

Maintaining Religious Harmony in Digital Spaces: Perspective Taking as an Antidote to Religious Panic on Social Media

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ABSTRACT

The 2024 International Credit Transfer Program (ICTP) is a collaboration between Universitas PGRI Semarang (UPGRIS) and Nakhon Ratchasima Rajabhat University (NRRU) in Thailand, designed to enhance academic and cultural exchange. This report evaluates the experiences of Sri Eka Watini, an Informatics student at UPGRIS, who participated in the ICTP for one semester (August–November 2024). She completed five courses (15 credits) in Programming for Data Analytics, Business Chatbot Systems, Artificial Intelligence, Application of Smart Technology for Local Community, and Data Mining. Her academic performance was assessed through coursework, projects, and examinations, while her cultural adaptation was documented through reflective journals and participation in cultural events. She successfully completed all courses with an average grade of A-, excelling in projects such as a business chatbot prototype and data mining analysis. Additionally, she improved problem-solving, teamwork, and cross-cultural communication skills. The ICTP effectively enhanced both technical expertise and soft skills, though challenges such as language barriers required faculty and peer support. This program broadened her academic perspective and motivated her to pursue international collaborations. Future ICTP iterations could benefit from enhanced language support and expanded course offerings to accommodate diverse academic interests.

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1. INTRODUCTION

The Merdeka Belajar Kampus Merdeka (MBKM) policy aims to prepare resilient students who are relevant to the needs of the times and possess high leadership qualities [1]. Based on the Ministry of Education and Culture Regulation No. 3 of 2020, students are granted the right to study up to three semesters outside their study programs or higher education institutions. MBKM opens opportunities for students to expand their knowledge and competencies in the real world according to their interests [2]. With the concept of boundless learning, students can study not only in academic settings but also in real environments such as villages, industries, and workplaces [3].

The International Credit Transfer (ICT) program is a key initiative under the Merdeka Belajar policy initiated by the Ministry of Education and Culture of Indonesia [4]. This program allows students from Indonesian universities to study abroad and transfer their academic credits back to their home institutions, fostering international collaboration and enhancing global competitiveness [5]. In preparation for students to have global competencies and as part of efforts to anticipate the fierce global competition in various aspects, cooperation with overseas universities is crucial to implement [6].

Academic credit transfer is the process of evaluating qualification components to determine equivalency with other qualifications through the integration of comparable credits for academic achievements and individual

accomplishments [7]. International Credit Transfer is the recognition of the study load and learning achievements of students from partner universities abroad [8]. This program allows Indonesian universities to learn various global credit transfer systems, such as ECTS, ACTS, and UCTS, and adapt them to national needs [7].

In facing the challenges of the Fourth Industrial Revolution, innovation is required by integrating online learning. This has become increasingly relevant during the COVID-19 pandemic, which led to the implementation of the International Credit Transfer Program online in 2021. Universitas PGRI Semarang, in partnership with Nakhon Ratchasima Rajabhat University (NRRU), Thailand, successfully implemented this program. Students participating in ICTP are typically selected through a rigorous process, including TOEFL tests and interviews, to ensure they have the required English language proficiency and adaptability to study abroad [7].

The international credit transfer program has a positive impact on improving cross-cultural understanding, foreign language skills, and student readiness to face global challenges [9]. A study by Liwiński (2017) stated that students participating in similar programs tend to have higher competitiveness in the job market [10]. Additionally, research by Liu and Wei (2023) emphasized that student involvement in international academic environments can enhance critical thinking and problem-solving skills [11].

Although interest in international academic exchange is increasing, there are still challenges in the implementation of this program, such as differences in learning systems, language barriers, and adaptation to new cultures. These issues can affect the effectiveness of the program if not properly addressed [12]. Existing literature has explored the benefits of international education in improving cultural competence, language skills, and academic knowledge [13], [14]. However, there is limited research providing a comprehensive evaluation of student experiences and project outcomes within the ICTP framework, especially in technical fields such as Informatics. Therefore, this study aims to identify the factors that support and hinder the success of the ICT program at NRRU, as well as provide recommendations for improving its quality in the future.

The solution proposed in this research is to analyze the experiences of students who have participated in the ICT program at NRRU, and identify learning and adaptation strategies that can enhance their academic success. This study will also explore how the ICT program can be adjusted to be more inclusive and effective for students from diverse academic and social backgrounds.

