

การเสริมสร้างทักษะแห่งศตวรรษที่ 21 ของพนักงานมหาวิทยาลัยสายสนับสนุน ผ่านความร่วมมือระหว่างมหาวิทยาลัยคู่สัญญา Enriching the 21st Century skills for non-academic staff in higher education through university partnership

วรดา อภิรัตน์^{1*} และ ฮิคาริ อิชิโด²
Worada Apirat^{1*} and Hikari Ishido²

บทคัดย่อ

สถาบันอุดมศึกษาทั่วโลกมุ่งมั่นพัฒนาเพื่อเพิ่มขีดความสามารถในการแข่งขันเพื่อให้มหาวิทยาลัยชั้นสูงอันดับมหาวิทยาลัยโลก สามารถดึงดูดนักศึกษาและแหล่งทุนสนับสนุนจากภายนอกซึ่งจะส่งผลต่อความสำเร็จและความยั่งยืนทางการเงิน การบรรลุเป้าหมายดังกล่าวต้องอาศัยการทำงานที่มีประสิทธิภาพของบุคลากรทุกฝ่าย ทั้งผู้บริหาร คณาจารย์ และบุคลากรสายสนับสนุน งานวิจัยที่ผ่านมากล่าวถึงกลยุทธ์และทักษะที่ผู้บริหารและ คณาจารย์ควรได้รับการอบรมเพื่อส่งเสริมและพัฒนาให้เกิดวิธีปฏิบัติและนวัตกรรมใหม่แก่องค์กร แต่การศึกษาเกี่ยวกับทักษะและความรู้ที่บุคลากรสายสนับสนุนควรได้รับการส่งเสริมและพัฒนานั้นยังคงได้รับการศึกษาอย่างจำกัด ทั้งที่บุคลากรกลุ่มนี้มีบทบาทสำคัญต่อการดำเนินงานของสถาบัน ในบริบทโลกยุคดิจิทัลบุคลากรสายสนับสนุนจำเป็นต้องพัฒนาทักษะแห่งศตวรรษที่ 21 เพื่อสนับสนุนความเป็นนานาชาติ ยกระดับคุณภาพบริการ และสร้างความร่วมมือที่มีประสิทธิภาพในสภาพแวดล้อมทางวิชาการที่หลากหลาย

บทความวิชาการนี้ กล่าวถึงกรณีศึกษาความร่วมมือของพนักงานสายสนับสนุนจากมหาวิทยาลัยคู่สัญญาคือ มหาวิทยาลัยชิบะ ประเทศญี่ปุ่น และวิทยาลัยนานาชาติ มหาวิทยาลัยมหิดล ประเทศไทย ซึ่งมีวัตถุประสงค์ให้พนักงานสายสนับสนุนจากได้พัฒนาทักษะแห่งศตวรรษที่ 21 ด้านการใช้ภาษาอังกฤษ ด้านดิจิทัล และการสื่อสารระหว่างวัฒนธรรม ซึ่งเป็นทักษะที่สำคัญและจำเป็นต่อการทำงานและชีวิตผ่านกิจกรรมออนไลน์ที่ใช้ภาษาอังกฤษเป็นสื่อกลางเพื่อการแลกเปลี่ยนเรียนรู้ในหัวข้อที่เกี่ยวกับภาษา วัฒนธรรม อาหาร สถานที่ท่องเที่ยว จุดแข็งของแต่ละประเทศในการดึงดูดนักศึกษาและนักท่องเที่ยวต่างชาติ รวมถึงเส้นทางความก้าวหน้าและการกระบวนกรหมุนเวียนงานของสถาบันอุดมศึกษาจากทั้งสองประเทศ การประเมินผลการจัดกิจกรรมออนไลน์พบว่า กิจกรรมในลักษณะดังกล่าวสอดคล้องกับวัตถุประสงค์ของโครงการที่ช่วยเสริมสร้างทักษะแห่งศตวรรษที่ 21 ทั้งสามด้านข้างต้นแก่พนักงานสายสนับสนุนของทั้งสองสถาบัน โดยสามารถนำความรู้ที่ได้รับจากการแลกเปลี่ยนเรียนรู้ไปปรับใช้ในการทำงานและชีวิต

