	5	0.04%
(2022) Education Research International - 2022 - Katal - Enhancing Teaching and Learning through Peer Observation An Indian Case	1	0.01%
(2024)	29	0.05%
(2024) FSTB_Roadmap2024_eBooklet_EN	7	0.10%
(2024)The sustainability-to-employment pipeline the impact of SDG-related curricula on graduates employability (1)	34	0.34%

Experiential Learning, Competency in Forecast Patterns and New Demand Realization contribute to the topic of Values in Higher Education 2025. Based on such findings, a graphical model was generated with the data. (Figure 1).

Conclusion and Discussion

In addressing SDG 4.7, curriculum design must be responsive and innovative. The "Sustainability-to-Employment Pipeline: The Impact of SDG-related Curricula on Graduates' Employability" (2024) emphasizes that curricula rooted in sustainability principles not only prepare students for employment but also instill a sense of responsibility towards societal challenges. By integrating SDG-related themes into various disciplines, institutions can create a holistic educational approach that reinforces contextual experiential learning. This requires collaboration between academia and industries to ensure that educational content remains relevant. Ongoing dialogue about the skills and competencies that employers seek can guide adjustments to curricula to meet future demands. Institutions should prioritize developing programs that involve real-world problem-solving scenarios, allowing students to work collaboratively on projects that require critical thinking and creativity. The SCOR model provides a structured approach to managing supply chain operations in the design of the

contextual experiential learning in the higher education sector. By applying the SCOR model, educational services can become diverse and different kinds of working opportunities for enhancing learning and teaching processes across five key processes: Plan, Source, Make, Deliver, and Return may be arised.

As societies face unprecedented challenges, the role of education is to shape talents with competence and demonstrate their implementation skills as socially responsible citizens. Contextual experiential learning and abilities to forecast new demands provide a framework through which curriculum designer and assessment planners in higher education industry to contribute SDG 4.7 – knowledgge transfer. By fostering competencies in forecast patterns and new demand realization, educational institutions can equip students to navigate the complexities of the modern world.

References

Alimehmeti, G., Fia, M., & Paletta, A. (2024). The sustainability-to-employment pipeline: The impact of SDG-related curricula on graduates' employability. Studies in Higher Education, 49(12), 2328–2342. https://doi.org/10.1080/03075079.2023.2299328

Ambrose, M., Rivas, R., Rose, N., & Zubillaga, A. (2018). Halal demand in Hong Kong. Worcester Polytechnic Institute.

Baker, R. & Siemens, G. (2014). Educational data mining: A review of the state of the art and future directions. Journal of Educational Data Mining, 6(1), 1-6.

Carslon, E., Stigmar, M., Engberg, M, Falk, M., Stollenwerk, M. , Gudmundsson, P. & Enskar, K. (2022) "Students' Experiences of Participation in a Rsearch Team : Evaluation of a Research-based Teaching Activity in Higher Education, IJ-SoTL, Vol. 16. No.3.

Dwyer, C. A., Millett, C. M., & Payne, D. G. (2006). A culture of evidence: Postsecondary assessment and learning outcomes. Educational Testing Service. https://files.eric.ed.gov/fulltext/ED500004.pdf

Douglass, J. A., Thomson, G., & Zhao, C. M. (2012). The learning outcomes race: The value of self-reported gains in large research universities. Higher Education, 64(3), 317–335. https://doi.org/10.1007/s10734-011-9496-x

Financial Services and the Treasury Bureau. (2024). Roadmap on sustainability disclosure in Hong Kong: Ambition, assurance, enablement. Hong Kong Special Administrative Region Government. https://www.fstb.gov.hk/fsb/en/publication/report/docs/FSTB_Roadmap2024_eBooklet_EN.pdf

Hong Kong Exchanges and Clearing Limited (HKEX). (2024). Implementation guidance for climate disclosures under HKEX ESG reporting framework. HKEX. https://www.hkex.com.hk

Kornell, N., & Hausman, H. (2016). Do the best teachers get the best ratings? Frontiers in Psychology, 7, Article 570. https://doi.org/10.3389/fpsyg.2016.00570

Kinzie, J., Baker, G. R., Jankowski, N. A., & Provezis, S. (2012). Using assessment results: Promising practices of institutions that do it well. National Institute for Learning Outcomes Assessment. Retrieved from https://www.learningoutcomesassessment.org/wp-content/uploads/2019/02/UsingAssessmentResults.pdf

Kim, H. H., & Lalancette, D. (2013). Literature review on the value-added measurement in higher education. OECD. https://www.oktemvardar.com/articles/Value%20added%20in%20HE.2013.%20OECD.pdf

Feeney, Clare (2019). How to Change the World. Global Professional Publishing Ltd. UK.

