The International Journal of Learning Spaces Studies (IJLSS)

Homepage: https://journals.artahub.com/

ORIGINAL RESEARCH ARTICLE

The Poll Lab@Suan Dusit Poll Model: An Innovation in Experiential Learning (A Field Report)

Sukhum Chaleysub[1], Pornpan Buathong[2], Nongluck Chotevithayathanin[3]*, Suktip Suksai[4]

[1] *Associate Professor Dr., Suan Dusit Poll, Suan Dusit University, Bangkok 10300, Thailand. sukhum_cha@dusit.ac.th, 0009-0006-8974-690X*

[2] *M.S., Suan Dusit Poll, Suan Dusit University, Bangkok 10300, Thailand. pornpan_bua@dusit.ac.th, 0009-0001-6660-4021*

[3] *Ph.D., Suan Dusit Poll, Suan Dusit University, Bangkok 10300, Thailand. (Corresponding Author) cnongluck295@gmail.com, 0009-0004-8196-2531*

[4] *MSc., Suan Dusit Poll, Suan Dusit University, Bangkok 10300, Thailand. suktip@dusit.ac.th, 0009-0005-4934-9216*

ARTICLE INFO

Article History:
Received: 2025-07-24
Revised: 2025-08-24
Accepted: 2025-08-28
Published Online: 2025-09-01

Keywords:
Experiential Learning,
Learning Space , One World Library (OWL), Suan Dusit Poll, Poll Lab

Number of Reference: 28
Number of Figures: 1
Number of Tables: 4

DOI:
10.22034/lss.2025.519256.1038

ABSTRACT

This conceptual and field-based study presents the development of the Poll Lab Model, a practice-based learning approach and integrated learning ecosystem grounded in experiential learning theory, professional skill enhancement, and educational innovation at Suan Dusit Poll, Suan Dusit University. The model was developed to bridge the gap between theoretical knowledge and employability skills by integrating real survey projects, reflective practices, and community-based collaboration. Data were collected through post-activity questionnaires using a 5-point Likert scale and analyzed descriptively and interpretively, focusing on participants' learning experiences and satisfaction rather than statistical inference. An analysis of eight learning activities conducted in the Poll Lab space between July and December 2024, involving 181 participants, revealed consistently positive outcomes in Attitude, Skills, and Knowledge (ASK) development. The overall satisfaction level was high, with an average score of 4.56 out of 5 (92.18%), indicating strong learner engagement and perceived value of the experience. Key findings suggest that a practice-based learning environment integrating real data, knowledge exchange, and interdisciplinary collaboration can effectively enhance both learning outcomes and learner satisfaction. Furthermore, an interpretive comparison between the Poll Lab Model and international exemplars—MIT Media Lab, Stanford d.school, and LEaRN at the University of Melbourne—highlights shared principles of flexibility, collaboration, and technology-enhanced learning. Overall, the Poll Lab represents a technology-supported and context-responsive learning space model that aligns institutional innovation with the United Nations Sustainable Development Goals (SDGs), offering a transferable framework for higher education transformation and policy learning.

►**Citation:** Chaleysub, S., Buathong , P., Chotevithayathanin , N., & Suksai, S. (2025). The Poll Lab@Suan Dusit Poll Model: An Innovation in Experiential Learning. *The International Journal of Learning Spaces Studies (IJLSS), 3(3): 35-52.*

Introduction

The rapid advancement of technology and the emergence of Artificial Intelligence (AI) have significantly disrupted traditional skills and knowledge, rendering them insufficient for the demands of the modern workforce. This is particularly evident in the context of higher education, which urgently requires new learning models to prepare students for the rapid changes that are occurring. *Learning by Doing* has become increasingly essential in equipping individuals with new competencies in this era of transformation (Dewey, 1938; Kolb, 1984). It enables learners to develop practical skills and become immediately ready to enter the workforce. Moreover, the promotion of *Lifelong Learning* is crucial in fostering continuous personal and professional growth throughout one's life (Chaleysub, 2025).

Suan Dusit University, as a leading institution in innovative learning management, has developed the concept of *"One World Library (OWL) to The University"* to transform every space on campus into a *"Learning Ecosystem."* This ecosystem effectively integrates knowledge, modern learning theories, information technology, and the behaviors of the next generation of learners. This concept aligns with Brown's (2009) *Learning Space* theory, which emphasizes that physical environments have a direct impact on learning behavior. One of the innovations emerging from this idea is the *"Poll Lab,"* developed by Suan Dusit Poll, Suan Dusit University, designed to serve as an *"Experiential Learning Space."* The Poll Lab supports the development of various essential skills, including research, public opinion survey, data analysis, and language proficiency. These are cultivated through real-world learning experiences and knowledge exchange between experts and learners. The approach follows the *Experiential Learning* model of Kolb & Kolb (2017), which emphasizes direct engagement within purposefully designed learning environments.

This academic article aims to present the development and lessons learned from the Poll Lab as an innovation in experiential learning. The main objectives are as follows:

1. To extract lessons from a learning model that emphasizes professional skill development through real-life experience;
2. To analyze the outcomes of the implementation and the learning results of participants in terms of attitudes, skills, and knowledge; and
3. To propose sustainable approaches for developing learning spaces in universities that can be scaled to other contexts.

It will be of value to curriculum administrators, higher education policymakers, and stakeholders involved in learning space management, especially in an era when universities must create environments that go beyond traditional classrooms. These spaces should become platforms for unlocking learners' full potential in multiple dimensions, namely, academic, professional, and personal growth as global citizens.

Literature Review

Concepts and Directions in the Development of Modern Learning Spaces

Modern Learning Spaces

"Learning spaces" have become a central focus in modern education management, particularly in higher education, where learning is no longer confined to traditional classrooms. Instead, it expands into "intellectual spaces" that encourage experimentation, creativity, and interaction between individuals and technology (Oblinger, 2006). The development of learning spaces is grounded in several theoretical frameworks, including:

1. Social Constructivism, which posits that knowledge is constructed through social interaction and collaborative learning (Vygotsky, 1978);
2. Experiential Learning Theory, which emphasizes learning through direct experience (Kolb, 1984); and
3. Third Place Learning, which suggests that informal, non-institutional spaces play a pivotal role in fostering creative intelligence (Oldenburg, 1999). While classical theories provide the foundation for understanding learning spaces, contemporary research highlights how

emerging technologies and data-driven environments are reshaping experiential learning. Computer-assisted learning (CAL) environments enhance individualized learning pathways and scaffold complex problem-solving through adaptive feedback (Al-Fraihat et al., 2020). Virtual and augmented learning systems provide immersive, authentic contexts that extend Kolb's experiential cycle and foster deeper engagement (Radianti et al., 2020). Similarly, AI-supported platforms integrate real-time analytics and personalized feedback, transforming Brown's (2009) concept of "learning spaces" into more dynamic, adaptive ecosystems (Zawacki-Richter et al., 2019).

