

SUB THEME 04

Transforming Education: Navigating Reforms in the Digital Age

Advancement of Teacher Professionalism in National Colleges of Education: Sri Lankan Experiences

C. J. H. Kasturi Arachchi¹ , G. G. O. Kasturi Arachchi² , C. Kasturi Arachchi³

^{1,2} *Business School, Sri Lanka Institute of Information Technology*

³ *Dept. of Postgraduate Studies, Lincoln University*

chathujhan@gmail.com

Abstract

Professional development is essential for academic staff to stay informed about emerging educational trends and improve their teaching skills. Opportunities such as workshops, seminars, conferences, mentorship programs, and collaborative projects foster continuous growth and community among educators. Emphasizing technology integration is crucial, equipping educators with digital skills to enhance student engagement and personalized learning. Additionally, research and innovation play a key role in professional development, encouraging academic staff to contribute to the educational community through research and publications.

For Sri Lanka's National Colleges of Education (NCoEs), promoting a research-oriented culture can help transform these institutions into centres of excellence. Needs assessments should guide the development of professional development programs, ensuring they are tailored to the specific needs of staff. Workshops, seminars, online courses, and evaluation mechanisms are necessary to assess the effectiveness of training programs.

Continued professional development should be supported by offering access to training, participation in conferences, and opportunities for advanced degrees. Scholars like Reitzug (2002) and Terry (1999) emphasize the importance of varied strategies to address skills gaps among educators. Ultimately, the goal of professional development in Sri Lanka's NCoEs is to empower educators, improve the quality of education, and contribute to national development.

This study aimed to investigate the professionalism of academic staff at NCoEs in Sri Lanka. It specifically sought to identify strategies for determining training needs, the opportunities available for professional development, and staff perceptions of these programs. Despite its importance, the nature of professional development in NCoEs has been underexplored, making this investigation significant for understanding and enhancing these efforts.

Literature Review

Professional development (PD) is essential for educators, administrators, and academic staff, offering a pathway to enhance knowledge, skills, and job-related attitudes. It can take various forms, such as training, workshops, conferences, or professional learning networks, and is crucial for career progression and improving organizational performance. Multiple strategies are often employed to address the lack of skills or knowledge, as noted by Terry (1999). The philosophical orientations guiding professional development include traditional management, craft, and reflective inquiry, influencing how programmes are organized (Daresh, 2002; Fenwick & Pierce, 2002).

PD initiatives are often shaped by resource availability and the specific needs of the education system, as seen in various countries (Baan et al., 2023; Arif et al., 2023). Educators are expected to actively participate in PD to stay updated with trends and apply new knowledge to enhance their practice. Organizations benefit by developing a more competent workforce (Numonjonov, 2020), while employees gain better career prospects, such as promotions or lateral transfers.

In the educational context, PD supports teachers, administrators, and educational staff in improving their knowledge, skills, and attitudes to enhance the quality of education. These programmes can be government-funded or supported by private organizations, delivered in diverse formats, such as one-day workshops, multi-week courses, or advanced degree programmes. PD can

be conducted in-person or online, during school hours or beyond, and led by internal educators or external consultants (Daniëls et al., 2019).

Effective PD, according to Guskey & Yoon (2009), requires a well-organized, structured, and purposeful time investment, focusing on content or pedagogy. In the past, PD focused mainly on knowledge expansion, but now there is a stronger emphasis on developing competencies and skills to address the rapidly changing educational landscape, particularly with advances in information technology. Quality education today demands high standards from educational leaders and educators, requiring ongoing PD efforts to meet the evolving needs of students.

Professional development plays a critical role in the success of educational institutions. By fostering continuous improvement in teaching quality and instructional strategies, PD helps educators stay aligned with contemporary educational practices, thereby contributing to better student outcomes. This is especially crucial in the face of global educational challenges and technological advancements, emphasizing the need for high-quality PD that aligns with the goals of educational institutions (Grogan & Andrews, 2002).

Methods and Methodology

This study employed a Convergent Parallel Mixed Method design, integrating both qualitative and quantitative data collection to explore the research problem. The use of mixed methods enhances the reliability and validity of the research by allowing methodological triangulation, which confirms the findings across different data sources (Yauch & Steudel, 2003). This approach is particularly valuable when addressing complex research questions that cannot be fully answered by one method alone, offering a more comprehensive understanding of the research problem (Creswell & Creswell, 2017).

The research incorporated both survey and case study strategies. The case study approach allowed for the investigation of real-life events in contemporary settings, providing a holistic view of participants' experiences

(Yin, 2009). Data collection methods included questionnaires, document surveys, and interviews, focusing on Presidents, Vice Presidents, and academic staff from the National Colleges of Education (NCoE), as well as education officers from the National Institute of Education (NIE) and the Ministry of Education (MoE) in Sri Lanka.

Participants were selected using both purposive and random sampling, ensuring a diverse representation of newly recruited and senior academic staff from NCoEs across different provinces, alongside education officers. The data was analyzed using thematic analysis for qualitative data (Aronson, 1994) and descriptive statistical techniques for quantitative data. The integration of both qualitative and quantitative analyses provided a richer and more nuanced understanding of the findings, aligned with the goals of Mixed Methods research.

Results and Discussion

This study revealed participants' perceptions of Professional Development (PD) programmes for NCoE lecturers, using a mean value scale (Strongly Agree = 4, Strongly Disagree = 1). The results indicated moderate agreement on the existence of these programmes (Mean=3.05) and their organization by the Ministry of Education (MoE) (Mean=2.89). However, participants raised concerns about the absence of a dedicated venue (Mean=3.76), the lack of a selection criterion (Mean=2.02), and the need for more systematic approaches (Mean=3.75).

Significant dissatisfaction was evident regarding the selection criteria for foreign training (Mean=1.83) and the fairness of these processes (Mean=1.32). Participants felt that PD programmes focused too much on theoretical knowledge (Mean=3.41), and there was strong agreement on the necessity of foreign training for lecturers (Mean=3.69). Junior lecturers showed more active participation (Mean=3.39) compared to senior lecturers (Mean=2.01). Despite this, participants felt that the expected outcomes of these programmes were not being fulfilled (Mean=1.78), and the quality standards, including time duration and content, needed improvement (Mean=1.47).

This study highlighted the need for more fairness, systematic planning, and alignment of PD programmes with current lecturer requirements to enhance their effectiveness. The participants expressed concerns about the absence of clear strategies for identifying training needs, which were often determined by available funding rather than actual needs. Other studies, such as those by Ma & Marion (2021), Antonopoulou et al. (2021), and Kilag et al. (2023), similarly emphasized the need for financial support for academics. Sparks (2002) revealed that many professional development programmes lacked coherence, and intellectual rigour, and failed to build on teachers' existing knowledge.

The consensus from participants highlighted frustration with the lack of systematic, proactive measures for training. Everard and Morris (1990) noted that continuous learning was necessary for teachers, as prior education alone was insufficient for a lifetime of teaching. The study found that the current approach to professional development in NCoEs lacked systematic planning and was often influenced by external factors such as funding, with minimal input from academic leadership. This resulted in generally negative perceptions of the programmes across different roles and experience levels, with senior lecturers and coordinators expressing the most dissatisfaction.

Despite the overall negative perceptions, participants commended the dedication of lecturers across various roles in implementing PD programmes, signalling a positive view of their involvement and commitment to professional development. However, it was evident that improvements were needed in both the structure and delivery of these programmes to ensure they met the specific needs of NCoE lecturers and fostered long-term professional growth.

Conclusions and Remarks

This study highlights the need for more proactive and organized efforts by higher authorities to address the training needs of academic staff at NCoEs more strategically. Participants expressed dissatisfaction with the current selection criteria and processes for Professional Development (PD)

programmes, emphasizing the need for a comprehensive evaluation and restructuring of these strategies to align with lecturers' expectations and programme goals.

A key concern is the distance between the training provided and the actual needs of lecturers, exacerbated by infrequent inquiries and reliance on external entities. Senior lecturers' lower participation rates also suggest a need for targeted strategies to increase their involvement, which is crucial for the success of these programmes.

This study highlighted widespread discontent with the programme design, venues, and instructional methods, signalling a need for reassessment to create a more engaging and effective professional development experience. Varying perceptions across different roles within NCoEs further indicate the necessity for tailored strategies to meet diverse expectations. Overall, the study calls for revisions in the programme structure to better cater to the specific needs and preferences of NCoE lecturers and improve satisfaction and outcomes.

Keywords: *Professional Development, Educators, Administrators, Academic Staff, National Colleges of Education, Continued Professional Development, Professionalism*

References

- Arif, S. A., Butler, L. M., Gettig, J. P., Purnell, M. C., Rosenberg, E., Truong, H. A., ... & Grundmann, O. (2023). Taking action towards equity, diversity, and inclusion in the pharmacy curriculum and continuing professional development. *American Journal of Pharmaceutical Education*, 87(2).
- Aronson, J. (1994). A pragmatic view of thematic analysis. *The qualitative report*, 2(1), 1-3.
- Aronson, J. (1995). A Pragmatic View of Thematic Analysis. *The Qualitative Report*, 2(1), 1-3. <https://doi.org/10.46743/2160-3715/1995.2069>
- Baan, J., Gaikhorst, L., & Volman, M. (2023). Professional development in inquiry-based working; the experiences of graduates from academic teacher education programmes. *European journal of teacher education*, 46(1), 114-133.
- Babbie, E., & Benaquisto, L. (2001). Qualitative field research. *The practice of social research*, 9, 298-300.

- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Fenwick, L. T., & Pierce, M. C. (2002). Professional Development of Principals. *ERIC Digest*.
- Hakim, C. (1987). *Research Design: Strategies and Choices in the Design of Social Research*, Contemporary Social Research Series 13. London: Allen and Unwin.
- Kasturiarachchi, C. (2019a). The pre-service training of education administrative officers: Experiences of education administrators in Sri Lanka. *International Journal of Research & Review* (www.ijrrjournal.com) Vol.6; Issue: 7; July 64-76, E-ISSN: 2349-9788; P-ISSN: 2454-2237
- Yin, R. K. (2009). *Case study research: Design and methods*: Sage Publications, Inc.

Enhancing Educational Outcomes: The Role of Instructional Leadership in Education Management in Sri Lanka

A. S. Thennakoon

Department of International Studies, University of Kelaniya
anjali_2023@kln.ac.lk

Abstract

Instructional leadership has emerged as a critical driver of educational outcomes, particularly in the context of Sri Lanka's educational system. In recent years, the role of instructional leaders primarily school principals and head-teachers has evolved beyond traditional boundaries, which were focused solely on curriculum development and direct classroom instruction. Instructional leadership is generally defined as the management of curriculum and instruction by a school principal. This concept emerged from research associated with the effective school movement of the 1980s, which highlighted the principal's role as crucial in running successful schools. Today, instructional leaders are also expected to engage in broader organizational management, encompassing tasks such as teacher recruitment, professional development, and resource allocation. This dual role presents a significant challenge: how can instructional leaders balance direct instructional support with strategic management responsibilities to optimize educational outcomes? This study aims to address this challenge by exploring the ways in which instructional leadership can enhance educational outcomes in Sri Lanka through an integrated approach that combines hands-on instructional support with effective organizational management.

Literature Review

Instructional leadership is widely acknowledged as a key factor in achieving successful educational outcomes. Over the past three decades, studies have consistently shown that effective school leadership is closely linked to positive school performance. As a result, there has been a growing focus on recruiting and preparing school leaders, especially principals, who

can serve as "instructional leaders." This emphasis on instructional leadership emerged from the effective school's movement of the 1970s and 1980s and has gained renewed attention due to increasing demands for school leaders to be accountable for student performance (Hallinger, 2005).

The literature on instructional leadership has traditionally centered around the direct influence of school leaders on teaching practices and student performance. Early studies, such as those by Hallinger and Murphy (1985), highlighted the principal's role in fostering high-quality teaching and learning environments. More recent research, however, has expanded this view, suggesting that effective instructional leadership also involves strategic organizational management (Leithwood et al., 2008). In the context of Sri Lanka, there is limited research on how school leaders can integrate these dual roles effectively. Local studies indicate that many principals struggle to balance instructional duties with broader administrative tasks (Nanayakkara, 2014). This gap in the literature underscores the need for further research into how instructional leadership can be adapted to the unique cultural and institutional context of Sri Lanka, where educational leaders must navigate complex social, economic, and political landscapes.

The definition of instructional leadership is widely debated, with traditional views emphasizing direct involvement in classroom activities, such as observing lessons and providing feedback to teachers and students. However, this hands-on approach may not be practical in today's complex and diverse educational settings, where it is unrealistic for school leaders to possess detailed knowledge across various subjects or to observe every classroom regularly.

A more contemporary perspective on instructional leadership focuses on broader organizational management. This approach includes hiring high-quality teachers, allocating resources effectively, and providing professional development opportunities. It recognizes the importance of creating an environment where teachers are supported and have the necessary resources to succeed. Instructional leaders should not only be directly involved in teaching

but also manage the educational environment to promote continuous improvement.

Modern instructional leaders must balance multiple roles, such as managing curriculum, assessments, teacher development, and resource allocation. They face challenges like resistance to change and conflicting initiatives, which require strong leadership skills and a collaborative approach that involves all stakeholders in the school community.

Methods and Methodology

This study utilizes a comprehensive literature review as its primary research method, drawing on both international and local studies to examine the role of instructional leadership in Sri Lanka. The review includes an analysis of empirical studies, theoretical frameworks, and case studies related to educational leadership. The methodology is designed to provide a holistic understanding of how effective instructional leaders balance direct classroom involvement with broader organizational responsibilities. By synthesizing findings from diverse sources, the study aims to identify key strategies that can be employed by instructional leaders in Sri Lanka to enhance both teaching quality and student outcomes. The analysis also considers the cultural, economic, and policy contexts that shape educational leadership practices in Sri Lanka.