Nakhon Ratchasima Rajabhat University (NRRU) is a leading higher education institution in Thailand, located in Nakhon Ratchasima city, northeastern Thailand [15]. Established as a teacher training school in 1923, the university has grown into a comprehensive institution and officially adopted the name "Rajabhat" in 1995 as part of Thailand's government policy to improve higher education standards. The university offers academic programs from bachelor's, master's, to doctoral levels in various fields of study, including education, arts, social sciences, natural sciences, technology, and management. These programs are designed to equip students with both theoretical knowledge and practical skills relevant to the needs of the modern workforce.

This journal discusses this gap by analyzing the author's own experience from Universitas PGRI Semarang, who participated in ICTP at NRRU. The proposed approach involves evaluating the academic projects completed during the program to highlight their relevance and contributions to the development of technical and analytical skills. For example, a chatbot development project for business services demonstrates the practical application of Artificial Intelligence, while an IoT-based air quality monitoring system showcases the integration of technology with community needs. These projects not only reinforce academic learning but also provide valuable insights into the progress of Information Technology in Thailand.

Additionally, this research offers an overview of how students faced challenges in the ICT program and the strategies they used to overcome these obstacles. Thus, this research can serve as a reference for future students participating in similar programs.

This research contributes to existing knowledge by providing a detailed case study on the implementation of ICTP within the context of Informatics education. This study emphasizes the importance of aligning international academic programs with local and global needs, thus promoting innovation and sustainability. Furthermore, this report serves as a guide for future participants and stakeholders to maximize the benefits of international academic collaboration.

2. METHOD

The research method used in compiling this journal is a qualitative descriptive method with a case study approach. This method captures the essence of participants' experiences through interviews and observations, allowing researchers to describe phenomena that occur in real-life contexts. This is very useful for new research fields, offering basic insights that can guide future studies [16]. The case study method allows for a detailed examination of the ICT Program, focusing on interactions and factors influencing implementation [17].

This method was chosen because the journal will describe the experiences and outcomes of the implementation of the International Credit Transfer (ICT) Program at Nakhon Ratchasima Rajabhat University, Thailand. This method allows for an in-depth understanding of the experiences and outcomes associated with the program, providing rich contextual insights. The data used in this study came from the final report of the program that had been prepared, covering academic, social aspects, and the impact of the program on students.

Each course taken has a final project designed to apply theory to practice. This project-based learning method allows students to develop technical and analytical skills through real implementation. The focus of the research is the

researcher's experience during the International Credit Transfer program at Nakhon Ratchasima Rajabhat University, Thailand.

Data collection was conducted through documentation consisting of academic activity reports, transcripts, reflections on student experiences, and observations during the program. In addition, an analysis was conducted on the courses taken, academic project results, and the benefits of the program in improving student competency. Data analysis was conducted using the content analysis method to identify patterns, trends, and impacts of the program on participating students. Data were analyzed based on indicators of academic success (grades and final projects), international experience (cultural adaptation and cross-cultural communication), and the influence of the program on student competency in informatics.

3. RESULTS AND DISCUSSION

The International Credit Transfer Program, which the researcher participated in at Nakhon Ratchasima Rajabhat University, produced significant results in the development of academic skills and practical abilities. In the ICT program in Thailand, the researcher enrolled in the Bachelor of Science program in Information Technology, Management Information Systems, and Computer Science. The courses taken were based on relevance or credit equivalency from the home program and target program, such as: 1) Programming for Data Analytics; Business Chatbot Systems; Application of Smart Technology for Local Community; Artificial Intelligence; and Data Mining.

3.1. Programming for Data Analytics

The researcher learned various programming skills for data analysis, including Python and R. The final project involved analyzing a large dataset to identify important patterns using data visualization and statistical data processing techniques. The student successfully completed the project with a final presentation that demonstrated a good understanding of the topics taught.

Some of the commonly used programming languages are Python. Python has become one of the most popular programming languages widely used in various fields, including data analysis [18]. Python offers flexibility and ease of use, making it a preferred choice for many data scientists, researchers, and software developers [19]. Data analysis is a systematic process that involves inspecting, cleaning, transforming, and interpreting data to uncover insights, patterns, and trends [20]. Programming for data analytics involves using specialized software and programming languages to process, analyze, and interpret data [21].

3.2. Business Chatbot System

The researcher learned the basics of chatbot development for business purposes. In the final project, the student developed a simple chatbot that could provide customer service information for an online store. This chatbot used a cloud-based platform and was able to respond to customer inquiries in English. The project was highly rated by the instructor due to its intuitive design and functionality.

A chatbot is a computer program designed to simulate human conversation. Chatbots are equipped with artificial intelligence and natural language processing, making them smart programs capable of answering questions posed by humans [22]. AI-based chatbot systems are now widely used across various industries (such as healthcare, law, retail, and education) to support customer needs. Recently, chatbots have also been used for business purposes to support services [23].