คำสำคัญ : พนักงานสายสนับสนุนในสถาบันอุดมศึกษา; ความร่วมมือระหว่างมหาวิทยาลัย; ทักษะแห่งศตวรรษที่ 21

^{1*} วิทยาลัยนานาชาติ มหาวิทยาลัยมหิดล, มหาวิทยาลัยมหิดล, ประเทศไทย

² บัณฑิตวิทยาลัยการศึกษาระดับโลกและสหสาขาวิชา, มหาวิทยาลัยชิบะ, ประเทศญี่ปุ่น

^{1*} Mahidol University International College, Mahidol University, Thailand

² Graduate School of Global and Transdisciplinary Studies, Chiba University, Japan

* Corresponding author: email: worada.apirat@mahidol.ac.th

Abstract

Higher education institutions (HEIs) worldwide are striving to become more competitive and achieve world-class status to attract more students and secure external funding for long-term success and financial sustainability. To achieve these goals, all university personnel including management, academic staff, and non-academic (support) staff must perform their roles efficiently and demonstrate the necessary professional skills to drive institutional progress. Although many studies address strategies and skill development for university management and academic staff, the training needs for non-academic staff remain underexplored. Despite their essential role in institutional operations, support staff are often overlooked in research on university advancement. In today's global and digital landscape, non-academic staff must also develop 21st Century Competency which is crucial for supporting internationalization, improving service quality, and fostering effective collaboration in diverse academic settings.

This article examines a case study of collaborative engagement between administrative staff from Chiba University, Japan, and Mahidol University International College, Thailand. The initiative was designed to cultivate essential 21st Century competencies focused English language proficiency, digital literacy, and intercultural communication—among support personnel. Recognizing the growing importance of these skills in both professional and personal domains, the project implemented a series of English-mediated online activities that facilitated cross-cultural exchange. Discussion topics included language, cultural practices, cuisine, tourism, national strategies for attracting international students and visitors, career progression, and job rotation systems within higher education institutions. Evaluation findings indicate that the activities were well-aligned with the project's objectives, effectively enhancing the targeted skill sets. Participants reported that the acquired knowledge was both relevant and transferable to their work environments and daily lives.

Keywords: non-academic staff in higher education, university partnership, 21st Century skills

Introduction

International students have become crucial to the financial sustainability of universities, particularly in countries facing declining birth rates such as Japan and Thailand. Their presence not only generates revenue but also enhances global rankings through the percentage of international students (QS Quacquarelli Symonds, 2023; Times Higher Education, 2019). Driven by global trends and national policies, as well as cultural appeal and institutional services, international student numbers in both countries continue to rise. To meet these demands, higher education

institutions (HEIs) must ensure that staff especially non-academic personnel, possess the necessary competencies. These staff members are integral to supporting students, faculty, and stakeholders. Training is a strategic investment that fosters teamwork and skill development (Barreto, 2020). As noted by Avenali et al. (2022), staff roles vary and must evolve to meet organizational and multicultural challenges (Vaccharino & Li, 2018). Non-academic staff are vital to university operations, particularly in services supporting international students. They contribute to institutional innovation and must be equipped to work in

diverse environments (Bossu et al., 2019). Developing key 21st Century competencies: critical thinking, creativity, communication, and collaboration is essential not only for students but also for the staff who support them.

This article examines the current landscape of higher education in Japan and Thailand, the roles and challenges of non-academic staff, and the development of essential skills: English proficiency, digital literacy, and intercultural communication through a partnership between Chiba University (Japan) and Mahidol University International College (Thailand). It concludes with recommendations for future staff development to inform institutional and HR strategies.

