

An Institute of



TRANSFORMATION GROWTH SUSTAINABILITY

Institutional Profile & Highlights 2024~2025



CONTENTS

ABOUT NIE

- 01 NIE Vision & Mission
- 03 History of the National Institute of Education (NIE)
- 05 NIE Council
- 07 NIE Senior Leadership
- 09 Academic Departments
- 11 NIE Strategic Vision 2025
- 13 2024 at a Glance: Key Statistics

PROGRAMMES & RESEARCH

- 15 Programmes & Tracks
- 21 Global Immersion
- 23 Enhanced Teacher Education Model for the 21st Century (TE21)
- 25 Learning Initiatives for the Future of Education (LIFE@NIE SG®)
- 27 Sustainability@NIE
- 29 Al@NIE
- 37 Centres & Labs
- 39 Growing Research Funding and Support
- 40 Kev Research Works (Selected)

PARTNERSHIPS & NETWORKS

- 41 International Alliances and Networks
- 43 Rising Global Reputation and Rankings
- 45 NIE Named Professorships
- 47 Key Conferences & Events
- 50 Alumni Engagement Events

PEOPLE & INSTITUTIONAL CAPACITY

- 51 NIF Full Professors
- 53 Notable Awards & Accolades
- 57 NTU 'Best Foot Forward' 2025
- 59 Campus Refresh
- 61 Technology Roadmap for the Future of Education (TRFE)
- 63 Towards 2030... Developing a Vibrant & Innovative NIE

CAMPUS MAP

69 NIE Location Map

ABOUT NIE



NIE Vision

An Institute of Distinction: Leading the Future of Education



NIE Mission

Inspiring Learning, Transforming Teaching, Advancing Research

About the National Institute of Education, Nanyang Technological University (NIE NTU) Singapore

The National Institute of Education (NIE) has its early roots as the pioneering Teachers' Training College (TTC), which was founded in 1950. In 1973, the Institute of Education (IE) was formed from the old TTC. It was established as an autonomous institute of the Nanyang Technological University (NTU) in 1991. Today, NIE is among the world's top education institutes, renowned for its excellence in teacher education and educational research and nested within one of the world's top-ranked universities.

NIE leverages the deep multilateral partnership with the University, local schools and the Singapore Ministry of Education (MOE) to provide evidence-informed, practice-focused and values-based programmes and initiatives for teaching professionals and school leaders. The close partnership among NIE NTU, MOE and the Singapore schools is one of the unique features that place Singapore in the world's top-performing education systems. Through carefully designed programmes delivered by expert teacher educators, NIE makes a positive impact on the quality of the teaching profession and teaching practices that in turn enhance pedagogies and the quality of learning in Singapore schools.





History of the National Institute of Education (NIE)



Teachers' Training College (TTC) is founded

On 1 March 1950, the TTC was set up to train English-medium primary school teachers, before expanding to secondary school teacher training.

College of Physical Education was established.



Celebrating its 75th anniversary in 2025, NIE is one of the world's top institutes in the Education and Training disciplines today.

TTC became the only teacher training institution in Singapore following the closure of the School of Education

TTC was revamped as Institute of Education (IE).

> IF relocated to Bukit Timah campus.

Institute of Education and

College of Physical Education merged to form the National Institute of Education (NIE).

NIE was established as an autonomous institute of the Nanyang Technological University (NTU).

NIF relocated to Yunnan Garden campus in Jurong.

NIE Council



COUNCIL CHAIR

Ms Lim Wan Yong

Permanent Secretary (Education)

Ministry of Education

DEPUTY CHAIR
Mr Wong Siew Hoong
Advisor
Ministry of Education



MEMBERS



Professor Liu Woon Chia (Ex-officio) Director National Institute of Education

Professor Andrew Brown Emeritus Professor of Education and Society Institute of Education University College London





Ms Beatrice Chong
Deputy Director-General of Education
(Professional Development)
Ministry of Education

NIE Council

MEMBERS



Ms Gwenda Fong
Deputy Secretary (Digital Society and
Development)
Ministry of Digital Development and
Information (MDDI)

Mr Tan Chin Hwee
Chairman
Energy Supply Resilience Advisory Panel,
Energy Market Authority (EMA)
Singapore Trade Data Exchange Services Pte Ltd
(SGTraDex)





Professor Tan Ooi Kiang Deputy Provost (Education) Nanyang Technological University

Professor Tan Tai Yong President Singapore University of Social Sciences





Mr James Wong Deputy Secretary (Services)/Group Director, HR Ministry of Education

NIE Senior Leadership



Professor Liu Woon Chia NIE Director

Associate Professor Chow Jia Yi Dean Teacher Education and Undergraduate Programmes





Until 30 June 2025

Associate Professor Ang Keng Cheng
Dean

Graduate Studies and Professional Learning

From 1 July 2025

Professor Chang Chew Hung
Dean
Graduate Studies and Professional Learning





Professor Low Ee LingDean
Academic and Faculty Affairs

NIE Senior Leadership



Professor Poon Kin Loong Kenneth Dean Research

Professor Tan Oon Seng Dean Special Projects





Dr Trivina KangChief Strategy and Partnerships
Officer
NIE Director's Office

Associate Professor Chua Bee Leng Chief Learning and Innovations Officer NIE Director's Office





Mr Kristopher O'Brien Divisional Director Academic Computing and Information Services

Mr Chan Tee Miang Divisional Director Corporate Planning and Development





Academic Departments

NIE's academic departments work closely with the Office of Teacher Education and Undergraduate Programmes (TEUP) and Office of Graduate Studies and Professional Learning (GPL) to prepare teachers and school leaders, delivering highly rigorous and evidence-based undergraduate, graduate & professional learning courses and resident programmes for teacher education and teacher development.

As members of a research-intensive university, faculty in the departments conduct research in and across subject disciplines to create knowledge and impact, influencing educational practice and policy in and beyond Singapore.

Asian Languages	English Language &	Humanities & Social
& Cultures	Literature	Studies Education
Learning Sciences	Mathematics &	Natural Sciences
& Assessment	Mathematics Education	& Science Education
Physical Education	Policy, Curriculum	Psychology and Child &
& Sports Science	& Leadership	Human Development
	Visual & Performing Arts	

NIE Strategic Vision 2025

With the theme 'A Future - ready NIE: Transformation, Growth and Sustainability', the NIE Strategic Vision 2025 (NIE 2025) is the Institute's strategic plan for the academic years 2023 to 2025.