Building on Brown (2009) and Oblinger (2006), this study situates the Poll Lab within the broader movement toward data-informed and technology-supported experiential learning. Rather than focusing on specific technologies, the model emphasizes how authentic data, collaborative processes, and interactive environments can serve as catalysts for learner engagement, reflection, and professional skill development. In this way, the Poll Lab represents a hybrid learning ecosystem that connects traditional experiential learning theory with the evolving practices of modern, data-based education.

Therefore, to ensure the quality of learning space design, it is essential to consider a combination of physical, digital, and social environmental factors. In addition, learning spaces should empower students to take on the role of "owners of their learning space" - meaning that learners have the authority and agency to direct their learning pathways, participate in decision-making, and take responsibility for their personal development. Such ownership enhances motivation and promotes a deeper understanding of content. It also allows learners to actively engage in designing and organizing their learning environments, thereby fostering a sense of belonging and emotional connection to the space. Ackers (n.d.) argued that empowering students as "owners of their learning spaces" enhances motivation and deepens engagement, leading to more meaningful and effective learning experiences. The principle has been practically implemented in initiatives such as the One World Library (OWL) and the Poll Lab, where learners are encouraged to co-create their learning environments in line with these ideas.

Suan Dusit University's Proactive Role in Learning Space Development

Suan Dusit University stands out for its development of the *"One World Library (OWL) to The University"* initiative, a model of Place-Based Learning (PBL) that emphasizes learning through meaningful engagement with physical spaces. This approach transforms every part of the university into a potential learning environment (Pholpuntin, 2023a; Pholpuntin, 2023b). The model has become a core strategy within the broader framework of "*The Power of SDU,"* which emphasizes the integration of academic learning, professional skills, social engagement, and innovation. The ultimate goal is to develop students into *"Learning Citizens"* - individuals who are equipped to learn continuously and contribute meaningfully to society. Under the OWL initiative, Suan Dusit University has developed a range of infrastructure projects to support innovative learning approaches, including:

1. Cafe Library - A flexible learning space that accommodates formal, semi-formal, and informal learning for everyone.
2. AI Station@SDU x OWL XI - A central learning hub that utilizes Artificial Intelligence (AI) as a key tool and mechanism to advance education in the digital era.
3. Poll Lab - An experiential learning space that uses real-world data to foster the development of ASK - Attitude, Skill, and Knowledge.
4. Poll Lab X - A collaborative learning platform developed in partnership with external organizations to extend learning impact into the wider community.

These initiatives demonstrate that the university does not merely function as a producer of graduates, but rather evolves into an *"Intellectual Space Producer"* - a flexible and adaptive institution that actively creates and connects learning environments aligned with the demands of the modern world.

Comparison of Learning Space Models with International Best Practices

The development of the Poll Lab at Suan Dusit University aligns with and can be compared to the learning space innovations of leading international universities. Notable examples include:

1. MIT Media Lab (Massachusetts Institute of Technology)

MIT Media Lab represents a model of an Open Innovation Space, where technology, research, and hands-on learning are integrated through a *Learning by Making* approach. Its core strength lies in fostering experimentation, embracing failure, and generating new knowledge beyond traditional academic boundaries.

Connection with Poll Lab – The Poll Lab serves as a Data-driven Learning Lab, where real-world data is used to support creative thinking and hands-on learning processes. Similar to MIT Media Lab, Poll Lab encourages experimentation and the development of new ideas through real experiences and inquiry-based learning.

2. Stanford d.school (Hasso Plattner Institute of Design at Stanford University)

Stanford d.school is widely recognized as a hub for experiential learning, with a strong focus on design thinking, interdisciplinary collaboration, and the creation of learner-centered experiences. The school fosters innovation by allowing students from diverse academic backgrounds to co-create solutions through hands-on, reflective processes.

Connection with Poll Lab – The Poll Lab shares similarities with Stanford d.school in its approach to cross-disciplinary collaboration, using real-world data to construct and synthesize knowledge. It also emphasizes the learner's role as the owner of the learning process, giving students agency in shaping their own learning experiences and outcomes.

3. Learning Environments Applied Research Network (LEaRN), University of Melbourne

The LEaRN network focuses on research related to next-generation learning spaces, emphasizing flexibility, technology integration, and the creation of learning ecosystems. This approach highlights the importance of designing adaptable environments that respond to the evolving needs of learners in a rapidly changing world.

Connection with Poll Lab – The Poll Lab has been developed under the concept of a flexible learning ecosystem, aligning closely with the core principles promoted by LEaRN at the international level. Its design reflects responsiveness to modern learning contexts through dynamic, real-world engagement.

Suan Dusit University's Poll Lab is strongly aligned with global trends in the development of learning spaces and experiential learning. What distinguishes Poll Lab is its unique emphasis on the use of authentic data as the core of the learning process. While international case studies often emphasize technological tools or conceptual design, Poll Lab places real data at the center of knowledge construction. Therefore, it represents a learning space innovation with significant potential for international scalability and impact.

Method

The development of the Poll Lab Model is grounded in the integration of educational innovation, experiential learning theory, and professional skill enhancement frameworks. This section outlines the conceptual and methodological foundations that guided the model's formulation and institutional application at Suan Dusit University. Rather than adopting an experimental or design-based research framework, the approach emphasizes conceptual synthesis and contextual adaptation—linking established learning theories with the university's real operational context. The purpose of this model is not only to address emerging educational and professional demands but also to establish a new paradigm that connects academic inquiry with authentic professional practice.

The model's design began with a review of existing challenges in higher education, particularly the persistent gap between theoretical knowledge and employability skills. Drawing from the operational experience of Suan Dusit Poll and the university's educational development initiatives, the Poll Lab was conceptualized as an integrated experiential learning ecosystem.

It provides learners with opportunities to apply knowledge through authentic survey projects, collaborative problem-solving, and reflective learning.

The conceptual design emphasizes three interrelated dimensions—learning principles, learning structures, and learning environments—that together create a holistic educational experience. These dimensions were refined through professional consultation, institutional reflection, and iterative dialogue among educators involved in Poll Lab's creation. The subsequent sections describe (1) the Design Concept of the Poll Lab Model, which elaborates on the five core educational principles underpinning the model, (2) the Learning Structure of the Poll Lab, which explains how the model is implemented through integrated learning activities that foster technical, linguistic, and professional competencies, and (3) Data Collection and Analysis, which outlines the procedures used to evaluate participants' learning experiences and satisfaction.

Through this conceptual process, the Poll Lab embodies Suan Dusit University's commitment to developing adaptive, reflective, and competent graduates capable of contributing meaningfully to the knowledge society. The model's structure integrates real-world data, social collaboration, and reflective engagement to create a learning ecosystem rooted in authentic experience rather than simulated learning environments.