Background of current situation of higher education in Japan and Thailand

The mobility of international students has increased in many countries due to the global trend of internationalization at the higher education level. In the case of Japan and Thailand, the number of international students in these two decades has risen by several factors; country's policy, infrastructure, international environment, support services, etc. Driven by country policy, Oba (2008) mentioned that the Japanese government has established a plan to foster 30 universities to become world-class institutions since 2001. This plan accumulated various policy tools. The necessity of international students was observed and the 300,000 international students were set out by 2020. Report by Statista (2022), the total number of

international students has increased from 2012 to 2021 from 161,850 to 312,210 in 2019 (as the following figures are reproduced in Figure 1). Even though the number declined for two consecutive years in 2020 and 2021, generally, it increased by 92.90 percent. Apart from the government policy, several reasons attract international students to Japan such as safety, convenience, and modern infrastructure as well as universities' efforts in providing support services and activities to international students; consultation and counseling, Japanese language classes, cultural exchange, and tours, summer school, job hunting, and career and education, etc. (Tran et al., 2022).

In Thailand, international students in higher education were from 190 countries in Term 1 of the academic year 2023. (Prachachat, 2023). According to a study by Jampaklay et al. (2022) number of international students in Thailand has increased from around 10,000 in 2009 to 25,110 in 2019 or 151.10 percent. The key success factors consist of the international environment within the institutions, quality, cost of education, capabilities of services, and support provided to international students by the HEIs. However, attracting international students is being competitive because the number of international students not only represents the university's image and reputation of the institution for university ranking criteria but also important as a source of revenue that contributes to the country's economy. These brought universities' drive toward world-class universities to be outstanding from other competitors.

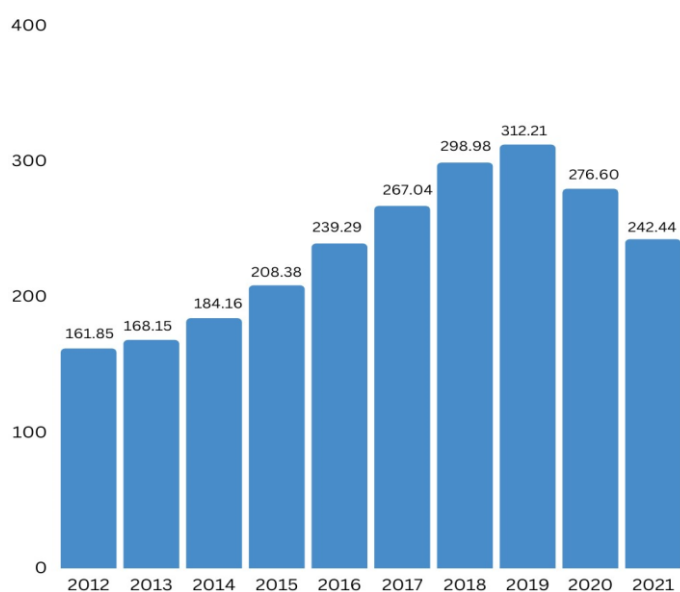


Figure 1 Number of international students in Japan from 2012 to 2021 (Thousand)

Sources: www.statista.com/statistics/1125812/japan-total-number-foreign-students/

The analysis of the competition competency of Thai universities also found in Srisawat (2020) that HEIs in Thailand must put more effort into university management, academic staff quality, and international environment and support. In terms of academic staff quality, HEIs shall start from the recruitment process to ensure that institutions have qualified academic staff by offering extra benefits and incentives to international researchers having a high rate of citations. International environment and support such as a library, teaching assistant, and unit or center that facilitate foreigners while staying at the host university are required to attract and increase the number of international students as well as international faculty. Chaedhananan and Dhirathiti (2022) revealed five fundamental guidelines driving Thai higher education institutions toward world-class universities which consist of 1) A guideline for university recruitment, the succession strategy, and action plans are suggested to include a board with world-class university specialists. The university executives board also should have

global vision and leadership with world-class university goals, high integrity with administrative competencies, 2) A guideline for resource allocation and resource management, institution shall create high-quality interdisciplinary/ research innovations and new business models for global benefits, 3) A guideline for a recommended work system determination; the potential development system for students with the innovative research process, administrative technology, communication and knowledge management, social benefits, and high-quality human resource must be created, 4) A guideline for organizational structure design and streamline systems that can be collaborated all related sectors with efficiency and flexibility, and 5) A guideline for organizational culture development to promote integrity, work diversity, the international mindset with social benefit and excellent focused.