An extension of NIE's 2018 to 2022 strategic plan, NIE 2025 focuses on continued excellence as well as transformation and growth in the key areas of 'Programmes & Research', 'Partnerships & Networks' and 'People & Institutional Capacity'.

It includes a key thrust in boosting NIE's reputation and engagement efforts to strengthen its position as a leader of the future of education. NIE 2025 also includes a thrust towards sustainability education and environmental sustainability on campus.





Visit the NIE official website www.ntu.edu.sg/nie/nie-strategic-vision-2025 or scan the QR code for more information.

NIE Strategic Vision 2025

distinctive capabilities and growth areas Harnessing NIE's evergreen strengths, Programmes & Research to empower educators and other

 eading transformative pedagogies and practices with experimentation and professionals for the future.

Implementing the NIE research strategy and strengthening the researchresearch.

Partnerships & Networks Area 2

Boosting NIE's influence, impact and visibility locally and globally.

Deepening affiliations with regional and international partners. towards a lifelong NIE engagement.

Strengthening alumni relations

Area 3

Strengthening a culture of trust and care, and a growth-and-solutions

Striving for and supporting sustained excellence in programmes, research employer of choice. and administration.

Strengthening enablers for NIE as an

ž

Transformative Pedagogies nnovative

Assessment Vibrant Research Ecosystem

Nell-engaged Stakeholders

Holistic Talent Development

Academic Reputation A Strong Global

Advancement Excellence & -eadership

An Enabled, Immersive & Sustainable Campus

EY STRATEGIC ENABLERS

LIFE@NIESG

NIE LEADERSHIP EXCELLENCE & ADVANCEMENT PROGRAMME **NIE SUSTAINABILITY**

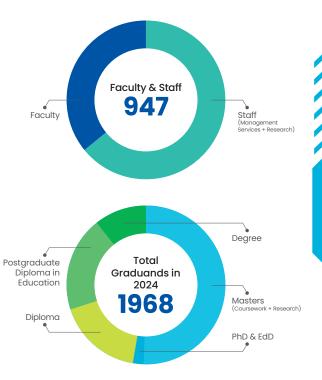
NIE CAMPUS RENEWAL

CHNOLOGY ROADMAP OR THE FUTURE OF

EDUCATION RESEARCH FUNDING PROGRAMME (5TH TRANCHE) SELECTED KEY **NITIATIVES** Š,

TE²¹: EMPOWERING TEACHERS FOR THE FUTURE

2024 at a Glance: Key Statistics





Mahabba

UNDERGRADUATE

NTU-NIE Teaching Scholars Programme / Bachelor of Arts / Science (Honours) in Double Majors (Academic Major and Education Major) in the following teaching tracks:

- · Bachelor of Arts in Art and Education
- · Bachelor of Arts in Chinese Studies and Education
- · Bachelor of Arts in Drama and Education
- · Bachelor of Arts in English Language & Linguistics and Education
- Bachelor of Arts in English Literature and Education
- · Bachelor of Arts in Geography and Education
- · Bachelor of Arts in History and Education
- · Bachelor of Arts in Malay Studies and Education
- · Bachelor of Arts in Music and Education
- · Bachelor of Arts in Tamil Studies and Education
- · Bachelor of Science in Biology and Education
- · Bachelor of Science in Chemistry and Education
- · Bachelor of Science in Food & Consumer Sciences and Education
- Bachelor of Science in Mathematics & Computational Thinking and Education
- · Bachelor of Science in Physics & Energy Studies and Education
- · Bachelor of Science in Sport Science and Education
- · Bachelor of Science (Honours) in Sport Science & Management
- · NIE Singapore Undergraduate Online



POSTGRADUATE DIPLOMAS AND DIPLOMAS

Postgraduate Diploma in Education (PGDE) in the following teaching tracks:

- · Postgraduate Diploma in Education (Primary) (General)
- · Postgraduate Diploma in Education (Primary) (Chinese / Malay / Tamil)
- · Postgraduate Diploma in Education (Primary) (Art / Music)
- · Postgraduate Diploma in Education (Physical Education) (Primary)
- · Postgraduate Diploma in Education (Secondary) (General)
- Postgraduate Diploma in Education (Secondary) (Chinese / Malay / Tamil)
- Postgraduate Diploma in Education (Physical Education) (Secondary)
- Postgraduate Diploma in Education (Junior College) (General)

Diploma programmes in the following teaching tracks:

- Diploma in Education (Primary) (Chinese Language / Malay Language / Tamil Language) (Two-Year)
- Diploma in Education (Primary) (Chinese Language) (One-Year)
- Diploma in Education (Primary) (Tamil Language) (One-Year)
- Diploma in Art / Music Education (Primary) (Two-Year) Diploma in Art / Music Education (Primary) (One-Year)
- Diploma in Physical Education (Primary) (Two-Year)
- Diploma in Special Education (One-Year)
- Diploma in School Counselling (Eight-Month)





GRADUATE EDUCATION

- Doctor in Education (EdD)
- PhD and Master's by Research
- · Master of Arts (MA)
- Master of Science (MSc)
- Doctor of Philosophy (PhD)

■ Master's by Coursework

- Master of Arts (Applied Linguistics)
- Master of Arts (Applied Psychology)
- Master of Arts (Counselling and Guidance)
- Master of Arts (Educational Management)
- Master of Arts (Humanities Education)
- Master of Arts (Instructional Design and Technology)
- Master of Arts (Teaching Chinese as an International Language)
 Master of Arts in Professional Education (Training and Development)
- Master of Education
- Master of Science (Exercise and Sport Studies)
- · Master of Science (Life Sciences)
- Master of Science (Mathematics for Educators)
- · Master of Science (Science of Learning)
- Master of Teaching

■ NTU Graduate Certificates and FlexiMasters

Advanced Diplomas

- · Advanced Diploma in Special Learning and Behavioural Needs
- Advanced Diploma in Primary Art Education
- · Advanced Diploma in Primary Music Education
- · Advanced Diploma in Primary English Language Education
- · Advanced Diploma in Primary Science Education
- · Advanced Diploma in Primary Mathematics Education
- Advanced Diploma in Special Education

¹ The Master of Education [M(Ed)] programme offers the degree in the following 16 areas of specialisation: Art, Chinese Language, Curriculum and Teaching, Developmental Psychology, Drama, Early Childhood, Educational Assessment, English, High Ability Studies, Learning Sciences and Technologies, Malay Language, Mathematics, Music, Science, Special Education and Tamil Language.