In the business and industry sectors, chatbots have started to be used for customer service and can interact with customers [24]. Chatbots serve to engage in conversations with visitors and respond as quickly as possible, allowing visitors to receive replies in a short amount of time [25]. Chatbots are technological innovations that support round-the-clock Q&A services and can efficiently handle repetitive questions. They make it easier for users to understand information in their natural language, thus improving the quality of customer service.

3.3. Artificial Intelligence

In this course, the researcher was introduced to basic artificial intelligence algorithms, including machine learning and neural networks. The final project involved developing a simple AI model to detect sentiment from local product reviews. This project was appreciated for applying AI concepts to local solutions and its success in processing data with a high level of accuracy.

Artificial Intelligence (AI) is a branch of computer science focused on creating systems or machines capable of performing tasks that usually require human intelligence [26]. AI encompasses a range of technologies and methods, including machine learning, natural language processing, computer vision, and robotics.

3.4. Application of Smart Technology for Local Community

This course focused on developing smart technology-based solutions relevant to the needs of local communities. The students' projects included developing an IoT (Internet of Things)-based application to monitor air quality in rural areas of Thailand. This application was successfully tested with simple sensors integrated into smart devices. The instructor praised the students' innovation in designing an application with practical impact for the community.

Application of Smart Technology for Local Community refers to the use of smart technology to improve quality of life, efficiency, and sustainability in local communities [27]. This technology includes the use of the Internet of Things (IoT), Artificial Intelligence (AI), Big Data, and automation systems to solve everyday problems, improve public services, and encourage community participation [28].

3.5. Data Mining

Data Mining In this course, students learned data mining techniques such as clustering, classification, and association rules. The final project involved analyzing a real-world dataset of retail transactions to uncover customer purchasing patterns. The results of this analysis were used to provide recommendations for more effective promotions. This project was rated highly because it produced significant insights for business management.

Data mining is the process of exploring and analyzing large amounts of data to find patterns, relationships, or meaningful information that was previously unknown [29]. This process combines techniques from various disciplines such as statistics, artificial intelligence (AI), machine learning, and database management to extract useful insights from datasets. The main goal of data mining is to transform raw data into actionable knowledge for decision-making, predictions, or optimization [30].

3.6. Discussion

Based on the data analysis, the research findings indicate that the International Credit Transfer program has a positive impact on three main aspects: enhancement of academic competence, international experience, and development of students' professional skills. This program not only enhanced the academic knowledge of students but also provided valuable experiences in an international context.

3.6.1. Improvement of Academic Skills

Each course taken provided practical experience that could be directly applied. For example, the skills in programming and data analysis acquired during the courses are highly relevant to current industry needs. The students who participated in the program successfully completed five courses at Nakhon Ratchasima Rajabhat University with a total of 15 credits. Courses such as Programming for Data Analytics, Artificial Intelligence, and Data Mining provided in-depth understanding of technologies and data analysis, which are highly relevant to the field of Informatics. The results of the academic projects completed showed an improvement in applying theory to practice, such as the development of chatbot models and retail data analysis.

3.6.2. Social and Cultural Engagement

Interactions with professors and local students provided a deeper understanding of Thai culture and improved cross-cultural communication skills. This became an important asset for students to adapt to a global environment. Students experienced an adaptation process in both academic and social settings that were different from Indonesia. The main challenges encountered were using English and adjusting to a learning system that differed from Indonesia's. However, this experience actually enhanced cross-cultural communication skills and helped build an international network. Additionally, students had the opportunity to understand the advancing technology in Thailand, particularly in digitalization and artificial intelligence.

3.6.3. Impact on Future Careers

The skills acquired, especially in information and communication technology, are highly relevant for improving competitiveness in the international job market. This program prepares students to face the challenges of an increasingly complex workforce. It not only enhances academic understanding but also builds professional skills such as problem-solving, critical thinking, and the ability to collaborate in multinational environments. The implementation of smart technology-based projects and data analysis provides firsthand experience in addressing industrial challenges.