In summary, working towards achieving world-class university ranking, the university management in Thailand and Japan must create supporting processes and sensitize academic

staff to world-class university ranking criteria that are mostly weighted by academic papers. Establishing the center and assigning responsible staff to work on university ranking, creating an international environment and support are also important to attract international students and academic staff. This part of services requires high capability of professional and support staff or non-academic staff, one of HEIs most valuable assets that directly involve administrative function and supporting academics to work in a diversified environment for university innovation in rapid change.

Staff in higher education

In previous research, becoming a world-class university requires collaboration from staff at all levels in HEIs from the management team, academic staff, and non-academic staff, therefore staff development at all levels is needed. According to the United Nations Education, Scientific and Cultural Organization (UNESCO, 1988), staff development at all levels was raised in the World Conference on Higher Education in the Twenty-first Century: Vision and Action that “an institution must consider all its staff; administrative and support personnel can play crucial roles in helping students to learn, and in enabling and facilitating an environment that favors learning. If non-academic staff are committed to the goals of an institution, they can be valuable partners in working with academic colleagues”. The perspectives on the roles of staff in different groups in higher education are various in many research papers. Employees in higher education described by Avenali et al. (2022) in “Determinants of the incidence of non-academic staff in European and US HEIs” can be divided according to the tasks; researchers and teachers who are main executives of university primary processes, administrative and technical staff who are in

charge of organizing and supporting primary processes, and high professional administrators who coordinate and organize the activities of employees. Kallenberg (2020) segmented the group of employees in HEIs into four groups; academic staff, professional staff, academic middle managers, and educational administrator. Each department and team work independently and the university may be seen as a patchwork. Comparing between groups, the academic middle managers and education administrators significantly influence various processes. Roles and contributions of staff in HEIs are expressed in Gupta (2021) that all university staff play different tasks. Academic staff and non-academic staff equally contribute support and operation services toward the success of students and institutions. On the other hand, Antiado et al. (2020) mentioned that with technology changes, community engagement, a call for innovativeness, and an increasing of diverse students, non-academic staff who work on the technical and support side of education institutions have been brought to be in front of the process. These people must be knowledgeable about their roles and participation in the process.

21st Century Skills and Challenges of non-academic staff in Japan and Thailand

In the context of globalized higher education, non-academic staff are increasingly required to possess 21st-century skills to support institutional goals such as internationalization, digital transformation, and inclusive service delivery. Skills traditionally emphasized for students and educators are now recognized as essential for administrative personnel (Hunter, 2018; Jung & Shin, 2015).

English proficiency is crucial for staff in Thai and Japanese universities as international programs expand. It enhances communication

with global partners and supports international students effectively (Hunter, 2018).

Digital literacy is foundational in modern workplaces. Staff must use digital tools for administration, data management, and virtual communication. Structured training improves practical skills (Erwin & Mohammed, 2022). Canva, with its intuitive interface, fosters creativity and collaboration, making it suitable for tasks like reports and presentations (Pedroso et al., 2023).

Intercultural competence is vital on increasingly diverse campuses. It involves language skills, cultural awareness, empathy, and flexibility. Non-academic staff must interact respectfully and effectively across cultures (Guillén-Yparrea & Ramirez-Montoya, 2023).

Over the past two decades, Japan and Thailand have seen a steady rise in international student enrollment. However, sustaining this growth and enhancing institutional competitiveness requires targeted improvements, particularly in student support services. These enhancements are vital for financial sustainability and for improving global university rankings. In Thailand, international students frequently encounter challenges related to language, communication, cultural adaptation, and daily life (Chemsripong, 2021). In Japan, student satisfaction and loyalty are strongly influenced by institutional image, service quality, and perceived value (Appuhamilage & Torii, 2019). Addressing language barriers, fostering intercultural understanding, and improving everyday services can significantly enhance student experiences. Non-academic staff, who manage academic support and operational services, play a critical role and must be equipped with competencies in communication, cultural sensitivity, and service delivery. Despite both countries' reputations for hospitality, the lack of English as an official language presents persistent challenges. Thai universities, such as

Mahidol University offer structured career advancement for non-academic staff, promoting long-term skill development (Mahidol, 2021). In contrast, Japanese institutions often rotate staff every few years to broaden institutional knowledge. Chiba University's Super University Learning Administrator (SULA) program exemplifies this approach, providing specialized training to support internationalization (Japan Society for the Promotion of Science, n.d.).