GRADUATE FDUCATION

■ Diploma in Physical Education (In-Service)

Certificate Programmes

- Certificate in Special Needs Support
- · Certificate in Educational Support
- Certificate in Primary Science Education
- · Certificate in Primary Mathematics Education
- · Certificate in Teaching Students with Hearing Loss
- Certificate in Teaching Students with Autism in Special Education Schools
- Certificate in Differentiating Curriculum and Instruction for High Ability Learners
- · Certificate in Educational Assessment
- Certificate in English Language Subject Content Knowledge for Teachers (Basic Level)
- · Certificate in STEM Curriculum Development



Visit the NIE official website **www.ntu.edu.sg/nie** or scan the QR code for the latest information.



LEADERSHIP & PROFESSIONAL DEVELOPMENT

- Leaders in Education Programme (LEP)
- Management and Leadership in Schools Programme (MLS)
- Building Educational Bridges: Innovation for School Leaders (BEB)
- Teacher Leaders Programme (TLP)
- Teacher Leaders Programme 1
 - designed for Senior Teachers
- Teacher Leaders Programme 2
 - designed for Lead Teachers and includes an overseas learning component
- Teacher Leaders Programme 3
 - designed for Master Teachers (planned)

CONTINUING EDUCATION AND TRAINING

Professional Learning and Continuing Education (PLaCE)





Global Immersion

STRATEGIC PARTNERSHIPS

NIE develops and deepens alliances, strategic partnerships and collaborations with reputable international educational and commercial organisations with the objective of cultivating mutually beneficial relations. Through memoranda of understanding and agreements, the Institute's network of collaborations spans the globe.



Visit the NIE official website www.ntu.edu.sg/nie/about-us/global-connections or scan the QR code for the latest list of our strategic partners across the globe.



INTERNATIONAL SCHOOL EXPERIENCE (ISE)

Launched in December 2023, the NIE International School Experience (ISE) is a two-week school attachment with NIE's partners for Diploma and PGDE student teachers to explore and appreciate the educational systems of Singapore and other countries, share teaching and learning experiences and gain networking opportunities with other educators from partner universities.

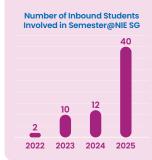


Global Immersion



SEMESTER@NIE SG

Launched in August 2022, Semester@NIE SG aims to attract top students from our partner universities for a feepaying semester at NIE. Since its inception, the number of partner institutions has grown steadily, including universities from China, Indonesia, the Philippines, Thailand, Vietnam and more.

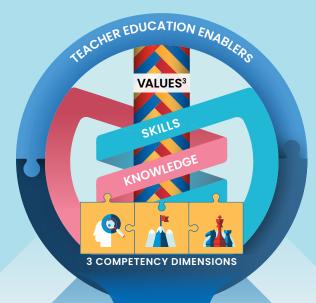


NIE INTEGRATED PROGRAMME

The NIE Integrated Programme aims to attract outstanding students from our partner universities to enrol into NIE as Non-Graduating Students. NIEIP students can use the credits earned in NIE (after the first year) to partially fulfil the graduation requirements of their Home University.



Enhanced Teacher Education Model for the 21st Century (TE²¹): Empowering Teachers for the Future





Shapers of character Creators of knowledge Facilitators of learning

Architects of learning environments Agents of educational change



Enhanced Teacher Education Model for the 21st Century (TE²¹): Empowering Teachers for the Future

NIE's initial teacher preparation is based on a central pillar of a three-pronged set of values (V3) around which the skills (S) and knowledge (K) needed of a 21st Century teaching professional are woven. It guides the design and delivery of NIE's teacher education programmes and prepares future-ready education professionals to develop 21st Century competencies in their students. The current Enhanced V3SK Model builds on the original V3SK in the Teacher Education Model for the 21st Century (TE21) initiative first introduced in 2012

The desire is for student teachers to be able to create new value in education that achieves sustainable development for society and for them to be cognisant of the ecosystem where their competencies impact the lives of the next generation. Importantly, student teachers are empowered to become self-directed and lifelong learners.



Visit the NIE official website www.ntu.edu.sq/nie/about-us/programmeoffices/office-of-teacher-education-and-undergraduateprogrammes/te21 or scan the QR code for more information.

Learning Initiatives for the Future of Education (LIFE@NIE SG*)

2024 Highlights

- Visit of 2nd Lee Sing Kong Professor in Early Childhood Education (February 2024)
- Visit of 2nd Lien Ying Chow Visiting Professor of Education (August 2024)
- DREAMS Project Publishes Findings
 - Visiting Professor Andrew Martins
- Rapid Cycle Evaluation (RCE) Project
- Visit of 2nd Evaluation Visiting Scholar AP Jeanne Century from University of Chicago in February 2024
- Reas: World Educational Research
 Association (WRRA) Visiting Researcher
 Award 2024 2026
 Award 2024 2026
- Learning buddy (LB) Gen-Al Platform to Facilitate Self-regulated Learning via Self Assessment

Singapore Centre for Character & Citizenship Education study trips & activities

Marvin Berkowitz Faculty Dialogue

V&E



Values and Assessment
Ethics and Evaluation
Child and Human Science of Emerging
Development Learning Technologies

OUI STRATEGIC GROWTH AREAS

B

Ш

Occupant Converge and Con

Manufac, Involvender & Londonia

AND DISTINCTIVE CAPABILITIES

LOVING Symposium (21 August 2024)

- Collaboration with Central China Normal University (CCNU)
 - NIE NTU A*STAR Partnership Joint Workshop with IHLs for SOLE
 - AlEd development initiatives for MOE SOL Grant Calls
 SoL-SGA Symposiums
- NIE Statement on Gen Al for Teaching and Learning
 Artificial Intelligence (AI) Lite
- Artificial Intelligence (AI) Literacy Package for Singapore Teachers
- 'Introduction to Al' for all Educators
- GenAl-powered LearningExperience Design (ALEX) Tool Add In for Microsoft Office
- New graduate course, 'Artificial Intelligence for Education: A Pedagogical Spectrum'



Learning Initiatives for the Future of Education (LIFE@NIE SG*)

ABOUT LIFE@NIE SG®

Launched under the NIE 2022 strategic plan, 'Learning Initiatives for the Future of Education at the National Institute of Education Singapore' (LIFE@NIE SG*) comprises a set of institute-level key priority areas and initiatives that serve to create knowledge and advance research across disciplines.