Results and Discussion

What is Instructional Leadership?

A clear understanding of instructional leadership is essential for effective implementation in schools. Traditional school leadership roles—such as teacher evaluations, budgeting, scheduling, and facilities maintenance—must now be supplemented with a stronger focus on teaching and learning. Effective instructional leaders are those who are deeply engaged with curricular and instructional issues that directly impact student achievement (Cotton, 2003). Research by King (2002), Elmore (2000), and Spillane, Halverson, and Diamond (2000) suggests that the role of instructional

leadership extends beyond the school principal to include other key figures within the educational organization.

Key Players in Instructional Leadership

Instructional leadership involves multiple individuals, who contribute to the educational process, including:

- Central office personnel (such as superintendents and curriculum coordinators)
- Principals and assistant principals
- Instructional coaches

Key Elements of Instructional Leadership

- **Prioritization:** Effective instructional leadership consistently prioritizes teaching and learning. While school leaders must balance management duties with visionary planning, a significant portion of their efforts should focus on improving educational practices.
- **Scientifically Based Reading Research (SBRR):** Instructional leaders need to be knowledgeable about SBRR and effective reading instruction. This knowledge guides the selection and implementation of instructional materials and allows for effective monitoring. Participation in professional development is also crucial for keeping leaders informed and capable of assessing educational progress.
- **Alignment of Curriculum, Instruction, Assessments, and Standards:** Instructional leaders must ensure that the curriculum, instruction, and assessments are aligned with educational standards. This alignment is critical to student achievement, and continuous review and adjustments are necessary to maintain this coherence.
- **Data Analysis:** Effective leaders use multiple data sources to evaluate performance and guide decision-making. Central office staff use data to support principals, while principals and coaches use data to develop instructional strategies, professional development plans, and student interventions.

- Culture of Continuous Learning for Adults: Instructional leaders promote a culture of ongoing professional development, recognizing that effective instruction is a skill that can always be improved. They provide time for training and follow up with monitoring and support to sustain new learning initiatives.

The Principal's Role in Instructional Leadership

Principals are crucial to school improvement efforts, particularly in the context of accountability measures such as those outlined in the No Child Left Behind Act. Effective principals focus on instructional improvement by setting key educational goals, aligning curriculum and instruction with standards, assessing student progress, and monitoring the implementation of instructional changes. They also foster a culture of continuous improvement by facilitating professional development and working collaboratively with teachers to enhance instructional practices.

Principal Responsibilities:

- **Prioritize:** Place instructional improvement at the forefront of school activities and concentrate on key educational goals, such as enhancing reading instruction.
- **Align:** Ensure that the curriculum, instruction, and assessment practices are in line with educational standards. Encourage teacher collaboration to interpret standards, analyze student work, and refine instructional strategies.
- **Assess:** Lead the selection and use of appropriate assessment tools and ensure that data is effectively used to guide instructional decisions and improve student outcomes.
- **Monitor:** Actively oversee the implementation of instructional programs and ensure that data-driven instructional changes are executed and evaluated for effectiveness.
- **Learn:** Engage in continuous learning alongside teachers, attend professional development sessions, and provide constructive feedback to cultivate a culture of learning and improvement.

The Principal's Role in Instructional Leadership: Insights from Idaho's Reading First Program

The Idaho Reading First Program illustrates the vital role of principals in overcoming challenges to effective instructional leadership. Through leadership academies and peer collaboration, principals develop their instructional leadership skills. By focusing on early reading instruction, monitoring instructional practices, and aligning district policies with program goals, principals enhance their effectiveness and drive student achievement.

Coaches as Instructional Leaders

Instructional coaches are essential in supporting teachers by providing instructional guidance, assessment expertise, and professional development. They collaborate with teachers to analyze assessment data, develop effective lesson plans, and implement instructional strategies, thereby playing a critical role in the successful implementation of instructional programs and overall school improvement.

Leadership Behaviors Linked to Instructional Leadership

Inclusive leadership behaviors, such as empowerment, humility, courage, and accountability, are vital for fostering a sense of belonging and inclusion among school staff. Leaders who exhibit these behaviors create an environment that supports instructional improvement and promotes a culture of continuous learning.

Key Findings on Instructional Leadership in Sri Lanka

The analysis reveals that instructional leaders who actively engage in the classroom providing direct support, feedback, and mentoring to teachers tend to foster more effective teaching practices and improved student learning. Leaders who adopt a proactive approach to organizational management, such as prioritizing professional development and ensuring effective resource allocation, create environments that support sustained educational improvement (Robinson et al., 2008). In Sri Lanka, successful instructional leaders are those who integrate these dual roles, balancing instructional support with strategic management. This integrated approach enables leaders to create

a cohesive and supportive educational environment that fosters continuous improvement and high levels of student achievement.

Conclusion

The study concludes that instructional leadership in Sri Lanka must evolve beyond traditional practices to incorporate a more integrated approach that combines instructional support with strategic management. This holistic model enables educational leaders to optimize both teaching quality and school performance, creating environments where educational excellence can thrive. The findings suggest that by embracing this integrated approach, instructional leaders in Sri Lanka can more effectively navigate their dual roles, ultimately contributing to improved educational outcomes. Future research should focus on developing specific training programs and policy frameworks that support this integrated model of instructional leadership.

Keywords: *Assessment, Curriculum Alignment, Data Analysis, Instructional Coaching, Instructional Leadership, Professional Development, School Improvement, Teaching and Learning*

References

- Cotton, K. (2003). *Principals and Student Achievement: What the Research Says*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Elmore, R. F. (2000). *Building a New Structure for School Leadership*. Washington, DC: The Albert Shanker Institute.
- Hallinger, P. (2005). Instructional Leadership and the School Principal: A Passing Fancy that Refuses to Fade Away. *Leadership and Policy in Schools*, 4(3), 221-239.
- Nanayakkara, G. (2014). The Role of School Principals in Enhancing Student Achievement in Sri Lanka. *International Journal of Educational Development*, 34(1), 1-9.
- King, M. B. (2002). Professional Development to Promote Schoolwide Inquiry. *Teaching and Teacher Education*, 18(3), 243-257.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2000). Investigating School Leadership Practice: A Distributed Perspective. *Educational Researcher*, 30(3), 23-28.

Electronic Learning in Secondary School Education: Study Based on Batticaloa West Education Zone

Judith Harriet Francke¹, Christy Sajith²

¹*Nawaloka College of Higher Studies, ²Sri Lankan Navy
judithharriet3@gmail.com*

Abstract

This study aims to identify the factors affecting the intention to adapt Electronic Learning and the relationship between identified factors and Electronic Learning among secondary school students in Batticaloa West Education Zone, Sri Lanka. With the consideration of constructs such as Performance Expectancy, Effort Expectancy, Perceived Playfulness, Social Influence and Perceived Usefulness, the survey was done among 60 Secondary level school students in Batticaloa West Education Zone, Sri Lanka for the research. The model of the study was evaluated using the Unified Theory of Acceptance and Use of Technology (UTAUT) model. Smart PLS was used for the measurement model testing and structural model testing. The study showed the results as the factors such as Performance Expectancy, Effort Expectancy, Perceived Usefulness and Social Influence have positive and significant influence on Perceived Level of Intention to Use Electronic Learning. Unexpectedly the results also showed that the factor, Perceived Playfulness do not have positive and significant influence on Perceived Level of Intention to Use Electronic Learning. The findings of the study provide information to educational institutions such as schools and Educational zonal office about the factors that they should concentrate on when improving the use of Electronic Learning. The study did not examine the E- Learning Intention among the school students from other grades and other schools from the zone as well. Therefore, it is suggested to consider school students with various geographical locations for future research.

Keywords: *E-Learning; Effort Expectancy; Performance Expectancy; Perceived Usefulness; Social Influence*

Introduction to the Study

The rapid rise of electronic technology has significantly changed educational practices, especially in developing countries. Despite the widespread use of smartphones and other electronic devices among students, effectively integrating these devices into learning remains a challenge. Key obstacles include inadequate technological skills, unreliable internet connectivity, and security concerns, as noted in several studies (A Ngampornchai, 2016). While mobile devices offer great potential for enhanced learning due to their accessibility and functionality, many students find it difficult to fully utilize these benefits.

Research suggests that factors like motivation, self-efficacy, and perceived advantages such as the convenience of electronic learning can positively affect students' readiness to embrace these tools (R Pillai, 2020). However, traditional educational practices often obstruct the shift to electronic learning, leading to resistance among students who may prefer conventional methods. Additionally, cost remains a significant barrier, as many learners in developing regions struggle to afford devices or reliable internet access (Mehdipour, 2013).

To unlock the potential of electronic learning, it's essential to identify specific factors that influence Sri Lankan students' intentions to adopt these technologies. Understanding these influences can help develop strategies to boost engagement with electronic learning, ensuring it complements traditional education rather than merely serving as an alternative. Addressing these challenges is vital for creating an effective educational environment that maximizes technology's benefits.

Research Questions

1. What are the factors that affect the intention to adapt Electronic learning in secondary school education?
2. What is the relationship between the identified factors and the intention to adapt Electronic learning?

Literature Review

Electronic Technology

In the 21st century, electronic devices have become essential to everyday life, with the GSMA reporting approximately 5.1 billion unique subscribers worldwide and around 8.8 billion mobile connections globally. Despite their widespread use, many students in both developing and developed countries, including Sri Lanka, find it challenging to effectively incorporate electronic devices into their education (Kena, et al., 2016). Mobile phones are preferred for their affordability and portability, providing convenient features like texting and internet access. Notably, around 94% of people aged 18-34 send texts and 63% use mobile internet, underscoring the crucial role of mobile technology today (BR Pflughoeft, 2020).

Electronic Learning

Electronic Learning, defined as the ability to learn from electronic devices anytime and anywhere (Ozan, 2015), is influenced by connectivity and safety concerns. Research shows that electronic devices, particularly smartphones, enhance learning performance and student engagement, leading to improved outcomes. Electronic devices promote productivity and foster a collaborative learning environment. Despite these benefits, a survey revealed low interest among students in utilizing electronic technologies for e-evaluation in the Gulf region (S Malik, 2020).

Technology adaptation of users

Recent research highlights the need to adapt technology for educational use, transitioning from personal to learning tools (R Phillips, 2012). While some everyday technologies have entered education, the integration remains limited. Key factors influencing electronic learning adoption include hedonic motivation, self-efficacy, and learning autonomy, while barriers include traditional usage and image concerns (R Pillai, 2020). Models like the Technology Acceptance Model (TAM) and UTAUT help

explain users' acceptance of electronic learning, with young people viewing mobile phones as essential for social connection (Campbell, 2006).

Methods and Methodology

The Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM) are widely used to understand how perceptions influence technology acceptance. TAM, introduced by Davis (1989), adapts elements of TPB, emphasizing attitude and behavioral intention as predictors of acceptance (MM Alam, 2021). Key factors in TAM include Perceived Ease of use and Perceived Usefulness. The Unified Theory of Acceptance and Use of Technology (UTAUT) expand on this by identifying Performance Expectancy, Effort Expectancy and Social Influence as critical factors. However, both TAM and UTAUT overlook individual differences like age and gender, which can significantly impact behavioral intentions.

Design of the study

This study has used the quantitative research approach. Questionnaire was used as the research method to collect data for the research study. This study was conducted in the premises of National schools in Batticaloa West Education Zone, Sri Lanka by issuing the paper-based offline questionnaires. The time of the study is cross sectional design which entails the collection of data in more than one case and at a single point in time in order to collect a body of quantitative data in collection with the variables which are then inspected to detect patterns of association. In the study unit of analysis will be individuals who are studying at the Secondary Level at the schools in Batticaloa West Education Zone, Sri Lanka.

The collected data was analyzed using SmartPLS software. The researcher intends to use descriptive statistics (frequency counts, percentages and mean values) to evaluate respondent characteristics. The relationship between identified factors and mobile technology adoption into school education was analyzed using inferential statistics (Correlation analysis and

regression analysis). Further, the reliability of the measurement scales will be determined using Cronbach alpha coefficient.

Population and Sampling methods

The population in this research is all the Secondary Level Students, studying in grade ten and eleven of Batticaloa West Education Zone, Sri Lanka. A stratified sampling method will be utilized in this study. The total sample size of 60 students is randomly selected from two national schools in Batticaloa West Education Zone, Sri Lanka.