Friedman, T. & Friedman, M. (2018). AI and the future workforce: A comprehensive guide to AI's impact on jobs. Harvard Business Review.

Hillage, J., & Pollard, E. (1998). Employability: Developing a framework for policy analysis. Institute for

Employment Studies.
International Journal of Talent Development and Capacity. (2023) The International
Centre for Innovation in Education. August 2023; December 2023 and Dec. 2024.
https://www.pef.uni-lj.si/wp-content/uploads/2024/08/IJTDC-11-12-2023-122-2024.pdf
https://www.oecd.org/en/about/projects/future-of-education-and-skills-2030.html
Li, F., Zhang, C., & Feng, Q. (2014). An empirical analysis of relationship between teacher's quality and student's achievement. In Proceedings of the 2014 International Conference on Education Reform and Modern Management (pp. 286–290). Atlantis Press. https://doi.org/10.2991/ermm-14.2014.78
Liu, O. L. (2009). Measuring value-added in higher education: conditions and caveats – results from using the Measure of Academic Proficiency and Progress (MAPPTM). Assessment & Evaluation in Higher Education, 36(1), 81–94. https://doi.org/10.1080/02602930903197917
https://www.tandfonline.com/doi/abs/10.1080/02602930903197917
Liu, O. L. (2011). Value-added assessment in higher education: A comparison of two methods. Higher Education, 61(4), 445–461. https://doi.org/10.1007/s10734-010-9340-8
Liu, O. L. (2011). Measuring value-added in higher education: Conditions and caveats – results from using the Measure of Academic Proficiency and Progress. Assessment & Evaluation in Higher Education, 36(1), 81–94. https://doi.org/10.1080/02602930903197917
Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. (2016). Intelligence unleashed: An argument for AI in education. Pearson Education.
McGrath, C. H., Guerin, B., Harte, E., Frearson, M., & Manville, C. (2015). Learning gain in higher education. RAND Corporation. https://doi.org/10.7249/RR996
McGrath, S., Alla-Mensah, J., & Langthaler, M. (2018). Skills for decent work, life and sustainable development: Vocational education and the sustainable development goals (ÖFSE Briefing Paper No. 18). Austrian Foundation for Development Research (ÖFSE). https://www.oefse.at/publikationen/briefing-papers/detail-briefing-paper/publication/show/Publication/Skills-for-decent-work-life-and-sustainable-development/
Patterson, A., Petal, P., & Yates, J. (2020). Partnerships for talent development:
Navigating the skills landscape. Public Policy Review.
Singh, V. K., Katal, A., Choudhury, T., & Imran, F. (2022). Enhancing teaching and learning through peer observation: An Indian case study. Education Research International, 2022, Article ID 7825178. https://doi.org/10.1155/2022/7825178
Steedle, J. T. (2010). Improving the reliability and interpretability of value-added scores for post-secondary institutional assessment programs. ERIC. https://files.eric.ed.gov/fulltext/ED509952.pdf

Steedle, J. T. (2012). Selecting value-added models for postsecondary institutional assessment. Assessment & Evaluation in Higher Education, 37(6), 637–652. https://doi.org/10.1080/02602938.2011.56327
Triansyah, F. A. (2023). Focus research on halal food marketing. Universitas Pendidikan Indonesia. https://hdl.handle.net/10419/182458
Türk, K. (2016). Performance management of academic staff and its effectiveness to teaching and research – Based on the example of Estonian universities. Trames, 20(1), 17–36. https://doi.org/10.3176/tr.2016.1.02
Woodcock, Jamie and Graham, Mark (2020). The GIG Economy. Polity Press, UK.
https://www.talent.gov.hk/browseOccupations?lang=en_US
https://hk.jobsdb.com/Hong-Kong-Christian-Service-jobs
https://www.unionchurchhk.org/events/
https://www.atlantis-press.com/proceedings/ermm-14/11285

https://www.researchgate.net/publication/358825624_Enhancing_Teaching_and_Learning_through_Peer_Observation_An_Indian_Case_Study