LIFE@NIE SG* is developed upon the foundations of NIE philosophies since the Institute's establishment in 1991, namely values-driven paradigm; responsiveness, relevance, rigour and future-orientation. As the Institute builds capacity and reputation in the evergreen and strategic growth areas, LIFE@NIE SG* aims to strengthen the Institute's capability to lead the future of education over the next decade.



Visit the NIE official website www.ntu.edu.sg/nie/about-us/life@nie-sg or scan the QR code for more information and updates.

INSTITUTIONAL PROFILE & HIGHLIGHTS 2024~2025

Sustainability@NIE

The NIE Sustainability Plan aligns with NTU's sustainability manifesto, leveraging our strategic position within the Singapore education system. NIE spearheads innovative approaches to teaching and learning about sustainability while nurturing nextgeneration learners as passionate advocates for environmental stewardship.





Visit the NIE official website www.ntu.edu.sg/nie/about-us/nie2025strategic-vision/NIE-sustainability-plan or scan the QR code for more information.

Sustainability Education and Outreach

MAKING A DIFFERENCE THROUGH ENVIRONMENTAL EDUCATION AND OUTREACH

The Sustainability Learning Lab (SLL) partnered with the Singapore Food Agency to develop lesson materials on sustaining Singapore's Food Supply. Materials were adopted by the Singapore Ministry of Education for Earth Day 2024.

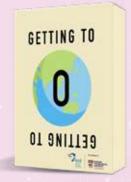
SLL supported World Water Day 2024 with presentation posters and tips on how to conserve water in our everyday lives through making smart consumer choices.

'GETTING TO ZERO' GAME

'Getting to Zero' is a physical card game that is conceptualised for secondary school Geography students or anyone interested in Singapore's energy options. The overall objective of the game is to enlighten student players on the kinds of national / institutional strategies that can be employed to strive for net-zero emissions as well as their accompanying trade-offs.

The game consists of elements such as game cards, game currency and a scoring sheet for competitive game play. Student players are presented with a slew of anthropogenic activities with varying carbon footprints (e.g., deforestation, coal mining). The player who has expended the least amount of financial resources to ensure the lowest level of emissions wins the game.

The game has been acquired by the Ministry of Education for use in Singapore schools.





Visit the NIE official website www.ntu.edu.sg/nie/research-labs/sustainability-learning-lab or scan the QR code for more information.

Al@NIE

NIE STATEMENT ON GEN ALIN TEACHING AND LEARNING

This statement by NIE is the institute's stance on Generative Artificial Intelligence (AI) as a tool that can enhance teaching and learning if used effectively, responsibly and ethically. It lays out ethical guidelines that faculty and students are expected to follow when making use of generative AI.

Learning through active participation

Teacher-facing

Suggest theory or principle relevant to existing ideas

Suggest activities for collaborative learning Suggest ideas that have not been raised Create ideas as a co-participant; as a thought partner

Assess quality of content creation, eg. writing

Suggest ideas (text, images, etc.) to trigger discussion

Assist in content creation, eg. writing

Generate assessment items Translation of materials for multimodal learning

Generate questions for self-revision

Create teaching materials

Summarise information for revision

Provide answers to students' questions

Learning as acquiring knowledge



Visit the NIE official website **www.ntu.edu.sg/nie/aied** or scan the QR code for the full statement.

Student-facing

AI@NIE

AI-RELATED PROGRAMMES & COURSES

ARTIFICIAL INTELLIGENCE

COURSES OFFERED TO EDUCATORS IN 2024



INTRODUCTION TO
ARTIFICIAL INTELLIGENCE:
AI FUNDAMENTALS WITH
NO-CODE PROJECT-BASED
LEARNING



EXPLORE THE KEY

APPLICATIONS OF AI

TOOLS FOR EDUCATION:

AI TOOLS FOR TEACHING

AND LEARNING



DESIGN CONSIDERATIONS FOR LEARNING EXPERIENCES WITH AI: DEVELOPMENT OF 21st CENTURY COMPETENCIES USING AI



USING GENERATIVE AI IN SINGAPORE'S EDUCATIONAL CONTEXTS: GENERATIVE AI FOR SINGAPORE'S CURRICULUM SUBJECTS



AI FOR SELF-DIRECTED LEARNING AND SELF-ASSESSMENT: NIE'S TEACHER GAIA APPLICATION FOR STUDENT-CENTRED LEARNING



ASSESSMENT IN THE AGE OF GENERATIVE AI (GAI): GENERATIVE AI FOR TRANSFORMATIVE ASSESSMENT



AI@NIE

MASTER'S AND LEADERSHIP COURSES

- Education at the Intersection of Artificial Intelligence and Neuroscience
- · Learning Analytics for Science of Learning
- · Assessment in the Generative AI Age
- Learning Analytics for Educational Practitioners
- Artificial Intelligence for Education: A Pedagogical Spectrum
- · Leadership in Artificial Intelligence for Education

PROFESSIONAL DEVELOPMENT

- Introduction to Artificial Intelligence
- Al for Self-Directed Learning and Self-Assessment
- Explore the Key Applications of Al Tools for Education
- Design Considerations for Learning Experiences with AI
- Using Generative AI in Singapore's Educational Contexts
- Assessment in the Age of Generative AI (GAI)
- Artificial Intelligence (AI) Competencies for Teachers: AI-Assisted Teaching and AI-Enabled Lifelong Professional Learning
- Al Literacy for Fostering Inquiry and Constructivist Learning Environments

CERTIFICATE IN AI FOR EDUCATION

The new certificate programme will commence its first run in July 2025.





Visit the NIE official website **www.ntu.edu.sg/nie/aied** or scan the QR code for more information and updates.

AI@NIE

AI-INFUSED TEACHING AND LEARNING APPLICATIONS AND INNOVATIONS

 Knowledge Building Learning Companion for Teachers (KB LCT)

KB LCT is a software that supports teachers through their Knowledge Building (KB) process. It provides personalised support for teachers to inquire deeper into KB principles, guiding principle-based design of KB lessons and reviewing lessons in anticipation of common KB implementation challenges.