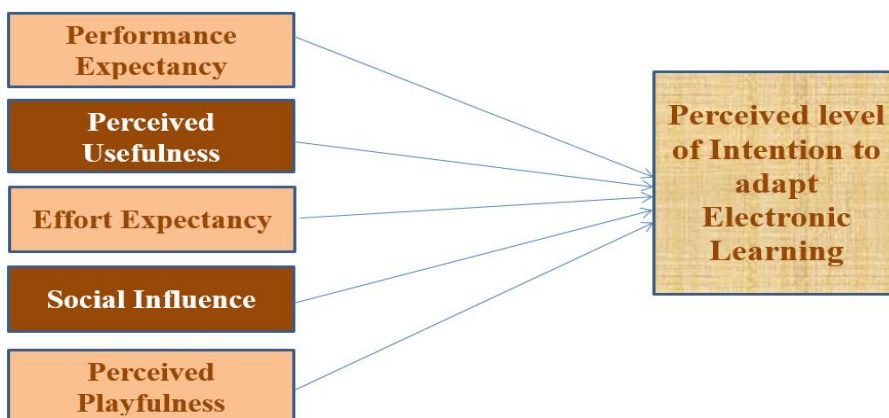


Figure 1: Conceptual Model
 (Source: Author Developed 2024)

Results and Discussion

	Frequency	Percentage
Gender		
Male	38	63%
Female	22	37%
School		
BT BW Unnichchai 8th Mile Post		
GTMS		
BT/BW/Irudducholaimadu Vishnu	30	50%
Vidyalayam	30	50%
Grade of study		
Grade 10		
Grade 11	31	52%
	29	48%

Table 1 : Descriptive Analysis (Source: Author Developed 2024)

Variables	Cronbach's Alpha	Composite Reliability
Performance Expectancy	0.698	0.832
Effort Expectancy	0.637	0.803
Perceived level of Intention to adapt Electronic Learning	0.634	0.836
Perceived Usefulness	0.691	0.823
Social Influence	0.619	0.838
Perceived Playfulness	0.512	0.797

Table 2 : Internal consistency reliability (Source: Author Developed 2024)

Variables	Average Variance Extracted (AVE)
Performance Expectancy	0.626
Effort Expectancy	0.621
Perceived level of Intention to adapt Electronic Learning	0.722
Perceived Usefulness	0.665
Social Influence	0.638
Perceived Playfulness	1.000

Table 3 : Convergent validity (Source: Author Developed 2024)

	R Square	R Square Adjusted
Perceived level of Intention to adapt Electronic Learning	0.182	0.158

Table 4 : Coefficient of Determination (R²) (Source: Author Developed 2024)

Hypothesis	Relationship	Path Coefficient	T Statistics	P value	Supported/ Not Supported
H1	PE -> PIEL	0.226	2.690	0.007	Supported
H2	EE -> PIEL	0.245	2.638	0.009	Supported
H3	PU -> PIEL	0.176	2.205	0.028	Supported
H4	SI -> PIEL	0.264	2.658	0.008	Supported
H5	PP-> PIEL	0.059	0.908	0.440	Not Supported

Table 5 : Hypothesis Testing (Source: Author Developed 2024)

Conclusions and Remarks

The primary objective of this study was to understand the factors influencing the intention to adopt Electronic Learning in secondary school education. Findings indicate that Performance Expectancy, Effort Expectancy, Perceived Usefulness and Social Influence positively impact students' perceived intention to use Electronic Learning, while Perceived Playfulness does not show significant positive relationship.

The implications suggest that educational institutions should promote Electronic Learning to enhance student engagement and capitalize on technological applications. However, the study is limited to Secondary level students in Batticaloa West Education Zone, necessitating further research across other grades and regions to gain a comprehensive understanding of Electronic Learning adoption in Sri Lanka.

References

- A Ngampornchai, J. A. (2016). Students' acceptance and readiness for E-learning in Northeastern Thailand. *Journal of Educational Technology* .
- BR Pflughoeft, I. S. (2020). Social media as E-participation: Can a multiple hierarchy stratification perspective predict public interest? *Government Information Quarterly*.
- Campbell, A. (2006). Introducing Enquiry-based E-learning to Senior Academic Administrators in Chinese Universities. *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*.
- Kena, G., Hussar, W., McFarland, J., de Brey, C., Musu-Gillette, L., Wang, X., et al. (2016). The Condition of Education 2016. . *National Center for Education Statistics*.

- Mehdipour, Y. (2013). The University Faculties' Attitude towards the Implementation of the Virtual Education System. *academia.edu*.
- MM Alam, N. A. (2021). E-learning services to achieve sustainable learning and academic performance: An empirical study. *Sustainability* .
- Ozan, O. (2015). Challenges in analyzing unstructured learner generated qualitative big data. *14th European Conference on e-Learning*.
- R Phillips, C. M. (2012). *Evaluating e-learning: Guiding research and practice*. taylorfrancis.com.
- R Pillai, B. S. (2020). An empirical study on the online learning experience of MOOCs: Indian students' perspective. *International Journal of Educational Management*.
- S Malik, M. A.-E. (2020). Comparison of E-learning, M-learning and game-based learning in programming education—a gendered analysis. *International Journal of Emerging Technology in Learning*.

Transforming Sri Lankan Education: The Role of Teachers in Human Rights Advocacy in the Digital Age

M. A. S. P. Manchanayaka

*Department of Languages, Saegis Campus
susilmanchanayaka@yahoo.com*

Abstract

The digital age presents opportunities and challenges for education systems worldwide. In Sri Lanka, teachers play a crucial role in shaping the minds of future generations. This research investigated how teachers can incorporate technology and digital platforms to promote human rights education. By integrating human rights concepts into the curriculum and using online resources, teachers can empower students to become active citizens aware of their rights and duties. The study explored teachers' challenges in implementing human rights education in a digital context, including limited access to technology, lack of training, and resistance from conservative stakeholders. This paper underscores the potential benefits of such initiatives, such as increased student engagement, improved critical thinking skills, and a more inclusive and just society. The research proposes a framework for teacher training and support to address these challenges and maximize the potential of digital technology. The framework includes developing online resources, workshops, and mentorship programs to effectively equip teachers with the necessary skills to integrate human rights education into their classrooms.

Keywords: *Advocacy, digital, education, human rights, teachers*

Introduction

The digital age has transformed communication, information-sharing, and education, with significant implications for Sri Lanka. As students increasingly rely on digital technologies, education systems must adapt to the opportunities and challenges of this shift. Human rights education is vital, particularly in Sri Lanka's context of conflict and inequality, and teachers play

a crucial role in promoting this through digital tools. This research explores how teachers can use digital technologies to enhance human rights education, empowering students to advocate for human rights. Despite challenges such as social dynamics and inequality, equipping teachers with digital literacy skills is crucial for fostering critical thinking and social justice, helping shape a more just and equitable future for Sri Lanka.

Review of literature

Digital technology is sine qua non in transforming education in Sri Lanka by providing new platforms for teachers to engage in human rights advocacy. Alemán de la Garza et al. (2019) emphasize the potential of digital tools to foster quality education, highlighting how technology can revolutionize pedagogy by offering more inclusive and interactive learning experiences. This shift is crucial for integrating human rights advocacy into classrooms, allowing teachers to introduce global human rights concepts and local issues effectively. Gamage and Halpin (2007) further support this notion, discussing how the "e-Sri Lanka" initiative aimed to bridge the digital divide, providing rural and underprivileged students with access to digital tools that can enhance general education and specific human rights advocacy efforts.

Teachers can shape the nation's future in post-conflict Sri Lanka by promoting *peace and human rights through education*. Bentreovato and Nissanka (2018) explore how civics textbooks in Sri Lanka often reflect tensions between global human rights discourse and local values. They argue that teachers are critical in navigating these tensions to present a balanced view of peace and human rights in classrooms. Similarly, Cunningham and Ladd (2018) examine the role of the school curriculum in peacebuilding, asserting that teachers must adopt innovative approaches to teach human rights and peace effectively. This highlights the significant responsibility of educators in fostering a generation that values human rights and social justice, especially in a digital era where information is readily accessible.

Teachers are positioned as *key change agents* in transforming education and advocating for human rights in Sri Lanka. Herath (2015) argues

that Sri Lankan teachers act as transformative intellectuals in post-conflict reconciliation, particularly language teachers. By integrating human rights into their curricula, they actively contribute to rebuilding social cohesion and fostering student understanding. Moreover, Hummel (2024) discusses the broader impact of teachers in Cambodia and Sri Lanka, focusing on their role in improving the quality of teaching and learning in the 21st century. This work emphasizes the need for teachers to develop digital literacy skills to effectively engage with modern educational tools and practices, reinforcing their role as advocates for human rights and social justice.

Educational reforms in Sri Lanka must address integrating digital technology and human rights education to prepare students for a more equitable and just society. Lim et al. (2020) provide insights into how ICT can improve access to quality education in the global south, using Sri Lanka as a case study. They argue that while ICT can bridge gaps in education, teachers need the necessary training and support to use these tools for promoting human rights and inclusivity. Hummel, Aldrian, and Sheehan (2024) extend this discussion by exploring how cultural factors and digital transformation influence educational practices in Sri Lanka, underscoring the importance of context-sensitive reforms that empower teachers to use technology for human rights advocacy.

Education for resilience is critical to post-conflict recovery in Sri Lanka, with *human rights education* playing a central role. Kovinthan Levi (2019) discusses how incremental transformations in education contribute to building resilience in students, particularly in post-war contexts. By incorporating human rights into everyday learning, teachers help students develop a deeper understanding of their rights and responsibilities, enabling them to contribute positively to society. Wijetunge and Alahakoon (2009) also highlight the importance of information literacy in empowering students, suggesting that teachers can use digital tools to enhance student's awareness of human rights and civic responsibilities, further contributing to social resilience.

Methods and materials

This study involved teachers from state schools in Sri Lanka, selected using a convenient sampling technique. The participants, aged between 29 and 52 years, all hold a degree in education or related fields. To collect data, I conducted semi-structured interviews with the participants. The interviews were primarily in English, with explanations provided in Sinhala when necessary to ensure clarity and accuracy. Additionally, I consulted relevant policy documents to understand the framework guiding education reforms and human rights advocacy in Sri Lankan schools.

The gathered data were analyzed thematically. This method allowed identifying, organizing, and interpreting key patterns and themes from the interviews. I categorized the data into several themes, including the role of teachers in human rights advocacy, the use of digital tools in education, and the challenges teachers face in integrating human rights education into their teaching practices. The analysis also considered the influence of policy frameworks on teachers' ability to advocate for human rights in the digital age. All participants provided informed consent (verbally) before participating in the study. I ensured confidentiality by anonymizing participant data and securely storing the collected information.

Discussion

Digital tools have proven powerful in enhancing teachers' ability to engage students effectively with human rights concepts. These tools foster interactive learning environments where students can explore and critically analyze social justice issues. However, access to digital education remains unequal, particularly in rural areas, limiting the reach of human rights advocacy in education. This digital divide raises concerns about inclusivity and equity, especially when current educational policies in Sri Lanka lack sufficient support for systematically incorporating human rights education.

Moreover, teachers require further training in digital literacy to integrate human rights education into their curricula. The challenge of bridging global human rights discourses with local realities adds complexity to their

role. Despite these challenges, students are increasingly learning about human rights topics through digital platforms. Teachers, especially in post-conflict Sri Lanka, view themselves as vital advocates for human rights, using education as a tool for reconciliation and peacebuilding.

Human rights education, supported by digital technologies, holds significant potential for fostering inclusivity and social justice. However, more equitable access to digital tools and resources is needed nationwide to maximize this potential. Strengthening policy frameworks and providing better teacher training can ensure a broader and more effective integration of human rights education into the Sri Lankan educational system.

Results

Digital tools significantly enhanced teachers' ability to engage students with human rights concepts, allowing for more interactive and dynamic lessons. These tools also have provided opportunities for more inclusive education, particularly by reaching diverse student groups. However, access to digital resources remained unequal across socio-economic groups, with rural areas particularly affected by limited access to technology. This disparity hindered the integration of human rights education in many parts of the country.

Despite the potential of digital platforms, existing educational policies did not adequately support the curriculum's systematic inclusion of human rights advocacy. Teachers expressed the need for more training in digital literacy to incorporate human rights education into their teaching effectively. They also highlighted the challenge of bridging global human rights discourses with the local realities faced by their students.

Nevertheless, students engaged more actively with human rights topics through digital platforms and online discussions, showing increased interest and participation. Teachers viewed themselves as advocates for human rights in post-conflict Sri Lanka, using education to promote reconciliation among students from different backgrounds.

Conclusion

Digital tools enhance teachers' ability to engage students with human rights concepts, but unequal access to digital education, especially in rural areas, limits their reach. Educational policies lack sufficient support for human rights education, and teachers need more digital literacy training to integrate it effectively.

References

- Alemán de la Garza, L., Anichini, A., Antal, P., Beaune, A., Crompton, H. and Tsinakos, A., 2019. Rethinking pedagogy: Exploring the potential of digital technology in achieving quality education.
- Bentrovato, D. and Nissanka, M., 2018. Teaching peace in the midst of civil war: Tensions between global and local discourses in Sri Lankan civics textbooks. *Global Change, Peace & Security*, 30(3), pp.353-372.
- Cunningham, J. and Ladd, S., 2018. The role of school curriculum in sustainable peacebuilding: The case of Sri Lanka. *Research in Comparative and International Education*, 13(4), pp.570-592.
- Gamage, P. and Halpin, E.F., 2007. E-Sri Lanka: bridging the digital divide. *The Electronic Library*, 25(6), pp.693-710.
- Herath, S., 2015. Teachers as transformative intellectuals in post-conflict reconciliation: A study of Sri Lankan language teachers' identities, experiences and perceptions. University of Toronto (Canada).
- Hummel, S. ed., 2024. *Empowering Education in Cambodia and Sri Lanka: Quality Improvement in Teaching and Learning in the 21st Century*. Springer Fachmedien Wiesbaden, Imprint: Springer VS.
- Hummel, S., Aldrian, S. and Sheehan, B., 2024. Culture, Education and Digital Transformation in Sri Lanka. In *Empowering Education in Cambodia and Sri Lanka: Quality Improvement in Teaching and Learning in the 21st Century* (pp. 9-29). Wiesbaden: Springer Fachmedien Wiesbaden.
- Kovinthan Levi, T., 2019. Incremental transformations: Education for resiliency in post-war Sri Lanka. *Education Sciences*, 9(1), p.11.
- Lim, C.P., Ra, S., Chin, B. and Wang, T., 2020. Information and communication technologies (ICT) for access to quality education in the global south: A case study of Sri Lanka. *Education and Information Technologies*, 25(4), pp.2447-2462.
- Wijetunge, P. and Alahakoon, U. P., 2009. Empowering 8: The Information Literacy model developed in Sri Lanka to underpin the changing education paradigms of Sri Lanka. *Sri Lankan Journal of Librarianship and Information Management*, 1 (1).