These strategies underscore the need for non-academic staff to adopt a growth mindset and develop 21st-century skills; critical thinking, creativity, communication, and collaboration to effectively support international students and institutional goals.

Developing non-academic staff' 21st Century skills through university partnership

Chiba University (CU) and Mahidol University (MU) have maintained a close institutional partnership since signing a formal agreement in 2008, which has supported staff and student exchanges, mobility programs, and other collaborative initiatives. Within this framework, non-academic staff in International Affairs have primarily been responsible for managing international activities. However, structural differences in staffing practices between the two institutions have led to varying levels of exposure to international environments. At MU, non-academic staff in International Affairs typically remain in their roles long-term, while in Japan, including at CU, support staff such as those in the Super University Learning Administrator (SULA) program are regularly rotated across departments. These differing systems, while beneficial in some respects, have inadvertently limited opportunities for non-academic staff outside of International Affairs to engage in international and intercultural contexts.

Structural differences and shared challenges between Japanese and Thai universities led international affairs staff to recognize the need for broader English communication and intercultural engagement beyond their offices. The COVID-19 pandemic further underscored the importance of digital skills, as institutions rapidly shifted to virtual collaboration and service delivery. In response, a joint initiative the Peer to Peer (P2P) Staff Development Project was collaboratively designed by non-academic staff from both institutions; Chiba University (CU) and Mahidol University International College (MUIC). The P2P was launched to equip non-academic staff with essential 21st-century competencies: English communication, intercultural competence, and digital literacy. Its objectives were to: (a) promote English as a medium for cultural and knowledge exchange, (b) develop digital skills through online meetings and interactive games, and (c) enhance intercultural communication. The initiative was structured into three phases: (1) proposal and executive approval, (2) pairing speakers to co-organize events, and (3) delivering monthly sessions from October 2021 to February 2022. Participation was open to all non-academic staff, regardless of English proficiency scores. Volunteers served as speakers and coordinating

via LINE groups and informal meetings. The five topics were selected to blend cultural and job-related themes, including Thai and Japanese phrases, cuisine, tourist destinations, strategies to attract international students, and career systems in both countries. These sessions fostered intercultural understanding and provided practical English usage opportunities. Digital tools such as Zoom, PowerPoint, Canva, and interactive games (e.g., role play, online quizzes, crosswords) were integrated into the events, promoting experiential learning. The P2P project demonstrated how peer-led, cross-institutional collaboration can effectively build essential skills among non-academic staff in HEIs.

The questionnaire with a rating scale of 1 to 5 with open-ended questions; part 1) Understanding and knowledge gain from the topic, part 2) Self-development, and part 3) Overall program were designed to evaluate project outcome. The average score from 1.0-1.8 means needs improvement, 1.81- 2.60 means poor, 2.61 – 3.40 means fair, 3.41 – 4.20 means good, and 4.21 – 5.00 means excellent. The results from 40 respondents out of 52 or 76.92% found that the satisfaction for all result items was above 4.21 which means the respondents rated the program as excellent.

Table 1 Program Evaluation

Questionnaire item	Score	Meaning
Part 1 Understanding and knowledge		
• Understanding and knowledge gain from the content	4.51	Excellent
Part 2 Self-development		
• Develop my digital literacy skills through an online activity	4.30	Excellent
• Develop my English speaking and listening for communication skills	4.23	Excellent
• Apply the knowledge from the activity to my work/ daily life	4.24	Excellent
Part 3 Overall Program Arrangement		
• The content on the topics is appropriate	4.61	Excellent
• Time for the activity is appropriate	4.52	Excellent
• The overall session is satisfying	4.62	Excellent

Source: Made by the authors

The evaluation was based on participant responses to a structured questionnaire, with findings grouped into three categories: understanding and knowledge, self-development, and overall program arrangement.