Al-powered Sports Coaching Observation Tool (COT)

COT uses speech recognition technology to automate the categorisation of teacher speech and behaviour, enabling meaningful feedback. The app has been adopted within NIE and by Ministry of Education (MOE) school teachers and sports coaches, elevating coaching practices on a large scale.

Al-powered Video Analytics in Lessons (AVAiL)

AVAiL is a video analysis tool leveraging data analytics to provide faculty with real-time and post-lesson data on online learner engagement during synchronous online lessons.



AI@NIE

AI-INFUSED TEACHING AND LEARNING APPLICATIONS AND INNOVATIONS

MyBotBuddy

MyBotBuddy is a chatbot designed using Generative AI to support students in their programming journey. It serves as an intelligent tutor, providing personalised, step-by-step guidance tailored to each student's pace and understanding.

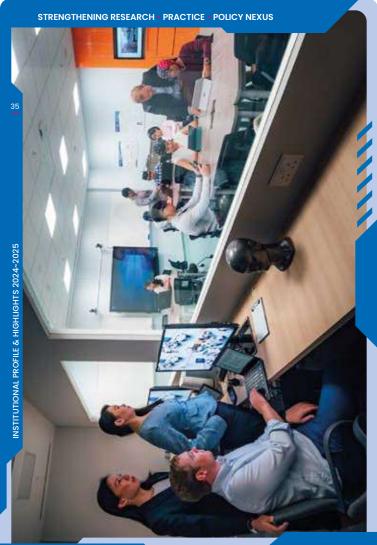
NIF AI Sandbox

Launched in 2024, Al Sandbox is an NIE-hosted platform that enables faculty and staff to explore the latest AI advancements including large language models and other AI tools. It allows educators to integrate Al-driven insights into their pedagogies and facilitates comparative studies of course content and efficacy by leveraging different AI models.

LIBytes

Launched in March 2024, LIBytes is a platform developed and designed for students and staff to access virtual reality (VR) and auamented reality (AR) content, as well as artificial intelliaence (AI)-enabled robots for integration into classroom teaching.





TRANSFORMATION • GROWTH • SUSTAINABILITY

STRENGTHENING RESEARCH * PRACTICE * POLICY NEXUS

NIE's Network with Researchers, Policymakers and Practitioners



KK Women's and Children's Hospital

















National Library Board

Singapore



















to 6 first canput my first skoo



Centres & Labs

NIE RESEARCH CENTRES

■ Singapore Centre for Character and Citizenship Education (SCCCE)



Launched in May 2023, SCCCE aims to advance professional learning and research in Character and Citizenship Education to support the development of children and youth in Singapore and beyond.

Centre for Research in Pedagogy and Practice (CRPP)

Established in 2002, CRPP conducts rigorous and relevant multi-disciplinary research and development that inform pedagogy and practice in Singapore and internationally.



Centre for Research in Child Development (CRCD)



Established in 2017, CRCD conducts studies focusing on factors that influence the course of development from early to middle childhood.

Science of Learning in Education Centre (SoLEC)

Established in 2021, SoLEC is a nexus for interdisciplinary research fields such as psychology, neuroscience, physiology and learning sciences. SoLEC aims to use basic and applied science of learning research to inform teaching and learning practices.



Centre for Assessment and Evaluation (CAE)



Launched in 2022, CAE is a one-stop hub for research and teaching in Assessment and Evaluation. CAE promotes literacy in these areas among educators so that they can make informed decisions on teaching and learning.

Centres & Labs

OTHER CENTRES AND LABS

- Centre for Arts Research in Education (CARE)
- Sustainability Learning Lab (SLL)





 Plasma Sources and Applications Centre (PSAC)



Mediated Learning Laboratory (MLL)



 Multi-centric Education, Research & Industry Science, Technology, Engineering, and Mathematics Centre (meriSTEM@NIE SG)



 Motivation in Educational Research Laboratory (MERL)





Visit the NIE official website **www.ntu.edu.sg/nie/research/centres-and-labs** or scan the QR code for the latest information.

Growing Research Funding and Support



Key Research Works (Selected)

DRIVERS, ENABLERS AND PATHWAYS OF ADOLESCENT DEVELOPMENT IN SINGAPORE (DREAMS)

The project follows about 7,000 adolescents from Secondary 1 to Secondary 4 / 5,



exploring educational choices, student experience and adolescent development in Singapore.

DREAMS aims to inform policy and practice, aiming not only for a happier and healthier Singaporean secondary school experience but also an empowering and enriching one, ensuring each student's full potential is realised.



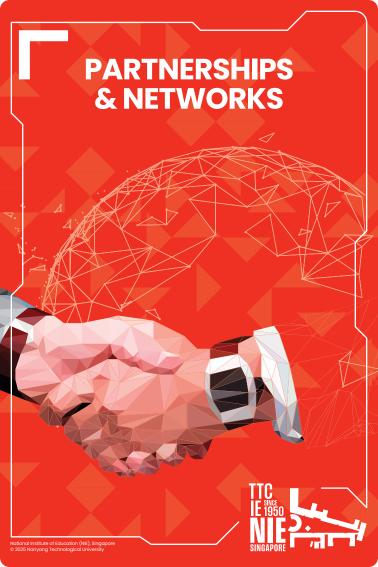
The lead principal investigators for DREAMS are (from left) Prof Kenneth Poon (Lead PI), Dr Melvin Chan (Lead Co-PI) and Dr Trivina Kana (Lead Co-PI).



COPYRIGHTED TECHNOLOGY FOR SUSTAINABLE SAND MINING (2024)

- Description of product: Sand mining monitoring system and sustainable sand harvesting technology
- Technology disclosure filed: TD 2024-144 Sand Mining Monitoring (NTUitive)
- ICs: Associate Professor Edward Park (Inventor 1), Sonu Kumar (Inventor 2; current PhD Scholar)

Associate Professor Edward Park



International Alliances and Networks

INEI ANNUAL CONFERENCE AND STRATEGIC PARTNERSHIP FOR SCIENCE OF LEARNING

NIE signed a Memorandum of Understanding with the College of Education, Seoul National University (SNU) to foster research collaborations with a focus on Science of Learning while at the International Network of Educational Institutes (INEI) Annual Conference 2023.