Transnational Education in Non-State Higher Educational institutes in Sri Lanka: Challenges and Opportunities

V. K. Kurukulaarachchi

Department of Education, CINEC Campus
verokuru@gmail.com

Abstract

Higher education is changing constantly, facing new opportunities and challenges in 21st century education. Globalisation and internationalisation of education offer pros and cons for all the stakeholders involved in the education or learning process. Transnational education (TNE) is an education arrangement in which students in one country receive courses or programmes from an educational institution situated in another country. Non state higher education institutes (NSHEIs) in Sri Lanka conduct both the Ministry of Education approved degree programmes and affiliated foreign degree and diploma programmes which provide many opportunities despite the obstacles. Sri Lanka is the second largest TNE enrolment country worldwide. However, it appeared that very little research has been conducted in this area. Hence the objective of the study is to explore the opportunities and challenges in transnational education in non-state higher education institutes in Sri Lanka. The methodology of the study is a systematic review of literature using an archival method, reviewing the accredited articles published in the Google Scholar, Tylor and Frances, and Emerald databases. Reviewing sources identified the themes, specifically opportunities and challenges in transnational education in Sri Lanka and current trends and future directions. Some of the opportunities in TNE are recognized as international collaborations, curriculum design and development, academic mobility, capacity building and training opportunities, and technological development; however, some of the challenges are also highlighted, namely regulatory barriers, quality assurance concerns, cultural and institutional pressures, and resistance. The study concludes emphasizing the significance of transnational education while also

underscoring the challenges, demands, and pressures that should not be overlooked.

Keywords: *Higher education, non-state higher education institutes in Sri Lanka, opportunities and challenges, transnational education*

Introduction

The concept of transnational education (TNE), which is defined as the movement of educational providers and programmes between nations, has undergone significant expansion in the past ten years (Knight, 2015). There are new players on the scene, new alliances, new delivery methods, and new rules. As a result, TNE terms have proliferated, and their usage has caused widespread confusion. TNE occurs in private, cross-nationally organized educational settings (non-state, non-governmental, profit, or non-profit) where individuals come together and work towards acquiring or passing on knowledge (Adick 2018). The most crucial requirements of the TNE is included in this simplified definition. Hence the goal of education (in whatever formal, informal, or other format as illustrated above) must be the interaction, the educational space's ultimate ownership and accountability is 'private' (nonstate, non-governmental, for profit or non-profit), however, this does not mean that it cannot interact with other actors, including national or international (intergovernmental) agencies and the interaction must occur pluri-locally across national borders, that is, movement of people, programs, educational institutions, and artefacts across borders (Adick, 2018). Sri Lanka understands the importance of TNE and the need to work with multiple stakeholders as a result of the internationalization and globalization of education.

Problem statement

Due to economic liberalization in the late 1970s and the state sector's inability to meet the nation's increasing demand for higher education, Sri Lanka became a hub for the development of non-state higher education, particularly TNE partnerships (British Council, 2023). During 2022–2023, Sri

Lanka accounted for 10% of all UK TNE enrolments worldwide, making it the second largest country for TNE enrolments. Of the ten host countries for UK TNE, it had the fastest rate of growth. However, according to the research (Cader , Mok and Tan, 2024) we can determine that remarkably little research has been done on the administration, operations, quality assurance framework, and partnership development of TNE in Sri Lanka, despite the country's importance and size as a partner to the UK. Hence, against this backdrop, the research question of the study is

What are the opportunities and challenges in transnational education in non-state higher education institutes in Sri Lanka?

The objective of the study is to explore the opportunities and challenges in transnational education in non-state higher education institutes in Sri Lanka

Literature Review

Transnational Education

Higher education is changing to meet the challenges of the twenty-first century, and one of the main factors influencing this change is internationalization. Cross-border, or transnational, education is one extremely significant and contentious facet of internationalization. The extent to which higher education is expanding internationally to provide degrees and programs abroad has undergone a significant transformation since the early 2000s (Knight and Liu, 2016). In the field of education, transnational education is a recent and ongoing development. One should consider it a useful collection of educational resources. Everyone involved in higher education will find that it raises significant and all-encompassing issues. There may be local, regional, national, and international repercussions from the difficulties involved in transnational education. According to Hussain (2007), a coordinated series of global reactions in the form of alliances result from this. There are many potential academic benefits associated with this extraordinary rise in transnational education, namely enhanced access, program diversity, intercultural skill and understanding development, collaborative research,

curriculum innovation, and capacity building, in addition to economic, sociocultural, and political advantages. Unforeseen consequences and obstacles are present at the same time. These can include the standardization or homogenization of academic programs, the profit motive, brain drain, unequal partnerships, low-quality and rogue providers, lack of qualification recognition, and excessive use of English. Knight and Liu (2016) stated thus, a thorough analysis of the literature must take into account the various stakeholders, delivery methods, kinds of partnerships, justifications, effects, and difficulties associated with cross-border higher education or transnational education.

Non-state higher education institutes in Sri Lanka

Although they are subject to government regulations and may receive public student loans, non-state higher education institutes (NSHEIs) are clearly not regulated by the state. Due to the intense competition among Advanced Level (A/L) students and the limited number of placements, gaining into a state university has become increasingly challenging. As a result, Kelegama (2017) claimed that additional private educational institutions must step up to close the gap. As a result, NSHEIs have proliferated in the higher education sector. There is a system in place at many NSHEIs in Sri Lanka for dealing with students who are denied admission to state universities. The Companies Act No. 07 of 2007 (also known as the BOI Act No. 16 of 1992) allowed sixteen private HEIs to register, and those HEIs were designated as NSHEIs in 2015. Twenty-four NSHEIs are now registered with the MOE in 2021, an increase from the previous year. In addition, according to Kelegama (2017), the Minister may designate any institution as a 'degree awarding institute,' subject to the fulfilment of certain requirements, by means of a 'Degree Awarding Institute Order, as provided by Section 25A of the Act. Due to the need for the institutes to obtain a competitive edge, the number of NSHEIs is growing, and competition among these institutes is also rising. Currently, NSHEIs offer not only Ministry of Education (MOE) approved University Grants Commission (UGC) recognized programmes but also affiliated

programmes with other foreign universities where transnational education may occur.

Methods and Methodology

This study used an archival method to conduct a structured literature review, reviewing accredited articles published in selected three databases, namely, Google Scholar, Taylor & Francis, and Emerald. The articles that made up the search results were written in English within the last ten years. The reference lists of a few pertinent articles were manually reviewed in addition to the aforementioned database searches, which resulted in the inclusion of a few additional articles in the study.

The researcher has observed distinct search strategies concerning distinct terms, specifically transnational education, transnational education in Sri Lanka, and transnational education in non-state higher education in Sri Lanka. Boolean operators AND and OR have been considered for further narrow and broad searches. The Google Scholar database was the first place to search, then Taylor & Francis and Emerald. The terms "transnational education," "transnational education in Sri Lanka," and "transnational education" are being searched. Finally selected articles are 34, 6, and 24 from databases Google Scholar, Taylor & Francis and Emerald, respectively.

Results and discussion

Themes identified when archiving previous studies, and these themes are opportunities in transnational education in Sri Lanka, challenges in transnational education in Sri Lanka, current trends, and future directions. International collaborations, curriculum design and development, academic mobility, capacity building and training opportunities, and technological development were discussed against the opportunities in transnational education in Sri Lanka. Further challenges in transnational education in Sri Lanka are identified under a few themes, namely regulatory barriers, quality assurance concerns, cultural and institutional pressures and resistance, financial constraints, student perceptions, and technological and infrastructural issues. Emerging trends in transnational education were also discussed under

the partnership with institutes, sharing resources, student mobility, and preparing students for the world of work. Literature search explores that according to De Silva & Jayathilaka (2022), one of the main features that attracts interest from potential students is the affiliation of private organizations with respectable international universities. However, because the institution must pass a stringent quality inspection and then maintain its standards, quality is crucial when working with these respectable international universities. The institute needs to ensure that its graduates are on par with those of students studying abroad. On the other hand, those opposed to the increasing attention being paid to for-profit, private institutions, especially those associated with foreign universities, claim that these institutions exploit Sri Lankan students and provide inferior services because they are affiliated with less developed universities and are not highly regarded internationally.

Conclusion

A thorough analysis of the literature was conducted to determine which perspective areas in non-state higher education in Sri Lanka had a balanced use of transnational education, as well as the opportunities and challenges that needed to be overcome to make a bigger contribution to the anticipated research areas. Hence, the conclusion of the study emphasizes the value of transnational education while also pointing out that there are obstacles and demands that should not be disregarded.

References

- Adick, C. (2018). Transnational education in schools, universities, and beyond: Definitions and research areas. *Transnational Social Review*, 8(2), p.124–138. doi:<https://doi.org/10.1080/21931674.2018.1463057>.
- British Council (2023). [online] British Council.: <https://opportunitiesinsight.britishcouncil.org/sites/siem/files/field/file/news/S-ri%20Lanka%20National%20Conference%20on%20TNE.pdf>.
- Cader, I., Mok, S. and Tan, S. (2024). *Transnational Education in Sri Lanka: Operational and quality assurance landscape*. [online] British Council, British Council, pp.1–47.:https://www.britishcouncil.lk/sites/default/files/sri_lanka_tne_report_august_2024.pdf.

- De Silva, C.R. and Jayathilake, G.K. (2022). *Humanities and Social Sciences Education in Sri Lankan universities - Past, Present and Future*. University Grants Commission, Sri Lanka, pp.29–46.
- Hussain, I. (2007). TRANSNATIONAL EDUCATION: Concept and Methods. *Turkish Online Journal of Distance Education*, [online] (8). Available at: <https://files.eric.ed.gov/fulltext/ED494810.pdf>.
- Kelegama, S. (2017). *Non-State actors in higher education in Sri Lanka: Issues and challenges* / *Daily FT*. [online] www.ft.lk. Available at: <https://www.ft.lk/Opinion-and-Issues/non-state-actors-in-higher-education-in-sri-lanka-issues-and-challenges/14-601900>.
- Knight, J. and Liu, Q. (2016). Cross border and Transnational Higher Education. *Oxford Bibliographies*, pp.1-20. doi:<https://doi.org/10.1093/OBO/9780199756810%2C%AD0176>.
- Knight, J. (2015). Transnational Education Remodeled. *Journal of Studies in International Education*, 20(1), pp.34-47. doi:<https://doi.org/10.1177/1028315315602927>.

Households' Preferences for Private Tuition Attributes in Jaffna Municipal Area, Sri Lanka

S. Vanaiya¹, S. Sivashankar², K. Sooriyakumar³, and S. Sarujan⁴

*Department of Agricultural Economics, University of Jaffna
ssivashakar@univ.jfn.a.lk*

Abstract

In Sri Lanka, there has been growing competition for university admission, and due to this, private tuition plays a vital role in many students' educational journeys. This study investigates households' preferences for private tuition attributes and analyzes the socio-economic and demographic factors that influence private tuition attributes in the Jaffna Municipal Area, Sri Lanka. This study considered attributes such as teachers' performance, teaching materials, exam methods, zoom classes, paper classes, and monthly payments to analyze the households' preferences. For this study, 300 Households of A/L students were randomly selected from the Jaffna Municipal Area, and data were collected using a structured questionnaire. A discrete choice experiment was employed, and a random parameter logit model was used to estimate the households' preferences for private tuition attributes. The findings of this study reveal that households are willing to pay more for paper classes (LKR 5397), followed by 75% improvements in teachers' performance (LKR 3894), teaching materials (LKR 2217), weekly exams (LKR 1383), and zoom classes (LKR 665). Also, a 50% improvement in teachers' performance and monthly exams are less preferred. Notably, respondents' education and age significantly influence their choice. The findings of this study would be helpful to policymakers in improving the Sri Lankan education system.

Keywords: *Discrete choice experiment, Government school, Private tuition, Random parameter logit model, Willingness to pay*

Introduction

The education system plays a pivotal role in ensuring the development and strengthening of social, cultural, historical, and integral development (Alawattagam, 2020). The education system is also called the back born of the society. Sri Lanka is one of the few countries in the world offering free education from grade one to university (Pallegedara, 2011). There has been an increasing competition among students for university admissions. Because of this reason, currently, in Sri Lanka, private tuition is a vital component of the current education system, notably in critical exams like G.C.E. Advanced Level (A/L). Even though the government facilitates free education for everyone in Sri Lanka, households choose private tuition for their children to enhance their performance (Cole, 2017). The growing reliance on the private education system causes challenges for the public education system. Hence, it is vital to understand which attributes households prefer and value the most. In the Sri Lankan context, literature on households' preferences for various attributes of public and private education is scarce. Therefore, this study aims to investigate households' preferences for various attributes of private tuition and government schools and to analyze the influence of socioeconomic characteristics on their preferences. The findings of this study will provide valuable insights that can be used to improve the public education system.

Materials and Methodology

Theoretical framework

This study uses the choice experiment approach to elicit the households' preference for various attributes. The random utility theory (McFadden, 1973) and the characteristics theory of value (Lancaster, 1966) are the foundations of the choice experiment modelling framework. Therefore, the utility (Unit) for the alternative i can be written as: $Unit = V_{nit} + nit$ (1)

According to RUM, the utility is modelled with two components such as deterministic component (observable component) V_{nit} and a random component (nit) representing an error term. $V_{nit} = \theta ASC + \sum X_m \beta_m$ (2)

where θ is the coefficient of ASC, and β_m denotes the parameter of each attribute.