Design Concept of the Poll Lab Model

The rapid transformation of the modern world - particularly the advancement of information technology and the labor market's increasing demand for practical skills - has revealed the limitations of traditional learning models in preparing students for professional life with quality and confidence. In response to these changes, Suan Dusit University, through the Suan Dusit Poll unit, has developed the Poll Lab as an innovative learning space that integrates the principles of survey research with experiential learning methodologies. This model provides students with opportunities to engage in real-world, hands-on learning while developing essential academic and professional competencies.

The development of the Poll Lab model is based on five core principles, which reflect the educational philosophy of the innovation era and serve as foundational ideas for designing effective experiential learning spaces in higher education institutions. These principles will be outlined and elaborated in the following section.

1. Experiential Learning or Learning by Doing

The concept of learning by doing is rooted in the work of John Dewey (1938) and later developed by David Kolb (1984)**.** It emphasizes learning through direct experience rather than rote memorization. In this approach, learners actively participate in real-world processes - including planning, implementation, analysis, and synthesis of learning outcomes. Hands-on learning does more than deepen understanding; it also fosters critical thinking**,** problem-solving**,** and creativity (Schank et al., 1999; Prince, 2004). Within the context of the Poll Lab, the role of the instructor shifts from a traditional knowledge transmitter to a "coach" or "learning facilitator" who designs meaningful activities, stimulates analytical thinking, and guides continuous reflection throughout the learning process.

2. Knowledge Sharing

The Poll Lab places a strong emphasis on knowledge sharing**,** including both explicit knowledge and tacit knowledge, through the exchange of experiences between experts and learners (Davenport & Prusak, 1998; Nonaka & Takeuchi, 1995). Cultivating an organizational culture that supports knowledge sharing is central to building a collaborative learning network within the Poll Lab. This approach encourages innovation development, reduces redundancy in knowledge creation, and fosters the sustainable growth of intellectual capital (Wang & Noe, 2010). By promoting open communication and mutual learning, the Poll Lab enhances its role as a dynamic environment for collective knowledge construction.

3. Collaborative Learning

The Poll Lab is designed to support collaborative learning through small group activities, following the principles of collaborative learning theory (Johnson & Johnson, 1999; Slavin, 2010) and the framework of social constructivism (Vygotsky, 1978). These perspectives

emphasize that knowledge is socially constructed through interaction, dialogue, and shared experiences. Key elements - such as positive interdependence**,** communication skill development, and shared responsibility - are systematically integrated into the learning process. This design not only enhances students' academic knowledge but also strengthens their social and interpersonal skills**,** which are essential for success in professional and civic life.

4. Professional Skill Development

The Poll Lab places a strong emphasis on the systematic development of professional skills, encompassing knowledge, practical competencies, and appropriate attitudes for future careers. This approach is grounded in the work of Guskey (2000), Darling-Hammond & McLaughlin (2011), and Eraut (2004)**,** who highlight the importance of integrated learning experiences for professional growth. The learning space is intentionally designed to support real-world practice in areas such as research**,** data analysis**,** professional communication, and collaboration with professional communities. These experiences prepare learners to adapt effectively to changes in the workforce and to thrive in complex, evolving professional environments.

5. Learning Spaces in Universities

The Poll Lab is an application of the Learning Spaces concepts proposed by Oblinger (2006) and Brown (2009)**,** which emphasize that effective learning spaces should be flexible**,** open**,** and supportive of creativity, experimentation, and dynamic knowledge exchange**.** In this context, the Poll Lab is designed not only as a physical space but also as a living environment that encourages students to explore, interact, and co-construct knowledge. It reflects the shift in higher education toward adaptive and learner-centered environments that respond to diverse learning styles and evolving educational needs. The design of Poll Lab emphasizes the creation of an ***"****Open Learning Space"* that integrates physical, digital, and social dimensions**.** It supports flexible learning modalities and promotes the role of learners as owners of the learning space.

In summary, the Poll Lab model represents an educational innovation that combines experiential learning**,** collaborative engagement**,** and professional skill development**,** within a flexible and context-responsive learning environment. Its adaptable structure aligns with the needs of the modern world and holds strong potential for sustainable implementation in other educational institutions.

Learning Structure of the Poll Lab

The Poll Lab is designed as an ***"****Open Learning Space"* that encourages learners to actively participate in hands-on learning processes. Its learning structure is organized through a variety of integrated activities that combine academic knowledge, professional skills, and language proficiency. These activities are based on real-world scenarios, collaboration with field experts, and the effective use of technology. Poll Lab's activities are structured into three key dimensions for learner development. They are:

1. Technical Skills Dimension - such as using data analysis software like QPS MRDCL, data collection, and data processing.

2. Language Skills Dimension - with a focus on English for professional contexts.

3. Professional Skills Dimension - emphasizing research expertise, communication, and research project management.

Each activity is developed under the "Learning Lab" concept, which applies experimental processes, inquiry-based learning, and knowledge synthesis. In this model, instructors take on the role of coaches or facilitators, rather than traditional lecturers, to guide learners through reflective and interactive learning experiences.

Data Collection and Analysis

Data were collected through post-activity questionnaires using a 5-point Likert scale to assess participants' satisfaction and perceived learning outcomes after each Poll Lab session. The evaluation focused on three dimensions: Attitude, Skills, and Knowledge (ASK), aligning with the model's learning objectives.

Although the reliability and validity of the evaluation instruments were not recalculated in this study, the tools were adopted from established instruments routinely used by Suan Dusit Poll, which have long demonstrated recognized reliability and validity within similar educational and professional training contexts. Therefore, the measurement framework was considered methodologically sound and consistent with prior institutional applications.

Descriptive statistics, including means and percentages, were employed to analyze the data and present the level of participant satisfaction across the eight Poll Lab sessions. The results were interpreted alongside qualitative reflections to capture both quantitative and contextual dimensions of learner experience.