4. CONCLUSION

The 2024 International Credit Transfer Program (ICTP) conducted between Universitas PGRI Semarang (UPGRIS) and Nakhon Ratchasima Rajabhat University (NRRU) in Thailand provided valuable academic and cultural experiences for students. Through this program, students took five courses equivalent to 15 credits, covering fields such as Programming for Data Analytics, Business Chatbot Systems, Artificial Intelligence, Application of Smart Technology for Local Community, and Data Mining. The results of this program demonstrated a significant improvement in students' academic skills, international experience, and professional development. In addition to understanding theory, students were able to apply concepts to real-world projects, such as the development of business chatbots and IoT-based air quality monitoring systems. Challenges, such as differences in learning systems and language barriers, were successfully overcome through adaptation and cross-cultural communication. Overall, this program not only enhanced students' technical competencies but also equipped them with important soft skills, such as critical thinking, cross-cultural communication abilities, and readiness to face global competition. Thus, ICTP contributes to the creation of graduates who are prepared to tackle challenges in the international workforce.

REFERENCES

- [1] M. S. Sofiyana dkk., *PANCASILA, Merdeka Belajar dan Kemerdekaan Pendidik*. UNISMA PRESS, 2021.
- [2] H. Muzakki, "Pengembangan Kurikulum Merdeka Belajar Kampus Merdeka (MBKM) untuk Meningkatkan Daya Saing Mahasiswa di UIN Sayyid Ali Rahmatullah Tulungagung," *Southeast Asian Journal of Islamic Education Management*, vol. 4, no. 2, Art. no. 2, Des 2023, doi: 10.21154/sajiem.v4i2.208.
- [3] K. P. dan K. Indonesia, *Buku Panduan Merdeka Belajar - Kampus Merdeka*, 1 ed. Jakarta: Kementerian Pendidikan dan Kebudayaan Indonesia, 2020.
- [4] Khoirurrijal dkk., *Pengembangan Kurikulum Merdeka*, 1 ed. Malang: Literasi Nusantara Abadi, 2022.