Part 1 Understanding and Knowledge

Participants reported a strong grasp of the program content, with an average score of 4.51, indicating excellent comprehension. This reflects the effectiveness of the instructional materials and delivery methods.

Part 2 Self-Development

The program significantly supported personal and professional growth. Digital literacy development scored 4.30, English communication skills 4.23, and application of knowledge to work or daily life 4.24 all rated

excellent. These results confirm the program's success in enhancing key 21st-century skills.

Part 3 Overall Program Arrangement

Participants highly valued the program's structure. Content relevance scored 4.61, time allocation 4.52, and overall satisfaction 4.62—the highest rating. These scores affirm the program's strong execution and positive reception.

Apart from the high score of program evaluation in Table 1, Word Cloud is used to capture opinions from the open-ended questions of participants and speakers in these online events. Opinions from participants for Topics 1 to 5 from each institution were put together and collected as part of the questionnaire as follows.

Opinions from the participants at Chiba University:

- really enjoyed working with the staff members from MUIC! Just one thing to regret is that we cannot end our program in time; some participants could not enjoy all the contents.
- It was useful to get to know each other. Well organized.
- Thai language was a little difficult to pronounce, but it was good chance to know about that language. Thank you!
- I really enjoyed preparing the presentation and was glad to know people from Mahidol University even though during the pandemic.
- Thank you for giving me an opportunity to learn the details of Thai Food. The presentation was so easy-to-understand, stylish and enjoyable for me. Someday, when I will visit Thai with my family, I will explain Thai food and manners to my children and choices of the food containing coconut milk (not spicy). ขอบคุณมาก ๆ ค่ะ
- We could learn about the strength of Thailand, also, it was great opportunity to take a look about our own strength. Thank you for your cooperation :)
- Thank you for taking place this P2P. I enjoyed it very much.



Figure 2 Word cloud based on the frequency of the opinions from the participants at Chiba University
Source: Made by authors from the online text analysis site (<https://textmining1.userlocal.jp>)

Figure 2 provides a word cloud (based on frequency, same as below) of the opinions collected. As shown, the participants from Chiba University “enjoyed” the “Thai presentation” and the “opportunity” provided chances for them to know staff from Mahidol University.

They mentioned that learning about language, and food will be useful for their life when traveling to Thailand with family. It was mentioned that the presentation was stylish and enjoyable.

Opinions from participants at Mahidol University International College:

- Speakers are so gorgeous.
- There're too many contents compared to the limited of workshop period so the time for doing activities together between the two institutions had to be quicken. The workers from both sides were somewhat allowed to practice their speaking skills.
- well done.
- Really appreciate. Wish it could be longer.
- I would like to learn more vocabulary from Chiba if could. :)
- It was a very interesting session and learnt a lot about other culture and basic language.
- The time should be 1.30 hours at least, so it is not rushed for the audience to digest the lesson.
- 1. Speakers from different countries have their own accents. It is very challenging but it makes me try harder to understand and appreciate the effort of the speakers. 2. Photos they used in their presentations are very nice. We could not see the names of food but it helped a lot when speakers read it out loud.
- The activity is very fun.
- It is very good to open my opinion about two cultures of the country.
- It is the good project.
- Very good session.
- This time, the game was quite hard to play so the participants might be afraid to play.
- Good chance to work with foreigner
- Very good project.
- Content from both side is clear and easy to follow. Just one point, the font size of the database in number is a little bit small.
- It's enjoyable and educational.



Figure 3 Word cloud based on the frequency of the opinions from the participants at Mahidol University International College

Source: Made by authors from the online text analysis site (<https://textmining1.userlocal.jp>)

Figure 3, showing the word cloud of the opinions from the participants at Mahidol University International College, reveals that the project was a very "good" session and they wish to appreciate the efforts of the “speakers”. Even

though the accents of speakers are challenging, however, photos from presentations make it easy to follow. understand the content. One point that staff from Mahidol University is the timing is too short. Participants from MU also

Summary and conclusions

This article has addressed a case study of a joint project organized by non-academic staff members at two higher education institutions: Chiba University from Japan, and Mahidol University International College from Thailand. Data internally collected as evidence for staff development in the future thus the IRB had not applied.