Findings

Learning Ecosystem of the Poll Lab Model

The success of the Poll Lab stems from the implementation of purposeful activities and the creation of a comprehensive learning ecosystem. This ecosystem encompasses not only the physical and organizational environment, but also the structure of learning activities and the collaboration among various stakeholders. The learning ecosystem of the Poll Lab, highlights the interconnections among various components that contribute to its success as an innovative model of experiential learning. The ecosystem is structured around three main components. They are (Figure 1)

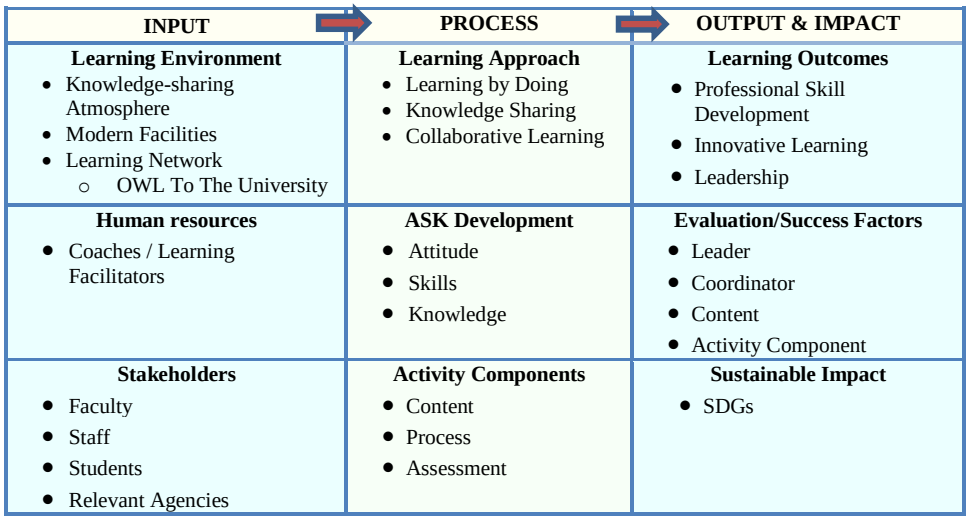

Figure 1. *Poll Lab Learning Ecosystem Model*

Figure 1 illustrates the Poll Lab's integrated learning ecosystem, showing the relationship between input, process, and output elements. The model demonstrates how learning environments, facilitators, and stakeholders interact to support ASK development—Attitude, Skills, and Knowledge—and to achieve sustainable impacts aligned with the SDGs.

1. Input Factors

The learning ecosystem of Poll Lab emphasizes three key input factors ,namely, the learning environment, human resources, and stakeholders. The learning environment includes a knowledge-sharing atmosphere, modern facilities, and a learning network connected with "OWL To The University." In addition, essential equipment and technologies are provided to support hands-on learning activities. Human resources involve the integration of experts from Suan Dusit Poll who serve as coaches and learning facilitators. These experts collaborate with faculty members from various departments to design and implement learning activities that meet students' needs. Stakeholders include students, staff, and relevant agencies who play a vital role in setting the direction and enhancing the effectiveness of learning activities.

2. Process

The learning process of Poll Lab is designed based on three key principles, namely, learning approach, ASK development, and activity components. The learning approach integrates various learning methods, including Learning by Doing, Knowledge Sharing, and

Collaborative Learning, in order to create a comprehensive and effective learning experience. ASK development (Attitude, Skills, Knowledge) emphasizes holistic development by fostering positive attitudes towards the profession, enhancing essential work-related skills, and acquiring up-to-date knowledge. This development is integrated through a variety of learning activities. The components of each activity are systematically designed to cover content, process, and assessment, ensuring that participants gain maximum benefits from their participation.

3. Output & Impact

Poll Lab generates clear outputs and impacts in three areas, namely, learning outcomes, evaluation, and sustainable impact. Learning outcomes demonstrate the development of professional skills, innovative learning, and leadership among participants. These outcomes are systematically monitored and assessed through diverse activity components. Evaluations are conducted by coordinators and activity leaders to measure the effectiveness of learning and to continuously improve operational practices. Sustainable impacts are evident in the support of Sustainable Development Goals (SDGs) and the creation of a learning environment that fosters continuous skill development and professional expertise. The Poll Lab model serves as an academic laboratory, a platform for promoting professional citizenship, and a supportive environment for achieving Sustainable Development Goals (SDGs) in the areas of quality education, equality, and human capital development.

Background of Developing the OWL to Poll Lab Learning Space

One World Library (OWL) to The University – The Learning Space of Suan Dusit University

The One World Library (OWL) to The University of Suan Dusit University serves as a foundational concept for shaping a new model of learning space management. It is based on the idea that “the entire university is a learning space” and acts as a systematic foundation that has led to the innovation of learning models such as Poll Lab. This development influences both the design and outcomes of Poll Lab as a practical learning space, aligning with the university’s philosophy of being an institution for lifelong learning innovation. Suan Dusit University developed the One World Library to The University concept with the objective of transforming the traditional role of the library from a conventional information center into an "Innovation Learning Hub" that integrates various dimensions of learning—physical, digital, and social.

The One World Library to The University is not merely a physical space for reading but is designed as an Open Learning Space that promotes Participatory Learning, Collaborative Learning, and Experiential Learning. This approach is consistent with the perspectives of Brown (2009) and Oblinger (2006), who suggest that “space influences learning behavior” and that modern libraries should be flexible, easily accessible, and multi-functional to support diverse modes of learning and interaction.

One World Library (OWL) to The University as a University-Level Learning Space Model

The One World Library (OWL) is not only a physical concept of a library, but also serves as a prototype for managing university-level learning spaces that systematically integrate content, people, technology, and learning processes. This concept aligns with the global trend in higher education, where universities are restructuring their “Learning Spaces” to meet the needs of modern learners. The model focuses on three main objectives, namely,

Encouraging learner engagement as “owners of their learning”;

Promoting interdisciplinary and interdepartmental collaboration; and

Designing spaces that support experimentation, failure, and synthesis.

Under this framework, OWL at Suan Dusit University has developed new learning models that foster innovations such as Poll Lab and various skill-enhancement activities, including English Sitcom, Green Style, and Data for Impact. All of these reflect that OWL is not merely a "book storage space," but rather an "architecture of learning" that transforms the university into a true "Learning Organization."

OWL to Poll Lab: Integrating Learning Spaces with Practical Processes

Poll Lab is one of the outcomes of OWL, emerging as a "new learning space" that expands from the traditional library structure into a Data-based Learning Lab. It integrates key elements of digital-era learning, including:

1. The use of Big Data and databases from Suan Dusit Poll;
2. Real data analysis for learning purposes;
3. Activities involving experts as mentors; and
4. Communication through professional presentations.

The relationship between OWL and Poll Lab reflects a continuous development of "innovative learning spaces" that support the practice of Higher-Order Skills. This approach aligns with the concept of Place-based Learning, which emphasizes the use of real-world locations as learning accelerators and as starting points for Self-directed Knowledge Construction. In addition, OWL plays a key role as the infrastructure that supports Poll Lab's learning processes through managing data systems and learning resources; providing human resources such as instructors, academics, and researchers; and organizing knowledge-sharing events, exhibitions, and "Public Platforms" for communicating student learning outcomes.

Suan Dusit Poll: From Public Database to Poll Lab as a Contemporary Learning Space

Suan Dusit Poll serves as a significant source of social data, functioning as a *Public Knowledge Infrastructure* that not only supports the analysis of social, political, and economic trends but also acts as a highly valuable academic resource. The continuously published poll results create broad public awareness and serve as "learning materials" for activities in Poll Lab, such as: real data analysis practice; learning research processes; communication skill training in real-world contexts; and generating new datasets that provide policy-related recommendations. Furthermore, the collaboration between Suan Dusit Poll and various internal and external networks demonstrates the potential to transform a "data repository" into a *Contemporary Academic Arena*, which plays a crucial role in human resource development in higher education.