- [5] I. K. Suardi, A. Arnidah, dan A. Haling, "Evaluation of the Implementation of the International Credit Transfer Program of Makassar State University," *Edunesia : Jurnal Ilmiah Pendidikan*, vol. 5, no. 2, Art. no. 2, Mei 2024, doi: 10.51276/edu.v5i2.883.
- [6] A. Faiz, V. A. Hadian, dan I. Kurniawaty, "Persepsi Mahasiswa dalam program International Credit Transfer," *ED*, vol. 4, no. 3, hlm. 3264–3269, Apr 2022, doi: 10.31004/edukatif.v4i3.2630.
- [7] K. P. dan K. Indonesia, *Petunjuk Teknis Penyaluran Bantuan Pemerintah Program Transfer Kredit Internasional Tahun 2021*. Jakarta: Kementerian Pendidikan dan Kebudayaan Indonesia, 2021.
- [8] Froilan dkk., *Merdeka Belajar*. Yogyakarta: Zahir Publishing, 2020.
- [9] E. Ramírez, "Influence of Students' Interactions Abroad on Developing Intercultural Competence.," *Journal of Teaching in International Business*, vol. 30, no. 1, hlm. 57–76, Jul 2019, doi: 10.1080/08975930.2019.1627979.
- [10] J. Liwiński, "The Impact of Studying Abroad on Economic Activity of Graduates," *Research Papers in Economics*, Mei 2017, Diakses: 1 Februari 2025. [Daring]. Tersedia pada: <https://typeset.io/papers/the-impact-of-studying-abroad-on-economic-activity-of-53832f3mfh>
- [11] H. Liu dan H. S. Wei, "Exploring The Impact Of International Education On Cognitive Development," *International Journal Of Social Science And Business Management (IJSSBM)*, vol. 1, no. 2, hlm. 1–11, Des 2023, doi: 10.59021/ijssbm.v1i02.40.
- [12] M. F. Ramadan, N. Islam, dan M. Putri, "Peran Biro Kemahasiswaan Dan Alumni (Bimawa) Universitas Muhammadiyah Lampung Dalam Pengembangan Potensi Non Akademik Mahasiswa: (Studi Pada Mahasiswa Prodi Ilmu Pemerintahan FISIP Universitas Muhammadiyah Lampung Angkatan 2021)," *Arus Jurnal Sosial dan Humaniora*, vol. 4, no. 3, Art. no. 3, Des 2024, doi: 10.57250/ajsh.v4i3.790.
- [13] V. Drozdova dan M. Taulean, "Academic and intercultural competences of international students in higher education," *Acta Prosperitatis*, vol. 13, hlm. 24–45, Jan 2022, doi: 10.37804/1691-6077-2022-13-24-45.
- [14] M. Jaafari, "Enhancing Students' intercultural competences through University Academic Training," *International Journal of Civilizations Studies & Tolerance Sciences*, vol. 1, no. 1, Art. no. 1, Apr 2024, doi: 10.54878/b3xc4f79.
- [15] N. R. R. University, "Nakhon Ratchasima Rajabhat University." Diakses: 29 Januari 2025. [Daring]. Tersedia pada: <https://www.nrru.ac.th/en/index>
- [16] J. L. Deckert dan M. Wilson, "Descriptive Research Methods," *University Press of Florida*, hlm. 153–165, Jan 2023, doi: 10.5744/florida/9780813069548.003.0011.
- [17] C. Debout, "Qualitative case study," *Soins; la revue de référence infirmière*, vol. 61, no. 806, hlm. 57–60, Jun 2016, doi: 10.1016/J.SOIN.2016.04.018.
- [18] R. Lo dkk., "Penggunaan Bahasa Pemrograman Python dalam Menganalisis Hubungan Kualitas Kopi dengan Lokasi Pertanian Kopi," *Jurnal Publikasi Teknik Informatika*, vol. 2, no. 2, Art. no. 2, Mei 2023, doi: 10.55606/jupti.v2i2.1752.
- [19] A. M. T. I. S. Ua dkk., "Penggunaan Bahasa Pemrograman Python Dalam Analisis Faktor Penyebab Kanker Paru-Paru," *Jurnal Publikasi Teknik Informatika*, vol. 2, no. 2, Art. no. 2, Jul 2023, doi: 10.55606/jupti.v2i2.1742.
- [20] L. Belcastro, R. Cantini, F. Marozzo, A. Orsino, D. Talia, dan P. Trunfio, "Programming big data analysis: principles and solutions," *Journal of Big Data*, vol. 9, no. 1, hlm. 4, Jan 2022, doi: 10.1186/s40537-021-00555-2.
- [21] A. Nurkholis, E. R. Susanto, dan S. Wijaya, "Penerapan Extreme Programming dalam Pengembangan Sistem Informasi Manajemen Pelayanan Publik," *J-SAKTI (Jurnal Sains Komputer dan Informatika)*, vol. 5, no. 1, Art. no. 1, Mar 2021, doi: 10.30645/j-sakti.v5i1.304.
- [22] E. L. Amalia dan D. W. Wibowo, "Rancang Bangun Chatbot Untuk Meningkatkan Performa Bisnis," *Jurnal Ilmiah Teknologi Informasi Asia*, vol. 13, no. 2, Art. no. 2, Mei 2019, doi: 10.32815/jitika.v13i2.410.
- [23] L. Anindyati, "Analisis dan Perancangan Aplikasi Chatbot Menggunakan Framework Rasa dan Sistem Informasi Pemeliharaan Aplikasi (Studi Kasus: Chatbot Penerimaan Mahasiswa Baru Politeknik Astra)," *JTIK*, vol. 10, no. 2, hlm. 291–300, Apr 2023, doi: 10.25126/jtik.20231026409.
- [24] S. H. Bariah, W. Pratiwi, dan K. A. N. Imania, "Pengembangan Virtual Assistant Chatbot Berbasis Whatsapp Pada Pusat Layanan Informasi Mahasiswa Institut Pendidikan Indonesia - Garut," *Petik: Jurnal Pendidikan Teknologi Informasi Dan Komunikasi*, vol. 8, no. 1, Art. no. 1, Mar 2022.
- [25] R. D. T. Sihotang dan H. Haryadi, "Pengaruh Usability dan Responsiveness Chatbot terhadap Kepuasan Pelanggan: Analisis Mahasiswa Bisnis Digital Universitas Negeri Medan dalam Konteks Penggunaan E-Commerce," *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi*, vol. 3, no. 6, Art. no. 6, Sep 2024, doi: 10.56799/ekoma.v3i6.5245.
- [26] I. Yuadi, *Monograf Forensik Digital pada Dokumen Cetak: Pendekatan Teknologi dan Machine Learning*. Mega Press Nusantara, 2024.
- [27] Ç. Evrim, *Handbook of Research on Smart Technology Applications in the Tourism Industry*. IGI Global, 2020.
- [28] J. Gupta, M. Bhutani, P. Gupta, dan Shikha, "IoT And Ai In Smart Systems: Creating Synergies For Tomorrow's Challenges," hlm. 191–207, Agu 2024, doi: 10.58532/nbennuraich11.
- [29] Mulaab, *Data Mining : Konsep dan Aplikasi*. Media Nusa Creative (MNC Publishing), 2021.



- [30] A. Sajid dan B. Amin, "Data Mining Techniques in Decision Making," *NUML International Journal of Engineering and Computing*, vol. 2, no. 1, hlm. 65–73, Jul 2023, doi: 10.52015/nijec.v2i1.39.