The project aimed to provide opportunities for the non-academic staff's 21st century skills; English language, digital literacy, and intercultural communication through partnership between the two institutions. The questionnaires after each of the online seminars under the project revealed satisfactory as well as promising outcomes for these purposes. The subjective descriptions of the online events of Topics 1 to 5 put together collected as part of the questionnaire reveal favorable responses from the respondents comprised of participants as well as speakers from Thailand and Japan. As there is scarce evidence in the literature mentioning how the skills and knowledge of non-academic staff members will be developed and trained to move forward with the rapid change in educational content in both Thai and Japanese universities, the project covered in this article poses a good case in point.

This project represented a new approach to non-academic staff development by identifying the 21st Century skills that are needed from both institutions, English language communication, digital literacy, and intercultural communication. Even though intercultural communication was not added in the program evaluation, however, it was addressed twice in Figure 4, opinions from speakers at Chiba University and Mahidol University International College who had more chances to work on events meetings and preparation processes. Thus, working processes, and activities during the

events provided non-academic staff to collaborate with creativity and critical thinking through the meeting, exchanging ideas, designing content, and experience sharing in a friendly environment. This approach of staff development can be an alternative way of enriching the 21st Century skills for non-academic staff and strengthening relationships of institutions that the management team shall consider.

Acknowledgments

The authors extend heartfelt thanks to all participants and speakers from the International Student Division at Chiba University, and the Human Resource Section and Project Development Unit at Mahidol University International College. The project's success was made possible through the support of key executives: Prof. Makoto Watanabe, Vice President of Chiba University; Assoc. Prof. Yingyot Chiaravutthi, Associate Dean for Finance and Human Resources; and Asst. Prof. Alexander Nanni, former Associate Dean for International Affairs at MUIC.

Special appreciation is given to Mr. Hiroshi Sodeyama, lead coordinator for the Japanese team, and Ms. Thidarat Charuwat from MUIC's Human Development Unit, whose dedication and commitment to promoting internationalization at home were invaluable.

References

- Antiado, A., Castillo F., Reblando, J., & Tawadrous, M.(2020).Managing professional development activities for non-teaching staff: For professional growth. *Universal Journal of Educational Research*, 8 (7), 3280-3285.
- Appuhamilage, K. S. M., & Torii, H. (2019). The impact of loyalty on the student

- satisfaction in higher education: A structural equation modeling analysis. *Higher Education Evaluation and Development*, 13(2), 82-96
<https://doi.org/10.1108/HEED-01-2019-0003>
- Avenali, A., Daraio, C., & Wolszczak-Derlacz, J. (2023). Determinants of the incidence of non-academic staff in European and US HEIs. *Higher Education*, 85, 55-83.
<https://doi.org/10.1007/s10734-022-00819-7>.
- Barreto, A. (2020). The importance of non-teaching staff training and public administration in Higher education institutions: Literature review. *International Journal of Research and Analytical Reviews*, 7(2), 146-157.
http://ijrar.com/upload_issue/ijrar_issue_2_0544205.pdf
- Bossu, C., Brown, N., & Warren, V. (2019). *Professional and Support Staff in Higher Education: University Development and Administration*.
https://doi.org/10.1007/978-981-10-1607-3_29-2
- Chaedhananan, K., & Dhirathiti, N. (2022). The model for strategic drive of Thai higher education institutions toward world-class universities. *Kasetsart Journal of Social Sciences*, 43(2), 271-278.
<https://doi.org/10.34044/j.kjss.2022.43.2.02>.
- Chemsripong, S. (2021). Perception and satisfaction of international students on higher education services in Thailand. *Journal of Community Development Research (Humanities and Social Sciences)*, 14(3). 44-58.
https://doi.nrct.go.th/admin/doc/doc_583786.pdf
- Erwin, K., & Mohammed, S. (2022). Digital literacy skills instruction and increased skills proficiency. *International Journal of Technology in Education and Science*, 6(2), 323-332.
<https://doi.org/10.46328/ijtes.364>
- Fielden, J. (1988). Higher Education Staff Development: A Continuing Mission. *World Conference on Higher Education in the Twenty-first Century: Vision and Action, Paris*, 1988 (289).
<https://unesdoc.unesco.org/ark:/48223/pf0000113606>, retrieved Oct 2, 2022.
- Guillén-Yparrea, C., & Ramírez-Montoya, M. S. (2023). Are intercultural competencies the key to international collaboration? A systematic review. In F. J. García-Peñalvo & A. García-Holgado (Eds.), *Proceedings of the TEEM 2022 Conference* (pp. 772-781). Springer. https://doi.org/10.1007/978-981-99-0942-1_80
- Gupta, M. (2021, May 8). *Non-academic staff in higher education institutions*. Linked in. <https://www.linkedin.com/pulse/non-academic-staff-higher-educational-institutions-mukul-gupta>
- Hunter, F. (2018). *Administrative staff as key players in the internationalization of higher education. Encyclopedia of International Higher Education Systems and Institutions*. Springer.
https://doi.org/10.1007/978-94-017-9553-1_604-1
- Jampaklay, A., Penboon, B., & Lucktong, A. (2022). Internationalization of higher education in Thailand: Promises and reality. *Kasetsart Journal of Social Science*, 43(1), 183-193
<https://doi.org/10.34044/j.kjss.2022.43.1.25>
- Japan Society for the Promotion of Science. (2023, December 8). *Top global university project*. Japan Society for the Promotion of Science.
<https://www.jsps.go.jp/english/e-tgu/>