Poll Lab Learning Outcomes: Attitude, Skill, and Knowledge (ASK)

Poll Lab activities contribute to the development of skills, attitudes, and knowledge through an integrated learning approach that supports sustainable personal development. This serves as a strong model for holistic human resource development, emphasizing the importance of enhancing skills, attitudes, and knowledge. In particular, it integrates learning through current real-world situations and promotes understanding of key social issues. This approach aligns with modern human resource development concepts and *The Power of SDU* policy concerning the development of a learning ecosystem.

During the learning activities conducted from July to December 2024, a total of 10 open and diverse learning activities were organized. The analysis of Poll Lab activities from sessions 3 to 10, covering 8 fully recorded sessions, demonstrates that these activities were designed to comprehensively develop participants' potential in all dimensions—Skills, Attitudes, and Knowledge—through various interconnected learning formats. The analysis of learning outcomes across the three dimensions (ASK) follows the competency development framework of Bloom's Revised Taxonomy (Anderson & Krathwohl, 2001), which emphasizes the development of learners in cognitive, affective, and psychomotor domains. The summarized learning outcome analysis is presented in Tables 1–3 as follows:

Table 1. *Skills Dimension*

Skill Category	Description	Related Activities
Technology Skills	QPS MRDCL; NETZERO MAN; NCX	Poll Lab 3, 7, 8, 9
Language Skills	(e-Clipping); Mental Health app	Poll Lab 4
Communication Skills	Reading English news; Vocabulary practice; Pronunciation; Real-world use	Poll Lab 5, 6

Analytical Skills	Interviewing; Question design; Interprofessional communication; Knowledge transfer	Poll Lab 3, 7, 8

Table 1 presents the types of technical, language, communication, and analytical skills developed through Poll Lab activities. Each skill category is matched with specific learning sessions that fostered practical application and professional competence within real-world contexts.

Table 2. *Attitude Dimension*

Attitude Category	Description	Related Activities
Lifelong Learning	Openness to learning English; Continuous self-development;	Poll Lab 4, 5, 6
Professionalism	Knowledge sharing	Poll Lab 3, 5, 6
Environmental Awareness	Development of professional skills;	Poll Lab 7
Organizational Pride	Responsibility; Teamwork	Poll Lab 10

Table 2 summarizes the attitudinal development observed among Poll Lab participants, categorized by lifelong learning, professionalism, environmental awareness, and organizational pride. Each category is linked to the Poll Lab sessions where these attitudes were actively cultivated through experiential activities.

Table 3. *Knowledge Dimension*

Knowledge Category	Description	Related Activities
Language Knowledge	Specialized vocabulary;	Poll Lab 4
Research Knowledge	Language use in news contexts;	Poll Lab 3, 5, 6
Environmental Knowledge	Synonyms and similar words	Poll Lab 7
Communication Knowledge	Using analysis software;	Poll Lab 8, 9, 10

Table 3 outlines the types of knowledge acquired by participants through Poll Lab sessions, including language, research, environmental, and communication knowledge. The data highlight how different learning activities contributed to enhancing theoretical understanding and applied knowledge relevant to professional practice.

Evaluation Results of Participants' Satisfaction with Poll Lab Learning Activities

The learning activities organized within the Poll Lab practical learning space, developed by Suan Dusit Poll, are designed to function as real classrooms. These activities emphasize direct experience, hands-on practice, and the creation of actual learning outputs. This form of spatial learning innovation was developed to align with the university-wide learning space development under the concept of *One World Library to The University*, where every space within the university serves as a learning environment (*Place-based Learning*). Quantitative data were collected from participants through questionnaires for each activity session. The collected data were then analyzed using basic statistical methods, including the mean ($\bar{x}$), percentage, and standard deviation. The results of participants' satisfaction analysis for Poll Lab sessions 3 to 10 (8 sessions in total) are presented in Table 4.

Table 4. *Satisfaction Levels of Participants in Poll Lab Activities*

Activity	N (181)	Mean	Satisfaction	Level	Rank
POLL LAB 3: QPS MRDCL	4	4.75	95.00%	Very High	2
POLL LAB 4: "ENGLISH SITCOM"	10	N/A	N/A	N/A	N/A
POLL LAB 5: PROFESSIONAL QUESTIONING AND INTERVIEWING	54	4.76	95.20%	Very High	1
POLL LAB 6: "INSIGHTS SUAN DUSIT POLL	50	4.35	87.00%	High	7
POLL LAB 7: "GREEN STYLE: Simple Steps AT Your Desk"	**14**	4.60	92.00%	Very High	5
POLL LAB 8: "EXPLORING PUBLIC RELATIONS WITH POLL LAB"	**9**	4.67	93.33%	Very High	4
POLL LAB 9: "POLL LAB X Mobile Psychology Clinic"	**11**	4.71	94.29%	Very High	3
POLL LAB 10: "REVISITING THE LEGEND OF THE OLD BUILDING"	**29**	4.42	88.42%	High	6
	Overall	4.56	92.18	Very High	

Table 4 reports the mean satisfaction scores and percentage ratings across eight Poll Lab

sessions (N = 181). The results indicate very high overall satisfaction (M = 4.56, 92.18%). Notably, Poll Lab 5: *Professional Questioning and Interviewing* received the highest satisfaction score, while Poll Lab 6 recorded the lowest yet remained within the "high" satisfaction level.

Note. Poll Lab 4 employed qualitative reflection journals instead of structured questionnaires; therefore, numerical satisfaction data were not available.

Remark

The interpretation criteria for mean scores (Supakit Wongwiwatthanakit, 2007) are as follows:

4.51–5.00: The participants' satisfaction with Poll Lab activities is at a *very high* level.
3.51–4.50: The participants' satisfaction with Poll Lab activities is at a *high* level.
2.51–3.50: The participants' satisfaction with Poll Lab activities is at a *moderate* level.
1.51–2.50: The participants' satisfaction with Poll Lab activities is at a *low* level.
1.00–1.50: The participants' satisfaction with Poll Lab activities is at a *very low* level.

According to Table 4, Poll Lab activities were organized for a diverse group of participants, including staff, instructors, and students, with a total of 181 participants. The overall satisfaction received an average score of 4.56, or 92.18%, which is categorized as "Very High" satisfaction. The activity with the highest number of participants was *Professional Questioning and Interviewing (Poll Lab 5),* which had 54 participants and received the highest satisfaction score, with a mean of 4.76 (95.20%), ranking first.