The marginal WTP for attribute k will be calculated by the following formula (Lusk, Roosen and Fox, 2003): $WTP_k = 2k_{cost}$ (3)

Attributes and Levels

The attributes and levels for this study were selected based on literature review and discussions with experts. We chose six attributes for this study: teacher performance, teaching materials, exam method, zoom class, paper class, and monthly payment. Table A1 (appendix) shows the attributes along with their corresponding levels. During the survey, the attributes and levels were clearly explained to respondents. To avoid the hypothetical bias in this choice experiment survey, we reminded respondents of the status quo option during the survey. An efficient design was utilized to generate the choice set. A pilot study with 30 respondents was conducted to estimate the prior values for developing the efficient design. A basic model (Multinomial logit model) was used to estimate the prior values. Ngene software was employed to develop the efficient design, and 8 different choice sets were employed in the final survey.

Study area and data collection

Multi-stage sampling technique was adopted in this study. In the first stage, the Jaffna DS division and Nallur DS division were purposively selected as they comprise a major part of the Jaffna Municipal area comprised these two DS divisions. In the next stage, from the Jaffna and Nallur DS divisions, 28 GN divisions were randomly selected. A total of 300 samples were collected from 26 GN divisions randomly.

Results and Discussions

Estimation results of the CLM and RPL models

We present the empirical results of CLM and RPL in Table 1. CLM and RPL-1 models were estimated without socioeconomic and demographic characteristics, while the RPL-2 model was estimated with accounting for socioeconomic and demographic characteristics in the utility function. The CLM relies on the assumption of Independence of Irrelevant Alternative (IIA); therefore, we developed RPL models with and without considering

socioeconomic and demographic characteristics. The estimated standard deviations in RPL models for teachers' performance (75%), monthly exams, and Zoom classes were statistically significant, indicating the existence of preference heterogeneity.

Willingness-To-Pay estimates

The marginal WTP estimates for different attribute levels are presented in Table 2. The estimates of marginal WTP indicate that households are willing to pay more for paper classes than other attributes. This finding implies that households in the Jaffna municipal area are willing to pay LKR 5397.33 more for private tuition that includes paper classes than government schools where they do not conduct paper classes. Following paper class attributes, households are willing to pay more of LKR 3894.04 for 75% higher teachers' performance compared to usual performance in government schools. At the same time, the findings reveal that households have a negative WTP for 50% higher teachers' performance. This implies that households are unwilling to pay for a 50% higher teacher performance improvement. The estimated WTP for teaching materials and weekly exams were LKR 2,217.06 and LKR 1,383.35, respectively. This shows that households are willing to pay more for teaching materials provided in private tuition.

Variable	CLM	RPL	
		RPL-1	RPL-2
Teacher performance (75%)	0.562*** (0.053)	0.593*** (0.057)	0.597*** (0.058)
Teacher performance (50%)	-0.359*** (0.050)	0.374*** (0.051)	-0.376*** (0.052)
Teaching materials	0.312*** (0.031)	0.339*** (0.034)	0.340*** (0.034)
Weekly exam	0.206*** (0.048)	0.210*** (0.050)	0.212*** (0.050)
Monthly exam	-0.076* (0.040)	-0.081* (0.044)	-0.082* (0.044)
Zoom classes	0.093*** (0.027)	0.101*** (0.030)	0.102*** (0.030)
Paper classes	0.767*** (0.040)	0.826*** (0.049)	0.827*** (0.050)
Monthly Payment	-0.0003*** (0.00002)	-0.0003*** (0.00002)	-0.0003*** (0.00002)
ASC	2.458*** (0.192)	2.450*** (0.195)	3.520*** (0.642)
Standard deviation			
Teacher Performance (75%)		0.192** (0.088)	0.185** (0.091)
Teacher Performance (50%)		0.004 (0.140)	0.018 (0.140)
Teaching Materials		0.014 (0.124)	0.010 (0.129)
Weekly Exam		0.045 (0.169)	0.093 (0.127)
Monthly Exam		0.290*** (0.071)	0.288*** (0.072)
Zoom Classes		0.151** (0.060)	0.152** (0.061)
Paper Classes		0.015 (0.107)	0.030 (0.100)
Interaction term			
ASC× Age		-0.798** (0.363)	
ASC× Gender		-0.365 (0.541)	
ASC× Education		-0.802* (0.462)	
ASC× Income		0.414 (0.376)	
ASC× Employment		-0.446 (0.393)	
Log likelihood	1503.03	-1499.36	-1493.68
AIC	3024.10	3030.70	3029.40
Pseudo R2	0.43	0.43	
Sample size	300	300	300

Table 01: Estimation Results of the Conditional Logit and Random Parameter Logit Models

*** denotes significance at 1%, ** at 5%, * at 10% level. Standard errors are presented in parentheses.

Likewise, households are more willing to pay for weekly exams conducted in private tuition than for those in the government school system. Notably, households are not willing to pay for monthly exams in private tuitions. Finally, households are more willing to pay LKR 664.43 for Zoom classes conducted in private tuitions.

Variable	CLM	RPL	
		RPL-1	RPL-2
Teacher performance (75%)	3883.35*** [3107.70, 4659.00]	3879.38*** [3099.46, 4659.30]	3894.04*** [3123.20, 4664.89]
Teacher performance (50%)	-2480.78*** [-3173.96, -1787.61]	-2445.87*** [-3107.79, -1783.94]	-2449.99*** [-3126.65, -1773.32]
Teaching materials	2159.90*** [1703.42, 2616.39]	2220.63*** [1739.55, 2701.71]	2217.06*** [1763.51, 2670.62]
Weekly exam	1422.46*** [812.50, 2032.42]	1373.28*** [753.73, 1992.82]	1383.35*** [771.02, 1995.67]
Monthly exam	-525.41* [-1079.50, 28.68]	-532.38* [-1117.80, 53.03]	-534.38* [-1103.70, 34.94]
Zoom classes	643.51*** [263.73, 1023.28]	660.96*** [278.42, 1043.49]	664.43*** [294.10, 1034.80]
Paper classes	5307.43*** [4508.97, 6105.89]	5400.67*** [4591.87, 6209.46]	5397.33*** [4561.57, 6233.08]

Table 2 Estimated willingness-to-pay (WTP) for the attribute levels
*** denotes significance at 1%, ** at 5%, * at 10% level; 95% confidence intervals are given parentheses

Conclusions and Recommendations

This study fills a gap in the literature in Sri Lanka regarding households' preferences for educational attributes by using the choice experiment approach. The findings of this study concluded that households prefer 75% higher teachers' performance in private tuition compared to usual teachers' performance in government schools, teaching materials provided in private tuition, and conducting weekly exams and paper classes in private tuition. At the same time, they are willing to pay for these attributes. In contrast, households are unwilling to pay for 50% higher teachers'

performance in private tuition than teachers' performance in government schools and monthly exams in private tuition. In addition, respondents' age and education level influence their choice of alternatives. This study provides useful information for policymakers to better understand the households' preferences and develop strategies to enhance the public education system.

References

- Alawattagam, K. K. (2020) 'Free Education Policy and its Emerging Challenges in Sri Lanka', *The European Journal of Educational Sciences*, 07(01), pp. 1–14.
- Cole, R. (2017) 'Estimating the impact of private tutoring on academic performance: primary students in Sri Lanka', *Education Economics*, 25(2), pp. 142–157.
- Lancaster, K. J. (1966) 'A New Approach to Consumer Theory', *Journal of Political Economy*, 74(2), pp. 132–157.
- Lusk, J. L., Roosen, J. and Fox, J.A. (2003) 'Demand for beef from cattle administered growth hormones or fed genetically modified corn: A comparison of consumers in France, Germany, the United Kingdom, and the United States', *American Journal of Agricultural Economics*, 85(1), pp. 16–29.
- McFadden, D. (1973) 'Conditional logit analysis of qualitative choice behavior'.
- Pallegedara, A. (2011) 'Demand for private tuition classes under the free education policy. Evidence based on Sri Lanka', *International Journal of Education Economics and Development*, 3(4), pp. 375–393.

Appendix

Attribute	Levels
Teacher performance	75% higher performance in private class (L1) 50% higher performance in private class (L2) Usual performance of government school (L3)
Teaching materials	Provided in private class (L1) Not provided in government school (L2)
Exam method	Weekly exam in private class (L1) Monthly exam in private class (L2) Once per term in government school (L3)
Zoom class	Zoom classes conducted in private class (L1) Zoom classes not conducted in government school (L2)
Paper class	Paper classes conducted in private class (L1) Paper classes not conducted in government school (L2)
Monthly Payment	LKR 0 LKR 1000 LKR 2000 LKR 3000 LKR 5000

Table A1: Summary of the attributes and levels used in this study

Choice set sample

Attributes	Alternative A	Alternative B	Status quo
Teachers performance	75% higher performance	50% higher performance	Usual performance of government school
Teaching material	Not provided	Provided	Not provided
Exam method	Once for term	Weekly exam	Once for term
Zoom class	Conducted	Not conducted	Not conducted
Paper class	Not conducted	Not conducted	Not conducted
Payment	Rs 3000	Rs 1000	Rs 0
I choose			

FigureA1: Sample choice set

Variable	Description
Age	1 if the respondents age is above 50 years, 0 otherwise.
Gender	1 if the respondent is male, 0 otherwise.
Education	1 if the respondent has educational qualification above A/L, 0 otherwise.
Income	1 if the respondent has income above 40,000, 0 otherwise.
Employment	1 if the respondent is government employee, 0 otherwise.

Table A2: Definition of variables used to explain preference heterogeneity

Attribute	Level	Coding
Teacher performance	L1	1=L2, 0=L2, -1=L3
	L2	0=L1, 1=L2, -1=L3
Teaching materials	L1	1=L2, -1=L2
Exam method	L1	1=L2, 0=L2, -1=L3
	L2	0=L1, 1=L2, -1=L3
Zoom class	L1	1=L2, -1=L2
Paper class	L1	1=L2, -1=L2

Table A3: Variable coding

**Exploring the Impact of Technology Integration in Lesson Planning
and Teaching Effectiveness in Higher Education Institutions:
A case study of the University of Ruhuna, Sri Lanka**

Nalin D. Wijesinghe¹, S. Chandrasena²

¹*Department of Economics, University of Ruhuna*

²*National Centre for Advanced Studies in Humanities and Social Sciences
nalin@econ.ruh.ac.lk*

Abstract

The integration of technology into teaching and learning planning has revolutionized higher education teaching practices. This study aims to investigate the impact of technological integration on lesson planning and the effectiveness of teaching at the University of Ruhuna. A cross-sectional research design was used to assess the use of digital tools in the planning of courses and the effect of technology integration on teaching effectiveness. The study used a quantitative approach to explore the effects of technological use on learning plans and teaching effectiveness, with a case study focusing on the University. The results show that 70% of staff members perceived significant improvements in student engagement through interactive quizzes, simulations, and real-time data analytics. The majority (78%) expressed satisfaction with the role played by technology in improving instruction and teaching. However, the results indicate that some faculty remain concerned about the complexity of these tools, which suggests that there is a gap in digital literacy. The most important finding of this study is that the integration of technological tools into teaching in higher education significantly improves the effectiveness of teaching by improving student engagement and enabling more dynamic, personalized educational experiences. Moreover, the study also highlighted the challenges faced by some faculty, in particular in interpreting and applying data generated by analytics platforms, suggesting the need for additional

training in data literacy in order to fully exploit the potential of these technologies in improving teaching practice.

Keywords: *Technology integration, lesson planning, teaching effectiveness, higher education, digital tools, pedagogical strategies, student engagement*

Introduction

The integration of technology into teaching and learning planning has revolutionized higher education teaching practices. With the increasing use of digital tools, educational institutions are exploring how these technologies can improve the effectiveness of education and improve student engagement. The use of learning management systems (LMSs), multimedia platforms, and data analysis has become widespread, providing instructors with a new way to design more interactive, personalized, and effective lesson plans (Dobre, 2015). Furthermore, the acceleration of the COVID-19 epidemic in the world's shift towards online and hybrid learning models underscores the need to effectively integrate these technologies into education practice (Bozkurt et al., 2020; Dhawan, 2020).

Technology has the potential to support teachers in managing classroom dynamics, providing feedback in real-time, and accommodating different learning styles. According to previous research, digital tools can make learning more dynamic by incorporating multimedia resources and collaborative activities, ultimately leading to more meaningful learning experiences (Harasim, 2017; McKnight, 2016). Although these tools have considerable potential, their effectiveness depends largely on how teachers adapt to their teaching methods to incorporate them (Mishra et al., 2006). Many educators face challenges in achieving seamless integration due to limited training, institutional support, or resistance to change (Kirkwood & Price, 2013).

This study aims to investigate the impact of technological integration on lesson planning and the effectiveness of higher education. This paper investigates how digital tools affect teacher education strategies and their

impact on student outcomes. This study investigates the role of technology in shaping modern educational practices and tries to gain knowledge of the opportunities and obstacles associated with the digital transformation of higher education classrooms.

Methodology:

The study uses a quantitative approach to explore the impact of technology integration on learning plans and teaching effectiveness, with a case study focusing on the University of Ruhuna. This methodology is aimed at capturing general trends in the way academic staff in the various faculties integrate digital tools into teaching and planning practices.