As an active member, NIE participates regularly in the annual meetings and conferences of INEI. Themed 'Educational Restoration and Growth: Resilience, Advocacy, and Empowerment',

the conference in 2023 was hosted by the College of Education at SNU in Seoul, South Korea from 11 to 13 October 2023. The INEI meeting facilitated the exchange of invaluable insights aimed at refining educational research and practices in line with the conference theme.





NIE is a founding member of INEI, a global network of 10 education institutes that is rooted in the shared optimism that the pooling of common experiences and achievements among a community of educators can bring about advances in education internationally.

Each INEI member institution has its own strengths and achievements and receives international recognition for its teaching programmes and research. Through their investment in ongoing research, they are making – and will continue to make – significant contributions to education in their own countries and internationally.



Visit inei.bnu.edu.cn or scan the OR code for more information.

International Alliances and Networks

ASSOCIATION OF SOUTHEAST ASIAN TEACHER EDUCATION NETWORK

NIE hosted the 17th Meeting of the Association of Southeast Asian Teacher Education Network (ASTEN) Presidents on 27 May 2024.

Delegates exchanged valuable insights on cutting-edge research in teacher education and learnings from each country and discussed strategic future research initiatives.





NIE is a founding member of ASTEN, a network of premier leading Teacher Education Institutions (TEIs) of the countries in the ASEAN. The goal of the association is to address issues, challenges and concerns relevant to teacher education programmes, practices and policies in the ASEAN Region. It also serves as a vehicle for collaboration in both academic and research endeavours within and across member institutions that will benefit the ASEAN nations and peoples.



Visit www.astenl.org or scan the QR code for more information.

Rising Global Reputation and Rankings

2025 QUACQUARELLI SYMONDS (QS) RANKINGS BY SUBJECT IN EDUCATION & TRAINING

In the QS World University Rankings 2025 by Subject for 'Education and Training' released on 12 March 2025, NTU-NIE Singapore's overall rank moved up two places to 8th position in the world, rising in rank and staying in the Top 10 for the second straight year. It surpassed the University of California, Berkeley (UCB), University of Toronto and University of California, Los Angeles (UCLA) in this year's ranking.

NTU-NIE in the QS Ranking for Education & Training



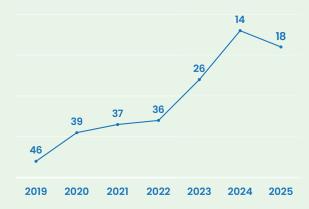
2019 2020 2021 2022 2023 2024 2025

Rising Global Reputation and Rankings

2025 Times Higher Education (THE) Rankings (Education Studies)

NTU-NIE Singapore is ranked 18th in the world in the **Times Higher Education (THE) World University Rankings 2025** for the **'Education Studies'** subject.

NTU-NIE in the THE Ranking for Education Studies



INSTITUTIONAL PROFILE & HIGHLIGHTS 2024~2025

NIE Named Professorships



16TH CJ KOH PROFESSOR IN EDUCATION

Professor Justin Dillon, the 16th CJ Koh Professor in Education and a professor of Science and Environmental Education at the University College London, UK, visited NIE in October 2024. He delivered a public lecture on 1 October 2024, focusing on how education might respond to the new reality facing young people and their teachers in terms of sustainability and climate education.



For the full list of past NIE CJ Koh Professorship recipients, visit www.ntu. edu.sg/nie/faculty/professorships or scan the QR code.

NIE Named Professorships



2ND LEE SING KONG PROFESSORSHIP IN EARLY CHILDHOOD EDUCATION

Professor Sharon Lynn Kagan visited NIE from 19 to 23 February 2024. She delivered a public lecture titled 'Creating Opportunities for Young Children: A Story of Continuity and Change' at Alliance Française de Singapour on 21 February 2024. Professor Kagan is an Associate Dean for Policy and the Virginia and Leonard Marx Professor of Early Childhood at Teachers College, Columbia University, USA.



2ND LIEN YING CHOW VISITING PROFESSOR OF EDUCATION

Professor Sharon Vaughn, the second Lien Ying Chow Visiting Professor of Education, visited NIE from 15 to 21 August 2024. She delivered a public lecture attended by 144 people on 'Dyslexia: Dispelling Myths and Exploring Current Research Trends' at NTU@ OneNorth Alumni House. Professor Vaughn is also Executive Director of The Meadows Center for Preventing Educational Risk at The University of Texas at Austin, USA.



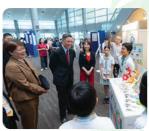
For more information on NIE Named Professorships, visit www.ntu.edu.sg/nie/faculty/professorships or scan the QR code.



REDESIGNING PEDAGOGY INTERNATIONAL CONFERENCE 2024 (RPIC)

The 10th edition of NIE's flagship conference, themed 'Growing future-ready teachers and learners: Collaborative research for educational change', was held from 28 to 30 May at the Nanyang Auditorium, NTU with then-Singapore Minister for Education Mr Chan Chun Sing as the Guest-of-Honour.

- Four keynote addresses and over 300 paper and symposium presentations, workshops and poster sessions
- Attended by close to 1,000 delegates comprising teachers, educators, practitioners, researchers and policymakers.





DREAMS SYMPOSIUM 2025

The inaugural DREAMS Symposium, titled 'Adolescents at the Crossroads: Navigating Education and Society in the 21st Century', took place on 8 January 2025. This symposium marked a milestone for the DREAMS project, a Ministry of Education (MOE)commissioned longitudinal study on adolescent development led by Professor Kenneth Poon, Dean, Research and Centre Director, Centre for Research in Child Development (CRCD).

The event welcomed 200 attendees, including researchers, policymakers, school leaders and teachers to NIE. It served as a vibrant platform to discuss the complexities of adolescent development and its implications for education and society in Singapore and beyond.





CO-HOSTING ERAS CONFERENCE & WERA FOCAL MEETING

NIE co-hosted the ERAS Conference & WERA Focal Meeting with ERAS (Educational Research Association of Singapore) from 21 to 24 November 2023.

- Theme: 'Forging Ahead: Transforming Education in a Rapidly Changing World'
- 7 insightful keynote presentations
- 43 symposiums, 332 papers and 62 poster presentations
- Attended by 850 participants from more than 30 countries

NIE GRADUATE STUDENT CONFERENCE 2024

The NIE Graduate Student Conference 2024 (NIEGSC 2024) offered an opportunity for NIE / NTU graduate students to share

their research insights and innovations, reconnect and discuss ways to advance methodologies in research and pedagogy. With the theme, 'From Insights to Impact: Bridging Research and Practice', the conference took place on 12 October 2024 at NIE.