The second-highest satisfaction score was for *Poll Lab 3: Learning QPS MRDCL*, with a mean score of 4.75 (95.00%), ranked second. This was followed by *Poll Lab 9: Poll Lab X Mobile Psychology Clinic*, which received a mean score of 4.71 (94.29%), ranked third. On the other hand, *Poll Lab 6: Insights Suan Dusit Poll* received the lowest satisfaction score at 4.35 (87.00%), ranked seventh, but it still falls within the "High" satisfaction level.

The analysis of satisfaction results in Table 4 reveals several interesting points. The top three activities with the highest satisfaction scores (Poll Lab 5, Poll Lab 3, and Poll Lab 9) share a key characteristic: they focus on developing specialized skills that can be practically applied in professional contexts. *Professional Questioning and Interviewing (Poll Lab 5)* received the highest satisfaction score (mean 4.76), reflecting participants' emphasis on communication and interpersonal skills—skills that AI has not yet fully replaced in today's job market.

Meanwhile, *Poll Lab 6: Insights Suan Dusit Poll* received the lowest satisfaction score (mean 4.35), which may indicate the challenges of designing activities with highly complex and academic content. This suggests the need for a better balance between theoretical content and practical activities to enhance engagement. Furthermore, the differences in satisfaction levels between student and staff groups highlight the necessity of adjusting the activity formats to match the needs and prior knowledge of each participant group.

An analysis of Tables 1–3, which present the learning outcomes in skills, attitudes, and knowledge, indicates that Poll Lab has successfully integrated the development of ASK (Attitude–Skill–Knowledge) across all activities. The model shows particular strength in developing technical skills, which appeared in 4 out of 8 activities, reflecting Poll Lab's focus on preparing learners for the digital era workforce. However, the development of attitudes related to environmental awareness and organizational pride was more limited, appearing in only one activity each. This highlights future opportunities for further enhancement in these areas.

The satisfaction results of Poll Lab participants, which were rated at high to very high levels, are consistent with the findings of Campbell & Cabrera (2014), who pointed out that experiential learning in purposefully designed spaces significantly enhances learners' satisfaction and engagement. Specifically, students tend to value opportunities for hands-on practice and experiential learning, while staff and instructors place more emphasis on content

that can be immediately applied in their professional work. These findings help explain the differences in satisfaction levels observed between student and staff groups in the Poll Lab activities.

In addition, *Poll Lab 5: Professional Questioning and Interviewing*, which received the highest satisfaction score with a mean of 4.76, aligns well with findings that flexible learning space designs focusing on developing essential skills are significantly correlated with higher learner satisfaction. Activities that enhance communication skills and provide hands-on practice tend to receive high ratings, reflecting the high demand for these skills in the current job market. This alignment highlights the effectiveness of the Poll Lab's design in generating high participant satisfaction while emphasizing key skills necessary for contemporary professional contexts.

Linking the Poll Lab Model to the Sustainable Development Goals (SDGs)

Poll Lab, as an innovation in practical learning, demonstrates support for multiple dimensions of the United Nations' Sustainable Development Goals (SDGs). This reflects the alignment of Poll Lab with six specific SDGs, showing its contribution to sustainable development in various aspects, as follows:

Quality Education (SDG 4) - Poll Lab creates an open learning ecosystem that supports lifelong learning, following the concept of Kolb & Kolb (2017). It provides opportunities for learners to develop professional skills through real-world experiences in research and opinion surveys, under the supervision of experts from Suan Dusit Poll. This establishes an accessible and high-quality learning space for all.

Decent Work and Economic Growth (SDG 8) - Poll Lab's activities focus on developing skills that meet current labor market demands, as highlighted in the *Future of Jobs Report* by the World Economic Forum (2023). In particular, data analysis, research, and communication skills are essential for employment in the digital era, helping increase access to decent and valuable jobs.

Industry, Innovation and Infrastructure (SDG 9) - Poll Lab serves as a center for the development of research and opinion survey innovations. It promotes the use of technology for data collection and analysis, while also strengthening the university's research infrastructure. This supports the goal of developing accessible technology and innovation for all.

Reduced Inequalities (SDG 10) - Poll Lab supports the reduction of inequalities through research on social issues, providing equal access to learning opportunities for all, and presenting data that reflects inequality problems to the public. This helps raise awareness and drive policy-level changes.

Peace, Justice and Strong Institutions (SDG 16) - Poll Lab plays a role in promoting transparency through public opinion surveys, encouraging public participation, and developing tools for monitoring and evaluating public policies. This contributes to building an open, transparent, and accountable society based on principles of good governance.

Partnerships for the Goals (SDG 17) - Poll Lab demonstrates success in building collaborative networks between educational institutions and various sectors by developing research networks and facilitating knowledge exchange across institutions. This reflects collective efforts to achieve the Sustainable Development Goals.

The integration of the Sustainable Development Goals into Poll Lab's operations reflects the potential of practical learning innovations to support sustainable development. In particular, this involves the development of human resources, the creation of innovation, and the promotion of institutional collaboration—all of which serve as essential foundations for driving society toward sustainable development.

Discussion

The findings from the implementation of the Poll Lab Model at Suan Dusit University provide meaningful insights into how experiential learning environments can transform higher

education practices in the digital era. The discussion that follows interprets these results through theoretical, empirical, and comparative lenses, while reflecting on implications for learning space development, learner engagement, and sustainable educational transformation.

1. Transformative Role of Experiential Learning in Higher Education

The Poll Lab findings affirm Kolb's (1984) experiential learning theory and Dewey's (1938) concept of "learning by doing," which highlight that authentic experience is a crucial catalyst for deep learning and long-term retention. The significant improvements in Attitude, Skills, and Knowledge (ASK) among participants demonstrate that structured experiential activities — particularly those involving real data and authentic professional practice — enhance learners' cognitive and affective engagement. This is consistent with Prince (2004), who emphasized that active learning environments promote critical thinking and adaptability. The Poll Lab thus exemplifies how universities can translate abstract theory into tangible, lived experience, closing the gap between classroom learning and workplace competency.

2. Knowledge Co-construction and Collaborative Engagement

The results further validate social constructivist perspectives (Vygotsky, 1978; Johnson & Johnson, 1999), demonstrating that knowledge sharing and peer collaboration contribute to both academic understanding and professional skill development. Poll Lab's activities, which integrate expert–learner interaction and interdisciplinary teamwork, foster a community of practice that mirrors professional collaboration. Participants' high satisfaction levels (mean = 4.56, 92.18%) reflect a sense of belonging and ownership within the learning process. This finding underscores Ackers' (n.d.) notion that when learners perceive themselves as "owners of their learning space," motivation and engagement deepen. The Poll Lab's open structure and facilitative teaching model, therefore, provide a template for participatory learning ecosystems that support sustainable knowledge construction.