1. **Research Design:** The cross-sectional research designs were used to assess the integration of technology into teaching and learning planning. This model allowed to gather data at a specific time in all faculties in the university. The research aims to provide a comprehensive overview of the role of technology in the education process by focusing on a wide range of academic disciplines.
2. **Sample Selection:** The target population was the entire academic staff of the University of Ruhuna. An online questionnaire was sent to all staff members through an institutional e-mail. Of this population, 154 faculty participated in the study by filling out a questionnaire representing a wide variety of fields of knowledge, teaching experience and technology use.
3. **Data Collection Method:** Data was collected using an online self-administration questionnaire distributed to all academic staff at the University's faculties. The questionnaire is aimed at collecting information on the following:
 - The frequency and type of technology used in lesson planning and teaching (such as learning management systems, multimedia and data analysis).
 - Sensitivity to the ease of integrating technology into the teaching plan.
 - The impact of technology on student engagement, learning outcomes and overall effectiveness of teaching.

-Challenges encountered during technological integration.

The questionnaire consisted of closed-ended questions using a Likert scale to capture quantitative data on faculty attitudes toward technology use. Some open-ended questions were also included to allow respondents to provide additional comments or insights about their experiences.

4. **Data Analysis:** The survey responses collected were analyzed using descriptive statistics to identify trends in the use of technology in different faculties and departments. Description methods were used to investigate the patterns of technological use, and their impact on lesson planning and teaching effectiveness. Data analysis was performed using R software, focusing on key variables such as the frequency of the use of technology, the perceived benefits, and the potential obstacles to effective integration. These analyses have helped to identify important factors influencing the use of technology in teaching and learning.
5. **Ethical Considerations:** The ethics review board of the University of Ruhuna granted ethical approval for the study. Participation in the online survey is voluntary and all respondents are guaranteed that their answers are confidential and anonymous. Informal consent was obtained electronically at the beginning of the questionnaire.

Results

The results of the study on the integration of technology in the planning of courses and the effectiveness of teaching at the University of Ruhuna were presented on the basis of responses from 154 academic staff of various faculties.

Technology Usage Patterns

According to the analysis, 73% of respondents regularly use digital tools such as Learning Management Systems (LMS), Presentation Software, and multimedia resources to plan and teach lessons. Faculty members of STEM-related disciplines (e.g., engineering, computer science) demonstrate a higher level of technological integration than faculty members of humanities and social sciences disciplines. This variation may reflect differences in

resource availability and technological readiness between faculties. The LMS platform Moodle was the most widely used tool (65% of respondents), followed by multimedia resources such as educational videos (57%).

Impact on Lesson Planning

68% of respondents agreed that technology would allow them to create flexible, personalized teaching plans that could be adjusted on the basis of student feedback and performance data. Over 60% of the participants reported that digital tools, in particular LMS platforms, reduce the time spent on routine learning planning tasks, allowing greater focus on the interaction and involvement of students. Despite the benefits, 42 percent of respondents found that technical difficulties (such as slow Internet connections and lack of institutional support) sometimes prevented them from fully integrating technology into the teaching plan.

Teaching Effectiveness

70% of staff members perceived significant improvements in student engagement through interactive quizzes, simulations and real-time data analytics. 65 per cent of respondents said that students improved performance and comprehension when technology was integrated into the learning process. In particular, the use of multimedia resources is related to better retaining complex concepts. However, 35 per cent of the teachers expressed concern that students in rural areas and regions with low resources might struggle to access the necessary digital tools, which could lead to differences in learning outcomes.

Overall Effectiveness and Satisfaction

The majority (78%) expressed satisfaction with the role played by technology in improving instruction and teaching. They found that technology helped them meet various needs of students and promoted a more interactive learning environment. Nevertheless, 55 per cent of faculty stated that they would benefit from further training and institutional support to maximize the capabilities of available digital tools.

Table 01 and Fig. 01 illustrate some of the key results:

Technology Tools	Percentage of Faculty Using Regularly (%)
Learning Management Systems	65%
Multimedia Resources	57%
Data Analytics Platforms	48%
Presentation Software	73%

Table 1: Frequency of Technology Use in Lesson Planning and Teaching

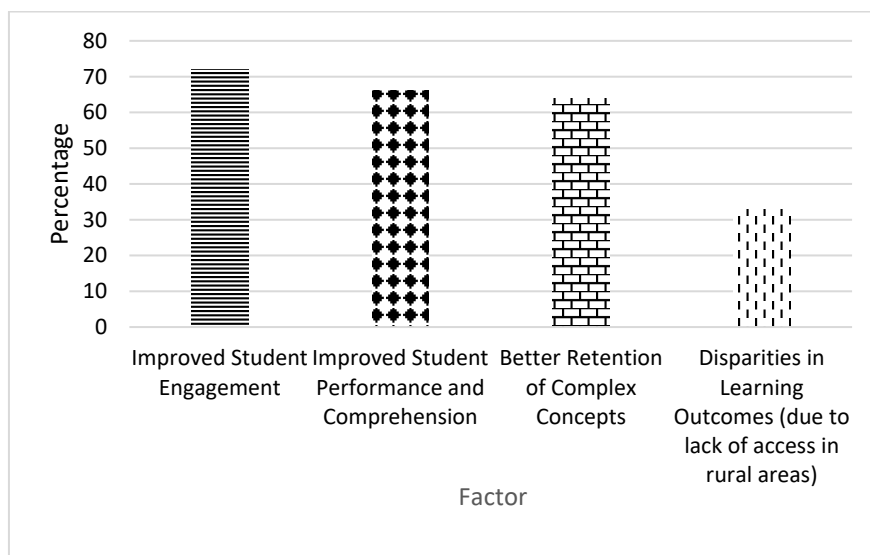


Figure 1: Perceived Impact of Technology on Teaching Effectiveness

The above results underscore technology's significant role in improving lesson planning efficiency and teaching effectiveness. However, they also highlight the need to address technological barriers and further support faculty members, particularly in faculties with limited digital infrastructure.

Discussion

The results of the study show that the integration of technology has had a significant impact on both lesson planning and the effectiveness of university education in Ruhuna University. This coincides with previous

research that digital tools improve teaching methods and facilitate personalized learning experiences (Kalyani, L.K., 2024). In response to the survey, most teachers highlighted the benefits of using Learning Management Systems (LMSs) and multimedia resources to design more interactive and interesting lessons. These tools were praised for improving student engagement and providing feedback in real-time, thus better-aligning lesson planning with student needs. The general principle emerged from the findings, namely that technology promotes more adaptable and adaptive teaching methods. In particular, the use of data analytics platforms allows instructors to monitor students' progress and adapt their teaching strategies accordingly. This reflects the growing literature supporting the effectiveness of technology-enhanced teaching environments (Johnson et al., 2019). The results also uncovered some challenges, such as the lack of adequate training in the effective use of these technologies, as shown in previous studies (Salmon & Wright, 2020).

Exceptions and Problems

Despite the overall positive impact, there are some notable exceptions. For example, not all faculties have shown the same level of commitment to digital tools. Humanities and social science faculty report lower adoption rates of technology than in engineering and medical faculties. This may be due to differences in curriculum structures and types of teaching tools applicable to the different disciplines. Moreover, some employees expressed concerns about the massive amounts of data generated by analytical platforms, which they found difficult to interpret and apply in a practical teaching context.

Theoretical/Practical Implications

The above results support the 'Technology Acceptance Model' (TAM) (Davis 1989), which argues that perceived ease of use and perceived value influence the adoption of technology by individuals. Although many staff acknowledge the usefulness of technology to improve classroom planning, the results indicate that some remain concerned about the complexity of these tools, which suggests that there is a gap in digital literacy. In practice, the results emphasize the need for continuous professional development. Training

workshops on digital teaching and effective use of technology can bridge this gap and empower teachers to fully exploit the potential of technology. In addition, institutions must ensure equitable access to digital tools in all faculties, as differences in the adoption of technology can affect the overall quality of education and student outcomes.

Recommendations

Based on the above results, the following recommendations are made:

1. Regular training sessions on how to effectively use technology for academic staff have been established, with a focus on integrating data analysis into lesson planning and classroom management.
2. Implement customized strategies for different faculties in order to ensure that the technologies adopted meet the specific needs of each discipline.
3. Ensure that all staff have equal access to up-to-date technological resources to prevent any discrepancy in the effectiveness of teaching in the departments.
4. Conduct follow-up studies to examine the long-term effects of technology integration on student performance and retention rates, especially in faculties with lower technology adoption rates.

The results indicate that although technology integration significantly improves the planning of classes and the effectiveness of teaching, successful implementation requires appropriate training, access and the ability to interpret educational data.

Conclusion

The most important finding of this study is that the integration of technology into lesson planning and teaching in higher education significantly improves the effectiveness of teaching by improving student engagement and enabling more dynamic, personalized educational experiences. It has been found that tools such as the Learning Management System (LMS), multimedia resources, and data analysis platforms support educators in creating interactive and personalized learning environments. However, the study also highlighted

the challenges faced by some faculty, in particular in interpreting and applying data generated by analytics platforms, suggesting the need for additional training in data literacy in order to fully exploit the potential of these tools in improving teaching practices. Overall, technology provides opportunities for innovation in education, but it also requires sufficient support to ensure that teachers can effectively use its benefits.

References:

- Bozkurt, A., et al. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15(1), 1-126.
- Dobre, Iuliana. (2015). Learning Management Systems for Higher Education - An Overview of Available Options for Higher Education Organizations. *Procedia - Social and Behavioral Sciences*. 180. 313-320. 10.1016/j.sbspro.2015.02.122.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22.
- Harasim, L. (2017). Learning theory and online technologies. *Routledge*.
- Kalyani, L.K., (2024). The Role of Technology in Education: Enhancing Learning Outcomes and 21st Century Skills. *International Journal of Scientific Research in Modern Science and Technology*. Vol. 3. Issue 4. pp. 05-10. DOI: <https://doi.org/10.59828/ijrmst.v3i4.199>
- McKnight, K., et al. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education*, 48(3), 194-211.
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A framework for integrating technology in the classroom. *Teachers College Record*, 108(6), 1017-1054.
- Johnson, L., Becker, S. A., Cummins, M., et al. (2019). NMC Horizon Report: Higher Education Edition. Austin, Texas: The New Media Consortium.
- Kirkwood, A., & Price, L. (2013). Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), 6–36. <https://doi.org/10.1080/17439884.2013.770404>
- Salmon, G., & Wright, P. (2020). Transformation and innovation in digital education: the role of pedagogy. *British Journal of Educational Technology*, 51(3), 987-999.

Job Satisfaction and Work-Life Balance: Experiences of Police Officers in Sri Lanka

C. J. H. Kasturi Arachchi¹, G. G. O. Kasturi Arachchi², C. Kasturi Arachchi³

^{1,2} *Business School, Sri Lanka Institute of Information Technology, Sri Lanka*
³ *Dept. of Postgraduate Studies, Lincoln University, Sri Lanka*
chacmb@gmail.com

Abstract

This study explored the job satisfaction and work-life balance of police officers in Sri Lanka, focusing on inspectors, sergeants, constables, and other ranks. It examined the factors influencing job satisfaction and work-life balance, as well as their effects on officers' well-being and performance. Police officers often face job-related stress, burnout, and difficulties in balancing their professional and personal lives due to long working hours, a high-stress environment, and exposure to critical situations. The research aimed to identify potential interventions to enhance job satisfaction and work-life balance within the Sri Lankan Police Department.

Work-life balance is a key factor in human resource management, essential for employee well-being and productivity. Studies by Guest (2002) and Veiga (2010) emphasized that balancing work responsibilities with personal life improves employee motivation and health. Further research by Grady (2008) and Ahamed (2013) showed that well-balanced employees experienced better family and work lives, resulting in higher job satisfaction. A related study by Elango and Fonceca (2021) highlighted challenges faced by female police officers in India, including long hours, lack of support, and gender discrimination, which hindered their ability to maintain a healthy work-life balance.

Keywords: *Career Progression, Job Satisfaction, Workload, Work-Life Balance, Well-Being*

Literature Review

The theories and models on work-life balance and job satisfaction provide a foundation for understanding the dynamics between work responsibilities and personal life. Role theory, as discussed by Ordu (2021) and Rajinikanth (2021), suggests that work and family roles are interlinked, with expectations shaped by these roles. Spillover's theory highlights the relationship between work and personal life, proposing that stresses in one area can impact the other. Armstrong (2006) adds that models of work-life balance encompass aspects like compensation, resources, and struggles individuals face in balancing both spheres.

Job satisfaction, a complex concept, has been defined in various ways. O'Reilly (1991) describes it as employees' attitudes and perceptions towards their job. Yang (2016) explains that job satisfaction is an individual's positive evaluation of their job, while Abdirahman et al. (2018) extend this to include the work environment and treatment by management. Spector (1997) emphasizes that job satisfaction influences behaviour and organizational success. Studies indicate that job satisfaction is closely linked to performance, commitment, and reduced absenteeism (Sila & Sirok, 2018). Strategies like training, recognition, and employee participation can enhance job satisfaction, though Kabak et al. (2014) suggest that employees also want a voice in organizational decisions.

Work-life balance is another important factor affecting job satisfaction. Matuska, Bass, and Schmitt (2013) found a strong correlation between work-life balance and reduced stress levels. The balance between work and personal life, as defined by various researchers, involves managing work and non-work responsibilities effectively (Lazar, Osoian, & Ratiu, 2010). Employers can improve work-life balance by offering flexible working arrangements, as noted by the CIPD (2019) and Dizaho, Sallen, and Abdullah (2017). This flexibility helps employees manage their work schedules, which in turn reduces stress and improves overall satisfaction.

Methods and Methodology

The main research methodology in this study is a quantitative, multi-method quantitative methodology, and survey research strategy and case study are the main research strategies that were used to study the problem of this research. The research paradigm is positivism and the research approach of this study is deductive. Questionnaires, interviews, and document surveys were employed to gather information in this study. Questionnaires and interviews were the main data collection methods that were administered to gather information from the police officers, Sergeants, Constables, and Inspectors in the Colombo district.