NIF LEARNING FESTIVAL 2025

The NIE Learning Festival 2025 from 17 to 18 March 2025 featured more than 20 engaging workshops and keynotes covering cutting-edge topics such as AI tools for education, climate change misconceptions, STEM curriculum development,



computational thinking, educational neuroscience and using drama to teach.

Led by experts, these bite-sized workshops provided participants with the opportunity to sample some of NIE's courses and make them a feature of their professional learning pathways for the year. Participants discovered the latest educational resources, tools and technologies to enhance their teaching practices. They were also able to connect with like-minded educators and create valuable partnerships with NIE experts.

Alumni Engagement Events



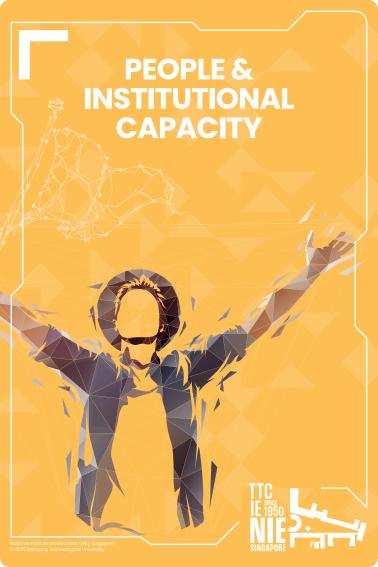
LAUNCH OF NTU NIE MATCIL ALUMNI CHAPTER

The inaugural ceremony of the NTU NIE Master of Arts in Teaching Chinese as an International Language (MATCIL) Alumni Chapter was held on 3 August 2024.



15TH CARING TEACHER AWARDS 2024

The ceremony was held in partnership with ExxonMobil Asia Pacific Pte Ltd on 16 September 2024 at Dunman High School and received a total of 12,984 nominations from 259 schools.



NIE Full Professors

Professor Goh Chuen Meng Christine

English Language and Literature

Professor Icy Lee

English Language and Literature

Professor Low Ee Ling

English Language and Literature

Professor Chang Chew Hung

Humanities and Social Studies Education

Professor Kevin Peter Blackburn

Humanities and Social Studies Education

Professor Hung Wei Loong, David

Learning Sciences and Assessment

Professor Dong Fengming

Mathematics and
Mathematics Education

Professor Kwek Leong Chuan

Natural Sciences and Science Education

Professor Rajdeep Singh Rawat

Natural Sciences and Science Education

Professor Xu Shuyan

Natural Sciences and Science Education

Professor Ang Pei-Hui, Rebecca

Psychology and Child & Human Development

Professor Liu Woon Chia

Psychology and Child & Human Development

Professor Poon Kin Loong, Kenneth

Psychology and Child & Human Development

Professor Tan Oon Seng Psychology and Child &

Psychology and Child & Human Development

Professor Michael Chia

Physical Education and Sports
Science

Professor Wang Chee Keng, John

Physical Education and Sports
Science

Correct as of May 2025



Notable Awards & Accolades

STANFORD-ELSEVIER GLOBAL TOP 2% SCIENTISTS AT NIE NTU SINGAPORE

NIE faculty have been named among the **GLOBAL TOP 2% OF ACADEMICS** in the following subject fields by Stanford University for 2024:

- Applied Physics / Fluids & Plasmas
- Education / Communication & Media Studies
- Education / Developmental & Child Psychology
- Education / Information Systems
- Education / Languages & Linguistics
- Education / Social Psychology
- Environmental Sciences / Geological & Geomatics Engineering
- General Physics / Fluids & Plasmas
- · Organic Chemistry / Medicinal & Biomolecular Chemistry
- Sport Sciences / Experimental Psychology

NIE Faculty on the 2024 List (by Department)

English Language and Literature	Associate Professor Vahid Aryadoust Professor Goh Chuen Meng, Christine Professor Icy Lee Associate Professor Victor Lim Fei Associate Professor Teo Chin Soon, Peter
Humanities and Social Studies Education	Associate Professor Edward Park Associate Professor Yang Peidong
Learning Sciences and Assessment	Associate Professor Wang Qiyun
Natural Sciences and Science Education	Professor Kwek Leong Chuan Professor Rajdeep Singh Rawat Dr Tan Lik Tong
Physical Education and Sports Science	Associate Professor Chow Jia Yi
Policy, Curriculum and Leadership	Associate Professor Heng Tang Tang
Psychology and Child & Human Development	Professor Ang Pei-Hui Rebecca Associate Professor Gregory Arief D Liem

TITUTIONAL PROFILE & HIGHLIGHTS 2024~2025

Notable Awards & Accolades (Selected)



Associate Professor Vahid Aryadoust English Language & Literature (ELL)

International Language Testing Association 2022 Best Article Award Winner (February 2024)

Aryadoust, V., Foo, S., & Ng, L.Y. (2022). What can gaze behaviors, neuroimaging data, and test scores tell us about test method effects and cognitive load in listening assessments? *Language Testing*, 39(1), 56-89.

Associate Professor Tan Chee Lay Asian Languages and Culture (ALC)

Joint-winner at Singapore Literature Prize 2024

Chinese Poetry Category: Poetry of the Eternal Summer





Associate Professor Leonard Tan Visual & Performing Arts (VPA)

Conductor at Singapore Symphony Orchestra National Day Concert (August 2024)

Notable Awards & Accolades (Selected)



Professor Low Ee Ling
Dean, Academic and Faculty Affairs
English Language and Literature (ELL)

Address to German Members of Parliament (March 2024)

Associate Professor Chen Wenli Head, Learning Sciences and Assessment (LSA)

Speech at International Society of the Learning Science Annual Meeting 2024 (June 2024)





Dr Joseph Yeo Kai KowMathematics and Mathematics
Education (MME)

Keynote Address at 6th Asia-Pacific Educational Assessment Conference

NTU 'Best Foot Forward' 2025



NTU 'Best Foot Forward' 2025

NIE participated in the NTU 'Best Foot Forward' 2025 fundraising challenge, which took place from February to April 2025.



TeamNIE emerged as the champion and **top team** across NTU, raising

\$\$51,865.23 for the NIF Advancement Fund.