3. The Poll Lab as a Model for Data-driven Learning Ecosystems

Distinct from traditional learning laboratories, Poll Lab emphasizes the use of real social data from Suan Dusit Poll as the central medium of learning. This data-driven approach situates learning within authentic socio-political contexts, bridging academic inquiry and societal relevance. Similar to the MIT Media Lab's model of innovation through making and Stanford d.school's design-based pedagogy, the Poll Lab integrates analytical, communicative, and reflective dimensions into a coherent ecosystem. Such integration transforms Brown's (2009) concept of learning space into a living system — one that merges physical, digital, and social dimensions. As a result, learners not only acquire technical and communication skills but also develop a holistic understanding of the ethical and civic implications of their work.

4. Alignment with Global Trends and Sustainable Development Goals (SDGs)

The Poll Lab's operational framework aligns with six Sustainable Development Goals (SDG 4, 8, 9, 10, 16, and 17), reflecting its broader contribution to social responsibility and inclusive education. By cultivating professional competencies that respond to labor market demands (WEF, 2023), it supports SDG 8 (Decent Work and Economic Growth). Moreover, its integration of collaborative networks across disciplines exemplifies SDG 17 (Partnerships for the Goals). This alignment signifies a paradigm shift in higher education — from knowledge transmission to social transformation — demonstrating that learning space innovation can function as an instrument for institutional sustainability and civic development.

5. Implications for Institutional Design and Pedagogical Innovation

From an institutional standpoint, the Poll Lab demonstrates how universities can reposition themselves as "Intellectual Space Producers" rather than mere providers of instruction. Its success suggests that universities should adopt a multi-layered strategy integrating space, data, and pedagogy within a unified ecosystem. Such integration allows for adaptive learning pathways that align with individual learner trajectories while supporting collective goals. Furthermore, the Poll Lab's emphasis on ASK development offers a replicable framework for embedding employability and citizenship education into curricula. The findings echo Darling-Hammond & McLaughlin (2011), who argued that professional growth is maximized when learning environments combine reflection, collaboration, and authentic practice.

6. Challenges and Future Considerations

Despite its successes, several limitations must be addressed to enhance the model's scalability and long-term sustainability. Resource constraints and personnel specialization limit the expansion of Poll Lab activities across all faculties. Additionally, the lower satisfaction scores in theory-intensive sessions indicate the need for improved balance between conceptual and experiential components. Future iterations should integrate AI-driven analytics, blended learning formats, and longitudinal tracking to assess long-term impacts on employability and professional development. Establishing partnerships with public and private sectors could also extend the Lab's reach and diversify its real-world data sources, enhancing its value as a national learning innovation.

The Poll Lab contributes to the literature by integrating data-driven learning within the physical learning space paradigm, thereby extending Kolb's experiential cycle into an institutional learning ecosystem model. This conceptual framework positions the Poll Lab as a bridge between experiential learning theory and higher education practice, illustrating how authentic data and interdisciplinary collaboration can transform university spaces into living laboratories for professional and civic development. By embedding real-world data into experiential cycles, the model advances a new understanding of learning environments as dynamic, evidence-based systems of practice.

In summary, the Poll Lab Model represents a comprehensive, data-based, and learner-centered innovation in experiential learning. It bridges theory and practice, fosters collaboration and reflective engagement, and aligns educational design with both institutional missions and global sustainable goals. The findings highlight that when learning spaces are reimagined as ecosystems—integrating experience, collaboration, and technology—they can produce not only skilled graduates but also socially responsible citizens capable of driving positive change in an evolving world.

Conclusion

In the context of modern education, where digital technology, social change, and economic uncertainty continually challenge traditional learning models, the development of university learning spaces must move beyond conventional structured learning management. It must focus on creating a dynamic, flexible, and real-life connected *Learning Ecosystem* that aligns with the realities of learners' lives.

The development of *Poll Lab* by Suan Dusit Poll represents one of the key case studies under the *One World Library to The University* initiative, as a form of *Place-based Pedagogy*. This practical learning innovation emerges from the integration of experiential learning, professional skills, knowledge exchange, and collaborative learning, all supported by the OWL infrastructure at Suan Dusit University, which serves as a prototype for learning space design in higher education contexts. Poll Lab functions both as a *skill training space* and a *real research laboratory*, where learners actively participate in knowledge production processes alongside experts and professional communities. This reflects that the development of ASK (Attitude – Skill – Knowledge) can truly occur within well-designed spaces, both physically and procedurally. At the same time, OWL serves to integrate learning resources, learning processes, and learners through the principles of *Library as Learning Infrastructure* and *Learning by Living*. These principles have influenced the development of various university projects, transforming them into creative academic laboratories that support learners' intellectual growth.

Beyond the specific case of Suan Dusit University, the Poll Lab model demonstrates potential for adaptation across different cultural and institutional contexts. In resource-limited contexts, the model can be simplified through the use of publicly available datasets and open-access technologies, ensuring that experiential and collaborative learning principles remain intact. In Western higher education systems, where interdisciplinary collaboration and innovation are emphasized, Poll Lab's data-driven inquiry can be embedded within project-based

curricula to enhance critical thinking and problem-solving skills. Conversely, in Asian or collectivist contexts, Poll Lab could be adapted to emphasize group cohesion and shared responsibility, aligning with cultural norms of teamwork and harmony. In institutions with advanced digital infrastructure, the model can also be expanded through AI-driven analytics, computer-assisted learning platforms, or virtual reality environments to increase inclusivity and global reach. These possible adaptations highlight Poll Lab as a flexible and scalable framework that transcends a single institutional case, reinforcing its potential relevance for international audiences.

In implementing the Poll Lab model, universities should integrate a longitudinal evaluation framework to track graduates' career development and the sustained application of acquired skills. A cohort-based approach - conducted at ٦, ١٢, and ٣٦ months post-participation - would capture employment outcomes, professional advancement, and the continued use of ASK skills. Employing a mixed-methods strategy that combines validated surveys, brief performance tasks, alumni interviews, and feedback from employers or faculty will ensure a robust, multi-dimensional evaluation. Such follow-up not only provides empirical evidence of long-term impact but also incorporates stakeholder perspectives, offering a comprehensive understanding of workforce readiness and professional growth.

Overall, the *"OWL to Poll Lab"* model serves as a significant case study in designing learning spaces that systematically integrate *data, space, and people*. This model can be meaningfully applied to the development of learning ecosystems in other higher education institutions.

Policy Recommendations and Applications

Based on the study of the Poll Lab model as a practical learning innovation, the following policy recommendations and applications are proposed.

1. Higher education institutions should support the development of new learning spaces.

The concept of "the entire university as a learning space" should be expanded beyond classrooms and libraries to include open spaces, community areas, and digital platforms as effective learning environments. This aligns with Brown's (2009) perspective on learning space design that influences learning behaviors.

2. Authentic data and real-world problems should serve as the foundation for learning.

Learning based on authentic data and real-world issues helps develop analytical thinking, problem-solving, and innovation skills. Educational institutions should collaborate with external organizations to develop research problems that address societal needs.