Data collection was carried out in this study to explore the nature of job satisfaction and work-life balance of police officers, Sergeants, Constables, and Inspectors in 25 police stations in the Colombo district, Sri Lanka. Therefore, the participants of this study were comprised of 100 Sergeants, 100 Constables, and 100 Inspectors who were involved in this study as participants from 25 police stations. In addition, 05 Sergeants, 05 Constables, and 05 Inspectors from 05 police stations provided information during the interviewing process. The participants were assigned codes as follows. For example, S -Sergeants, C - constables, and I - Inspectors to maintain anonymity. To analyze quantitative data, descriptive statistical tools were administered in this study.

Results and Discussion

This study explored the job satisfaction and work-life balance of police officers in Sri Lanka, focusing on inspectors, sergeants, constables, and other ranks. The data revealed mixed satisfaction levels with career progression, workload, and available resources, highlighting key areas needing improvement within the Sri Lankan Police Department.

Job Satisfaction

A significant portion of officers expressed dissatisfaction with opportunities for career progression. Half of the sergeants and inspectors and 40% of constables disagreed that they were satisfied with their career

advancement prospects. Similarly, workload dissatisfaction was evident, with 40% of officers disagreeing or strongly disagreeing that their workload was manageable, potentially affecting their job satisfaction and well-being. While some officers felt supported in carrying out their duties, a notable percentage disagreed, indicating a lack of adequate resources and support.

Work-Life Balance

Work-life balance remains a concern, with 40% of officers expressing satisfaction with their current balance, while 20% were dissatisfied. Many officers (60%) reported that their job negatively impacted their personal lives and relationships, reflecting the challenges of balancing professional duties with personal life. Flexible work arrangements, such as flexible hours or remote work options, were unavailable to 40% of officers, further complicating their ability to manage work-life balance. This lack of flexibility significantly contributed to dissatisfaction among officers, impacting their overall well-being and job performance.

Factors Affecting Job Satisfaction and Work-Life Balance

Workload manageability was a key factor in job satisfaction and work-life balance, with 40% of officers indicating dissatisfaction with their workload. Support from superiors and colleagues was another critical factor, with 40% of officers feeling unsupported in managing work-life balance and job-related challenges. Access to resources and programs promoting work-life balance was limited, with 60% of officers feeling they lacked adequate resources to maintain a healthy balance.

Impact on Well-Being and Performance

Job satisfaction was closely linked to overall well-being, with 70% of officers agreeing that their job satisfaction significantly impacted their well-being. Work-life balance also influenced job performance, with 90% of officers stating that maintaining a healthy balance positively affected their performance. Additionally, 60% of officers believed that their job satisfaction and work-life balance impacted their long-term career goals, indicating that these factors play a significant role in shaping their professional aspirations.

Potential Interventions

Officers overwhelmingly supported interventions to improve job satisfaction and work-life balance. Many believed that providing additional resources, such as counselling services or stress management programs, would enhance their satisfaction. Offering flexible work arrangements, such as adjusted schedules or telecommuting, was also viewed as a critical step toward improving work-life balance.

Following are some responses provided by the participants during the interviewing process. One Sergeant indicated: *“I find the most satisfaction in our community engagement initiatives. Being able to connect with the community, help people, and build trust is fulfilling. It gives a sense of purpose and accomplishment” (S2).*

Another police officer, an inspector stated: *“One aspect that’s been challenging is the high workload and irregular shifts. It can be exhausting, affecting both physical and mental well-being. Recent staff shortages have made it even more demanding” (I3).*

As indicated by police officers the high workload and irregular shifts are the main challenges for work-life balance and job satisfaction as police officers. However, it seems that the community engagement initiatives community engagement initiatives are supporting them to improve their job satisfaction.

One Constable expressed his perception about the work-life balance as: *“Maintaining work-life balance can be tough. Shift work disrupts routines, making it hard to plan personal activities or spend quality time with family. There are times when we’re on-call 24/7, which can be draining” (C4).* Another officer, a Sergeant stated: *“To improve work-life balance, I’ve learned to prioritize self-care. Regular exercise, meditation, and setting clear boundaries have helped me manage stress and create a better balance between work and personal life” (S5).*

As per the information provided by the above officers the police officers, especially, Sergeants and Constables are facing challenges in

managing their work-life balance, moreover, it appears that they follow some strategies to minimize work stress and create better work-life balance.

Discussion

The relationship between work-life balance and job satisfaction is widely researched across various sectors, including law enforcement. Studies indicate that maintaining a positive work-life balance can enhance job satisfaction, reduce stress, and improve overall well-being (Armstrong, 2006; Emsile & Hunt, 2009). Rohwer et al. (2022) examined the long-term effects of an alternating shift schedule among police officers and found small but positive changes in work-life balance and job satisfaction. Similarly, Rajinikanth (2021) explored the impact of work-life balance on police performance and found that a well-managed balance between work and family responsibilities leads to better job performance.

However, significant challenges remain. Research shows that many officers still experience dissatisfaction due to workload and stress, which negatively affects their work-life balance and job satisfaction (Hosseinabadi et al., 2018). Christiana and Rajun (2014) also noted that a negative work-life balance correlates with higher stress levels among employees, underscoring the need for flexible work arrangements and support systems. This highlights the importance of addressing these issues to promote a healthier work-life balance and enhance job satisfaction for police officers.

Conclusion and Recommendations

The dissatisfaction among police officers in Sri Lanka regarding their workload is significant, raising concerns about stress levels and work-life balance, which can negatively impact job satisfaction and overall well-being. Although many officers appreciate the support and resources available, a notable minority report dissatisfaction, suggesting specific areas for improvement. Career progression and workload issues are also prominent, necessitating focused efforts to enhance job satisfaction and the effectiveness of law enforcement. Despite some officers feeling satisfied with their work-life balance, a substantial portion struggles with it, partly due to limited access to

flexible work arrangements. This limitation can adversely affect personal lives, leading to stress and burnout. Workload manageability significantly influences job satisfaction and overall well-being. Those who experience manageable workloads report better job satisfaction, while others feel overwhelmed, impacting their mental health. To address these issues, the police department must expand supportive programs, invest in mental health resources, promote flexible work arrangements, and improve workload management. Recognizing and tackling these challenges can create a healthier, more satisfied police force, ultimately benefiting the officers and the communities they serve.

Reference

- Armstrong, M. (2006). *A handbook of human resource management practice*. Kogan Page Publishers.
- Boonzaier, B., Ficker, B., & Rust, B. (2001). A review of research on the job characteristics model and the attendant job diagnostic survey. *South African Journal of Business Management*, 32(1), pp. 11-34.
- Christiana, F. & Rajun, S. (2014). Work-life balance and its impact on employee satisfaction. *Journal of Organizational Behavior*, 25(3), pp. 365-383.
- Elango, L. & Michael Fonceca, C. (2021). Data on work-life balance experienced by women police officials of Tirupattur District, Tamil Nadu, India. *International Journal of Aquatic Science*, 12(2), pp. 667-673.
- Emsile, C. & Hunt, K. (2009). Work-life balance among police officers. *Public Management Review*, 12(6), pp. 685-700.
- Hosseinabadi, R., et al. (2018). The relationship between job satisfaction and stress among nurses. *International Journal of Occupational Medicine and Environmental Health*, 31(1), pp. 75-85.
- Ordu, A. (2021). Mediating role of work-life balance and job satisfaction in the relationship between person-job fit and life satisfaction among teachers. *Psycho-Educational Research Reviews*, 10(2), pp. 29-41.
- Rajinikanth, P. (2021). Work-life balance and police performance: A study in Tamil Nadu, India. *Journal of Human Resource Management*, 9(2), pp. 20-34.
- Rohwer, C., et al. (2022). The impact of alternating shift schedules on police officers' work-life balance and job satisfaction. *Occupational Health Review*, 28(5), pp. 205-213.
- Rohwer, E., Garrido, M. V., Herold, R., Preisser, A. M., Terschüren, C., Harth, V., & Mache, S. (2022). Police officers' work-life balance, job satisfaction and quality of life: longitudinal effects after changing the shift schedule. *BMJ Open*, 12(9), e063302.

Transforming Education: Navigating Reforms in the Digital Age with Indigenous Medicine

A. M. Muthalib

*Department of Unani Clinical Medicine, University of Colombo
mujasha@fim.cmb.ac.lk*

Abstract

In the era of rapid technological advancement, education has become a critical sector influenced by digital reforms. As the world increasingly embraces digital tools, traditional forms of education are being transformed to integrate modern methods of teaching and learning. The use of e-learning platforms, virtual classrooms, and artificial intelligence (AI) in education has led to significant changes, offering both opportunities and challenges across various disciplines. However, specialized fields such as Indigenous medicine face unique challenges in adapting to the digital age.

Indigenous medical systems, including Ayurveda, Unani, Sidda and Traditional Medicine, are rooted in centuries of empirical knowledge, emphasizing holistic health, balance with nature, and culturally embedded healing practices. These systems rely heavily on experiential learning, where students and practitioners engage directly with plants, natural remedies, and the patient's environment to understand and apply treatments. As a result, the digital transformation of education presents a complex landscape for Indigenous medicine, where the need for innovation must be balanced with the preservation of traditional practices.

This study aims to explore how education reforms in the digital age can integrate technological advancements into Indigenous medical education without compromising its core values. It addresses both the challenges and opportunities presented by digital tools and platforms and examines how they can enhance access to traditional medical education while ensuring the cultural

integrity and experiential depth of Indigenous knowledge systems is maintained.

Objectives of the Study

1. To examine the impact of digital reforms on Indigenous medical education, focusing on both opportunities and challenges.
2. To explore how digital tools can be integrated into traditional educational systems while preserving cultural knowledge and hands-on experience.
3. To assess the potential for global collaboration and knowledge sharing in Indigenous medicine through digital platforms.
4. To recommend best practices for implementing digital education in Indigenous medical curricula.

Literature Review

The rise of digital education has reshaped how knowledge is delivered and consumed across disciplines. E-learning platforms, AI-driven diagnostics, and virtual simulations have opened up new avenues for medical education. According to Yeung et al. (2022), digital tools offer increased flexibility, accessibility, and the potential for personalized learning, making them particularly valuable in fields like general medicine. However, the application of these tools in Indigenous medicine poses unique challenges due to the field's reliance on experiential and contextual learning (Pandkar et al., 2021).

Indigenous medicine is deeply embedded in cultural traditions, local ecosystems, and holistic approaches to healing. In Ayurveda, Unani, Siddha and Traditional Medicine for instance, the relationship between a practitioner and the patient involves not only diagnosing symptoms but also understanding the individual's connection to body temperament, nature, diet, and lifestyle (Salas-Pilco, 2019). This kind of learning is often passed down through oral traditions and hands-on experience, making it difficult to fully translate into a digital environment. Similarly, in Unani medicine, the diagnostic process relies on personal interaction and the practitioner's intuitive understanding of the

patient's temperament and body constitution, which are challenging to teach through virtual means (Hlalele, 2022).

However, digital tools also present significant opportunities. Virtual simulations, for example, have been used to teach diagnostic techniques and treatment protocols in both Ayurveda, Unani, Siddha and Traditional Medicine, allowing students to practice in a controlled environment before working with real patients (Pandkar et al., 2021). Additionally, digital repositories of traditional texts and knowledge provide unprecedented access to information, enabling students and practitioners worldwide to engage with Indigenous medical systems in ways that were previously impossible.

Despite these advancements, scholars have highlighted the need for caution. The commodification of Indigenous knowledge in online spaces, the potential for misinterpretation or misuse, and the loss of cultural context are significant concerns (Salas-Pilco, 2019). Thus, the literature suggests that while digital tools can enhance access and learning in Indigenous medicine, they must be implemented in ways that respect and preserve the cultural integrity of these systems.

Methodology

This study employs a qualitative research design, drawing on a combination of literature review, case studies and expert interviews to explore the integration of digital tools in Indigenous medical education. A comprehensive review of academic papers, reports, and articles on the topic of digital education in medical fields, with a particular focus on Indigenous medical systems, was conducted. The review provided insight into both the theoretical and practical challenges of digitizing education in this field.

Several case studies of institutions that have integrated digital tools into their Indigenous medicine programs were analyzed. These case studies provide real-world examples of how digital platforms, such as e-learning systems and virtual simulations, are being used to teach Ayurveda, Unani and Siddha medicine.

Semi-structured interviews were conducted with educators and practitioners in the field of Indigenous medicine to understand their experiences and perceptions of digital tools.

Further, this practice was already implemented during the COVID period, particularly at the Faculty of Indigenous Medicine, University of Colombo. The details for this study were obtained from individuals who were taught during the COVID period. (Hasmath et al., 2021)

The interviews provided qualitative data on the benefits, challenges, and potential for digital reforms in Indigenous medical education. Additionally, further insights were gained from advancements in China, where this practice has now been more fully developed. The methodology focuses on identifying the key themes that emerge from these data sources, providing a nuanced understanding of how digital tools are impacting the education of Indigenous medicine and offering insights into the future direction of educational reforms in this field.

Results and Discussion

The results of the study reveal a complex relationship between digital reforms and Indigenous medical education. On one hand, digital tools have expanded access to Indigenous knowledge, allowing students in remote or underprivileged areas to engage with traditional medical systems. E-learning platforms have enabled students to access lectures, readings, and discussions that were once confined to physical classrooms (Pandkar et al., 2021). Furthermore, digital repositories of ancient texts have made it possible for students and scholars to access rare and valuable knowledge that was previously difficult to obtain (Salas-Pilco, 2019).