- Jung, J., & Shin, J. C. (2015). Administrative staff members' job competency and their job satisfaction in a Korean research university. *Studies in Higher Education*, 40(5), 881–901.
<https://doi.org/10.1080/03075079.2013.865161>
- Kallenberg, T. (2020). Differences in influence: Different types of university employees compared. *Tertiary Education and Management*, 26, 363–380.
<https://doi.org/10.1007/s11233-020-09058-w>
- Mahidol University, (2021, April 18). *Mahidol University Strategic Plan 2018 – 2037*. Mahidol University.
https://op.mahidol.ac.th/pl/mahidol_university_strategic_plan_2018-2037
- Oba, J. (2008). Creating world-class universities in Japan: policy and initiatives. *Policy Future in Education*, 6(5), 629–640.
<https://journals.sagepub.com/doi/pdf/10.2304/pfie.2008.6.5.629>
- Pedroso, J. E. P., Sulleza, R. V. S., Francisco, K. H. M. C., Noman, A. J. O., & Martinez, C. A. V. (2023). Students' views on using Canva as an all-in-one tool for creativity and collaboration. *Journal of Digital Learning and Distance Education*, 2(2), 443–461.
<https://www.researchgate.net/publication/373420031>.
- Prachachat. (2023, March 25). *Revealing student statistics from the 10 countries most popular to study at Thai universities*.
<https://www.prachachat.net/education/news-1243365>
- QS Quacquarelli Symonds. (2023). *QS World University Rankings*. <https://QS World University Rankings – QS Quacquarelli Symonds>.
- Srisawat, P. (2020). Global University Rankings and Implications for Thai Universities. *Journal of Business, Economics and Communications*. 15(3), 1-12.
<https://so02.tci-thaijo.org/index.php/BECJournal/article/view/235779>
- Statista. (2022, Oct 2). *Number of international students in Japan from 2013 to 2022 (in 1,000s)*
<https://www.statista.com/statistics/1125812/japan-total-number-foreign-students/>
- Times Higher Education. (2019, September 2). *The World Reputation Rankings 2020: methodology*.
<https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2020-methodology>
- Tran H., Inosaki A., & Jin C. (2022). *On Campus Support and Satisfaction of International Students: A Review of Japanese Literature ISSN: 2435-1202 – The IAFOR Conference on Educational Research & Innovation: 2022 Official Conference Proceedings*.
<https://doi.org/10.22492/issn.2435-1202.2022.1>.
- Vaccarino, Franco., & Li, Mingsheng. (2018). Intercultural communication training to support internationalization in higher education. *Journal of Intercultural Communication*. 18(1), 1-14.
<https://www.researchgate.net/publication/324216263>