3. Future skills should be developed alongside professional skills.

Digital skills, AI literacy, and soft skills should be integrated into professional skill development to better prepare learners for future labor markets, as projected by the World Economic Forum (2023).

4. A flexible learning ecosystem that supports lifelong learning should be developed.

Educational institutions should design adaptable learning ecosystems that can be modified according to learning objectives and support lifelong learning. Digital technologies should serve as a bridge connecting physical and online learning environments.

5. Learning space development should be linked to the Sustainable Development Goals (SDGs).

The design of learning spaces and activities should consider the SDGs, especially Quality Education (SDG 4), Decent Work and Economic Growth (SDG 8), and Industry, Innovation and Infrastructure (SDG 9), to ensure broader and more meaningful impacts.

Implementing these recommendations will promote the development of learning spaces that respond to both current and future societal contexts and serve as models for other educational institutions in developing practical learning innovations.

Limitations and Challenges in Poll Lab Operations

Although Poll Lab has been successful in developing practical learning spaces, several limitations and challenges remain, as follows:

1. Resource Limitations

Developing new learning spaces that integrate advanced technologies and tools requires substantial budgets and resources. In particular, acquiring specialized software such as QPS MRDCL, which carries high licensing costs, may pose challenges for other educational institutions seeking to adopt this model.

2. Personnel Challenges

The operation of Poll Lab relies on personnel with expertise in survey research and data analysis, which are relatively rare skills in the academic field. Building and maintaining a team of specialists who can serve as coaches and learning facilitators remains a major challenge.

3. Challenges in Scaling Up

Despite receiving high satisfaction ratings, expanding Poll Lab activities to other faculties and programs presents challenges due to differences in academic contexts and specific needs of each discipline. This requires careful adaptation of activities to suit the unique characteristics of each field.

4. Limitations in Long-term Impact Evaluation

At present, Poll Lab faces limitations in tracking and assessing long-term impacts on participants' professional skill development and career success—key indicators of the effectiveness of the learning model.

5. Challenges in Curriculum Integration

Integrating Poll Lab activities into existing curriculum structures remains challenging due to scheduling conflicts, student workloads, and alignment with predetermined learning outcomes within each program.

Acknowledgement and Sponsoring Information

The authors acknowledge the use of the AI tool ChatGPT-4o in improving language clarity and readability during manuscript preparation. The tool was not used for generating original ideas or conducting analyses, and all intellectual contributions remain solely those of the authors.

Declaration of Competing Interest

The authors declare no competing financial interests or personal relationships that could have influenced the work reported in this article.

References

Ackers, J. (n.d.). *Redefining ownership in flexible learning environments: Empowering students to shape their educational journey*. VS America.

Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. *Computers in Human Behavior*, 102, 67–86. https://doi.org/10.1016/j.chb.2019.08.004

Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.

Brown, M. (2009). Learning spaces. In D. G. Oblinger (Ed.), *Learning spaces* (pp. 1.1–1.22). Washington, D.C: EDUCAUSE.

Campbell, C. M., & Cabrera, A. F. (2014). Making the mark: Are grades and deep learning related? *Research in Higher Education*, 55(5), 494–507.

Chaleysub, S. (2025, 24 April). Poll Lab: Another dimension of 'Suan Dusit Poll'. *Siamrath*. p.5.

Darling-Hammond, L., & McLaughlin, M. W. (2011). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 92(6), 81–92.

Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business School Press.

Dewey, J. (1938). *Experience and education*. Macmillan.

Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2),

247–273.
Guskey, T. R. (2000). *Evaluating professional development*. Corwin Press.
Johnson, D. W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory into Practice*, 38(2), 67–73.
Kolb, A. Y., & Kolb, D. A. (2017). Experiential learning theory as a guide for experiential educators in higher education. *Experiential Learning & Teaching in Higher Education*, 1(1), 7–44.
Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press.
Oblinger, D. G. (Ed.). (2006). *Learning spaces*. EDUCAUSE.
Oldenburg, R. (1999). *The great good place: Cafes, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community*. (3rd ed.). Marlowe & Company.
Pholpuntin, S.) ๒023a .(THE BIG IDEA Suan Dusit One World Library – Turn Ideas into Reality. Bangkok, Thailand: Suan Dusit University.
Pholpuntin, S. (2023b). THE BIG IDEA Suan Dusit One World Library – Turn Ideas into Reality. *Journal of Multidisciplinary in Social Sciences*, 19(3), 104–111. https://so03.tci-thaijo.org/index.php/sduhs/article/view/274242
Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231.
Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers & Education*, 147, 103778. https://doi.org/10.1016/j.compedu.2019.103778
Schank, R. C., Berman, T. R., & Macpherson, K. A. (1999). Learning by doing. In C. M. Reigeluth (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (Vol. 2, pp. 161–181). Lawrence Erlbaum Associates.
Slavin, R. E. (2010). Co-operative learning: What makes group-work work? In H. Dumont, D. Istance, & F. Benavides (Eds.), *The nature of learning: Using research to inspire practice* (pp. 161–178). OECD Publishing.
Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115–131.
Wongwiwatthanakit, S. (2007). *Dictionary of Research and Statistics*. Bangkok, Thailand: Darnsutha Press.
World Economic Forum. (2023). *The future of jobs report 2023. World Economic Forum*. https://www.weforum.org/publications/the-future-of-jobs-report-2023/
Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 1–27. https://doi.org/10.1186/s41239-019-0171-0

Author details

Sukhum Chaleysub currently serves as the Advisor to the President of Suan Dusit University. With over three decades of dedicated service to the institution, he has held numerous academic and leadership positions, including President of Suan Dusit University and the founder and President of Suan Dusit Poll. Most recently, he has been appointed as an Advisor to the Minister of Education in Thailand. His extensive expertise spans multiple domains, including education, public relations, public opinion polling, leadership, and related fields.

Pornpan Buathong serves as the Director of Suan Dusit Poll at Suan Dusit University in 2024. She possesses a strong academic and professional background in behavioral science, education, and public

opinion polling. She plays a pivotal role in Poll Talk, a monthly program disseminated via YouTube, where she also serves as the Master of Ceremonies (MC).

Nongluck Chotevithayathanin joined Suan Dusit Poll at Suan Dusit University in 2003 as a researcher and has since held various academic to support the university's executive functions. She currently writes a monthly column for Siamrath newspaper and has previously served as the Foreign Affairs Director of Suan Dusit Poll. Her professional expertise spans the fields of education, library and information science, and communication.

Suktip Suksai has been working at Suan Dusit Poll for three years. Prior to that, she worked at the Faculty of Science and Technology for seven years. She possesses expertise in administrative management, infographic design, and communication technology. Currently, she is pursuing a doctoral degree in the Doctor of Education program in Educational Leadership at Suan Dusit University, aiming to expand her professional work and develop her perspectives in various dimensions.