However, the findings also highlight significant challenges. Many educators and practitioners expressed concern about the loss of hands-on learning experiences, which are fundamental to the practice of Indigenous medicine. For example, in Ayurveda, Unani and Siddha the ability to identify plants, understand their medicinal properties, and create remedies from raw materials is a critical skill that cannot be fully replicated in a digital

environment (Hlalele, 2022). Similarly, the diagnostic process in Ayurveda, Unani and Sidda medicine requires direct interaction with patients, which is difficult to achieve through virtual simulations or online learning platforms.

Another key issue identified in the study is the potential for misinterpretation or misuse of traditional knowledge when it is digitized and made available online. Indigenous medical systems are deeply tied to cultural and ecological contexts, and when these elements are removed, there is a risk that the knowledge will be commodified or misapplied (Yeung et al., 2022). As a result, there is a need for ethical guidelines and best practices to ensure that digital education in Indigenous medicine respects the cultural integrity of these systems. (Mohideen et al. 2023)

The discussion also highlighted the potential for digital reforms to foster global collaboration in Indigenous medicine. By making traditional knowledge more accessible, digital platforms can facilitate cross-cultural exchanges and collaboration among practitioners, scholars, and students from different parts of the world. This can lead to a deeper understanding of the value of Indigenous medical systems and promote their integration with modern healthcare practices in a way that is both ethical and respectful.

Conclusion

The digital age presents both challenges and opportunities for the transformation of Indigenous medical education. While digital tools can expand access to traditional knowledge and foster global collaboration, they must be employed thoughtfully to preserve the cultural and experiential elements that are fundamental to these systems. The findings of this study suggest that educational reforms in the digital age should be carefully designed to balance the benefits of technology with the preservation of traditional practices. The study concludes that future research should focus on developing ethical frameworks and best practices for integrating digital tools into Indigenous medical education. These frameworks should prioritize the preservation of cultural context, the promotion of experiential learning, and the protection of Indigenous knowledge from commodification and misuse.

References

- Pandkar, P, Kulkarni, S, & Navale, L 2024, 'ICT and Technological Advances for Ayurveda Education and Practice: Status, Challenges and Scope'. *Educational Administration Theory and Practice journal*, vol. 30, no. 5, pp. 12887-12893.
- Salas-Pilco, Z 2019, 'Introducing technology into learning designs for indigenous contexts', *Interaction Design and Architecture(s)*, vol. 41, pp. 62-77.
- Hlalele, D. 2022, 'Indigenous Knowledge Systems and Sustainable Learning In Rural South Africa', *Australian and International Journal of Rural Education*. Vol. 29, no.1, pp. 88-100.
- Yeung, K, Parvanov, D, Hribersek, M, Eibensteiner, F, Klager, E, Kletecka-Pulker, M, Rössler, B, Schebesta, K, Willschke, H, Atanasov, G, & Schaden, E 2022, 'Digital Teaching in Medical Education: Scientific Literature Landscape Review'. *JMIR Med Educ*. Vol. 8, no. 1, e32747.
- Hasmath, A.R. & Muthalib, A.M. (2021). Analysis of conventional classroom versus online learning and its challenges among BUMS undergraduates. *Annual Research Symposium, University of Colombo*, pp. 548.
- Mohideen, F.S.M. & Nazeem, M.H.M. (2023). Evaluating the efficacy of online learning among the students of the Institute of Indigenous Medicine during and after the Covid-19 pandemic: a survey. *9th International Conference on Ayurveda, Unani, Siddha and Traditional Medicine – 2023, Icaust – 2023, and Triphala International Research Symposium Ayurex Colombo-2023*, pp. 117.

Digital Transformation in Foreign Language Teaching: Exploring the Challenges and Opportunities of Online Education for the German External Degree Program

B. Madhupali Sugandhika Cooray

Department of Modern Languages, University of Kelaniya.
sugandhikac@kln.ac.lk

Abstract

The transition to digital learning in response to the COVID-19 pandemic has significantly impacted foreign language education at the Centre for Distance and Continuous Education (CDCE) at the University of Kelaniya. This research examines the implications of implementing a Learning Management System (LMS) for German language instruction within external degree programs. While the LMS has facilitated the continuity of education by providing flexible access to course materials and integrating multimedia resources, it has also introduced notable challenges. The absence of real-time interaction between educators and students has hindered the communicative approach essential for language learning, affecting key skills such as speaking and listening. Through a SWOT analysis and interviews with 15 lecturers in the German language section, the study identifies both strengths and weaknesses of LMS utilization. Key strengths include flexibility in accessing resources and opportunities for incorporating diverse multimedia content. Conversely, significant weaknesses arise from limited direct interaction, leading to student isolation and engagement issues. The research highlights that while opportunities for accessing a broader range of resources exist, threats such as inadequate educator training and the loss of authentic communication practice jeopardize effective language instruction. The findings reveal that educators struggle to assess students' language proficiency effectively due to a lack of immediate feedback and minimal student interaction within the LMS. Consequently, there is a pressing need for innovative pedagogical strategies to enhance engagement and communication.

The study recommends adopting a blended learning model that combines online resources with periodic on-site lectures to foster interaction and provide more accurate assessments of speaking and listening skills. Additionally, establishing a feedback mechanism for students will enable educators to adapt instructional content to better address learners' needs. This research contributes valuable insights into optimizing digital tools for foreign language education in developing contexts, particularly in the evolving landscape of post-pandemic learning.

Keywords: *Asynchronous learning, Distance Learning, Foreign Language Education, German Language, Learning Management Systems.*

Introduction to the Study

The Centre for Distance and Continuous Education (CDCE) at the University of Kelaniya plays a pivotal role in offering degree programs to external candidates, particularly in foreign languages. Each year, many students enroll in these programs, seeking to enhance their linguistic proficiency and professional prospects. Traditionally, these programs were delivered through on-site lectures, allowing direct interaction between educators and students. However, the COVID-19 pandemic necessitated a rapid transformation in educational delivery.

In response to the pandemic's challenges, the CDCE adopted new strategies for distance learning, implementing a Learning Management System (LMS) where course materials were uploaded, and recorded lectures were made available. This marked a significant shift from the earlier in-person approach, resulting in the absence of direct interaction between educators and learners, which highlights both the opportunities and challenges of transitioning to a fully digital mode of instruction.

This study aims to explore the implications of this digital transformation, focusing on the challenges educators face in delivering German language education through the LMS for external degree students. By identifying these challenges and evaluating the opportunities that digital

platforms offer, this research will provide insights into optimizing the use of digital tools in the post-pandemic educational landscape.

Literature Review

The use of Learning Management Systems (LMS) for foreign language education has become more prominent, particularly due to the shift to online learning during the COVID-19 pandemic. As universities adopted digital platforms, it became apparent that while LMS provides various benefits, it also introduces significant challenges for language teaching. One major challenge is the reduction of real-time interaction between educators and students. Communicative approaches like Communicative Language Teaching (CLT) rely on spontaneous communication and immediate feedback, which are difficult to replicate online (McKnight et al., 2020). Educators have reported difficulties maintaining student engagement, as virtual learning spaces often lack the same level of interaction found in physical classrooms (Carrillo & Flores, 2020).

Asynchronous learning, while offering flexibility, can make students feel isolated from peers and instructors. In traditional settings, students benefit from interactive activities like group projects, which are harder to manage effectively online (Siemens et al., 2015). This is particularly concerning in language programs, where active participation is crucial for skill acquisition (Azeem Ashraf et al., 2023). Technological limitations, such as unreliable internet connections, also pose challenges for implementing LMS in language teaching (Rasheed et al., 2020).

Despite these obstacles, LMS offers opportunities to enhance foreign language teaching. Its flexibility allows students to access materials at their own pace, which benefits adult learners (McKnight et al., 2020). Additionally, LMS facilitates integrating multimedia resources, like videos and quizzes, enriching the learning experience (Carrillo & Flores, 2020).

To address challenges, educators are adopting strategies tailored to the online environment. Using interactive content that engages students in meaningful language use is essential. Studies emphasize incorporating real-

world tasks and virtual discussions to foster collaborative learning (Carrillo & Flores, 2020). Integrating synchronous tools, like live video lectures, bridges the gap between asynchronous learning and the need for real-time interaction, improving engagement and satisfaction (Siemens et al., 2015).

While studies highlight the challenges and opportunities of using LMS in education and language teaching, there remains a lack of research focused on the unique challenges educators face in teaching foreign languages in external degree programs, especially in developing contexts like Sri Lanka, where foreign language learning demand is growing due to global job market opportunities.

Methods and Methodology

This study utilized purposeful sampling to select 15 lecturers from the German language section of the CDCE at the University of Kelaniya. These lecturers were directly involved in teaching foreign languages through the Learning Management System (LMS) and were chosen for their expertise and firsthand experience with both traditional and digital teaching methods. This approach ensured that participants had relevant knowledge to provide valuable insights into the transition from in-person to online education, allowing exploration of the impact of LMS on language instruction and student engagement in external degree programs. This focused sample helped validate and deepen the findings from the SWOT analysis.

Results and Discussion

The SWOT analysis on the use of Learning Management Systems (LMS) for foreign language teaching at the Centre for Distance and Continuous Education (CDCE) reveals several important insights. Strengths include flexibility, allowing students to access materials at their convenience, which is particularly useful for external learners juggling work and study. It also supports integrating multimedia resources, such as videos and quizzes, enriching the language learning experience. However, weaknesses include the lack of real-time interaction, a crucial component of language education where

immediate feedback and conversational practice are key for skill development. This absence can leave students feeling isolated and less engaged.

Opportunities include LMS opening access to a wider range of resources, such as digital libraries and online language-learning communities, which may not be available in traditional classrooms. With the right training and support, educators can create more engaging content, improving the learning experience. Threats include the underutilization of LMS due to insufficient training for educators, limiting its effectiveness. Additionally, the loss of authentic communication practice poses a risk, as students miss real-life scenarios critical for developing fluency and confidence in the target language.

Through expert interviews conducted with the academic staff of the German section, key challenges regarding the use of Learning Management Systems (LMS) for foreign language teaching were revealed. Lecturers expressed difficulty in gauging improvement in students' language proficiency, making it challenging to set appropriate examination papers. This issue stems from the lack of direct interaction, which traditionally helps educators assess language skills like speaking and listening in real-time. Furthermore, lecturers reported receiving minimal feedback from students regarding uploaded materials or recorded lectures. This lack of communication makes it difficult for instructors to identify areas requiring additional support or improvement. Students also tend to avoid using online forums within the LMS for raising questions or discussing issues, leading to a breakdown in two-way communication and preventing lecturers from understanding the specific difficulties faced by students.

Conclusions and Remarks

In conclusion, the implementation of Learning Management Systems (LMS) for foreign language teaching at the Centre for Distance and Continuous Education (CDCE) has shown a mix of benefits and challenges. While LMS provides flexibility and access to resources, critical issues such as the lack of real-time interaction and student feedback hinder its full potential.

These limitations affect essential skills like speaking and listening, which require active communication and immediate feedback.

To optimize LMS use, a blended learning model should be introduced, incorporating a combination of online resources and periodic on-site lectures to better assess student progress. Formative assessments, such as oral tests and presentations, should be conducted on-site rather than online to ensure accurate evaluation of speaking and listening skills. Lastly, management should implement a system enabling lecturers to receive timely feedback from students, ensuring that instructional content can be adjusted to meet their needs more effectively.

References

- Azeem Ashraf, M., Nazeer, A. and Hameed, A. (2023) 'The challenges of online language learning: A review of the literature', *Journal of Language Teaching and Research*, 14(1), pp. 65-75.
- Carrillo, C. and Flores, M.A. (2020) 'COVID-19 and teacher education: The need for a collaborative response', *Education for Global Citizenship*, 19(3), pp. 1-10. DOI: 10.1007/s11092-020-09370-1.
- Garrison, D.R. and Anderson, T. (2003) *E-learning in the 21st Century: A Community of Inquiry Framework for Online Learning*. London: Routledge.
- Kearney, M. and Hattie, J. (2019) 'The impact of mobile technology on student engagement and learning outcomes', *Education Research Review*, 26, pp. 65-78. DOI: 10.1016/j.edurev.2019.01.001.
- Khalil, M. and Elkhider, I. (2020) 'Adapting to the new normal: The impact of COVID-19 on online language learning', *International Journal of Emerging Technologies in Learning*, 15(4), pp. 61-71. DOI: 10.3991/ijet.v15i04.11276.
- McKnight, K., Davis, M. and Cordero, L. (2020) 'How digital learning is changing foreign language education', *Language Learning & Technology*, 24(2), pp. 23-35. Available at: <http://llt.msu.edu/vol24num2/mcknightetal.pdf> (Accessed: 10 October 2024).
- Rasheed, R., Balaha, M. and Nasser, S. (2020) 'Online learning during the COVID-19 pandemic: A study of the challenges faced by teachers', *International Journal of Educational Technology in Higher Education*, 17(1), pp. 1-12. DOI: 10.1186/s41239-020-00224-9.
- Siemens, G., Gasevic, D. and Dawson, S. (2015) 'Connecting learning analytics to the learning sciences', *Proceedings of the Fifth International Conference on*

Learning Analytics and Knowledge, pp. 68-72. Available at:
<https://doi.org/10.1145/2723576.2723582>.

Tsai, Y.S. and Tsai, C.C. (2020) 'The impact of learning management system on students' learning outcomes', *Education and Information Technologies*, 25(5), pp. 3547-3567. DOI: 10.1007/s10639-020-10305-6.

Wang, Y. and Chen, L. (2021) 'Examining the impacts of online learning on language acquisition', *Language Teaching Research*, 25(1), pp. 123-140. DOI: 10.1177/1362168820957876.