'Best Foot Forward' is a university-wide fundraising activity organised by NTU's University Advancement Office. The event aims to unite the OneNTU community through fitness and philanthropy.

Campus Refresh

Main construction works are slated to start from Q2 2026 and completion is planned to coincide with the opening of the upcoming MRT station on the Jurong Regional Line.





Campus Refresh

INNOVATIVE TEACHING AND LEARNING SPACES

Al-enabled Tutorial Rooms and Lecture Theatres

Designed to leverage AI technologies for education, these innovative rooms and spaces will be equipped with AI-based cameras, interactive panels and configurable furniture for a transformative and hybrid learning experience.

SOLAR PHOTOVOLTAIC SYSTEMS

Since May 2024, solar photovoltaic systems have been installed and implemented across the NIE campus. The switch to solar power saw a 32% reduction in electricity consumption in June 2024 compared to the average consumption from June 2018 to 2023



Technology Roadmap for the Future of Education (TRFE)

Launched in May 2024, the multi-year TRFE outlines the IT strategic direction taken to achieve NIE's mission of leading the future of education. The roadmap is articulated through the desired outcomes of the institute's key stakeholder groups and organised into four digital thrusts and three enablers.

The digital thrusts prescribe the specific areas of focus while the enablers provide foundational capabilities that can be built upon.





OUR DIGITAL VISION

Leading the future of education, enabled by digital technologies guided by sound pedagogical practices."

OPERATING CONTEXT

- NEW LEARNING TRENDS
- **TECHNOLOGY**
- ADVANCEMENT
- **NEW WORKING NORM**

STAKEHOLDERS

- LEARNER
- RESEARCHER
- FACULTY
- STAFF

Innovate, design and facilitate teaching with emerging technologies to inspire nextgeneration educators



Enhance learning experiences that cater to different profiles

DIGITAL THRUSTS

Enhance research support to improve the impact on policy and practice





Advance systems and processes to enhance productivity

DIGITAL ENABLERS



Building a future ready and agile workforce



Deploying flexible infrastructure and applications



Building a safe and resilient computing environment



Visit the NIE official website www.ntu.edu.sg/nie/about-us/nie2025strategic-vision/TRFE or scan the QR code for more information.

Towards 2030... Developing a Vibrant and Innovative NIE

FACULTY DEVELOPMENT

Faculty Dossier Portal

Integrated with the identification of Tier I publications from the PRDS system and automation of assessment parameter counts, the Faculty Dossier Portal will streamline faculty evaluation processes, increase accuracy and reduce administrative workload.

Faculty Technology Enabled Learning Development Framework (FacTEL)

Designed to enhance faculty development and digital fluency, FacTEL aims to address the diverse needs in technology-mediated teaching across NIE by improving the faculty's competency in technology-mediated teaching and learning.



Towards 2030... Developing a Vibrant and Innovative NIE

NEW & UPCOMING COLLABORATIONS AND FACILITIES

■ TECHNOLOGY FOR EDUCATION CENTRE

Officially announced on 29 May 2025, the new Technology For Education Centre (TEC) housed in NIE will leverage AWS' cloud infrastructure, technical expertise and digital learning resources to co-design and co-develop innovative projects aimed at advancing the use of data analytics, AI and other emerging technologies in teaching and learning. It is a key part of a three-year Memorandum of Understanding (MOU) between NIE and AWS to accelerate educational innovation and advance research in educational technology.

The collaboration exemplifies educational innovation as a core pillar of NIE's AI for Education strategy under AI@NIE, aligning with Singapore's National AI Strategy 2.0's (NAIS 2.0) vision for building an AI-ready workforce.

COLLABORATIONS IN AIED

NIE will partner institutions like the University College London Institute of Education and Central China Normal University to further research and capacity building in AI in Education (AIEd). In the plans is a collaborative research facility tentatively titled the 'AI in Education eXperimentation Laboratory' (AIEd XLab), which is intended for the development of prototype intelligent technologies (such as machine learning, language processing and robotics) to support learning and transforming pedagogies.



Charting New Horizons: Beyond 75 Years of Innovation in Teacher Education



Towards 2030... Developing a Vibrant and Innovative NIE

NIE 75TH ANNIVERSARY

2025 marks 75 years of NIE's impact on education and 60 years of Singapore's independence, celebrating how education and nation-building have shaped our shared future.

NIE will showcase its rich history of innovation in teacher education and research, connecting the past, present and future in celebration of its 75th anniversary. The theme of 'Charting New Horizons: Beyond 75 Years of Innovation in Teacher Education' aims to convey a sense of exploration, innovation and forward momentum.

The year-long celebration will engage stakeholders — faculty, staff, students, alumni and industry partners — through storytelling, interactive experiences and thought leadership that focus on NIE's contributions to education and its role in helping to shape the future of education in Singapore and globally.

75 INNOVATIVE PROJECTS

In celebration of NIE's 75th anniversary in 2025, the institute is funding the development of 75 ground-up projects by staff and faculty to boost innovation and streamline work processes. Each department and project will receive \$\$5,000 to fund the rollout of their ideas.



Towards NIE 2030...





Towards 2030... Developing a Vibrant and Innovative NIE

CO-CREATING NIE 2030

NIE continues its efforts to develop its next institute-level strategic plan for the academic years 2026 to 2030. Five taskforces have been set up to generate ideas for the following strategic areas:

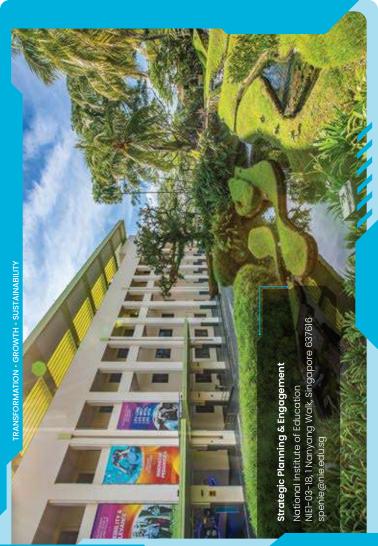
- Redefining Learning
- Broadening Research and its Impact
- Establishing NIE as a Global Leader
- Developing a Vibrant and Innovative Culture
- Growing People and Cultivating Excellence

The NIE 2030 strategic plan is set to be unveiled at the NIE Director's Address 2026.

Campus Map

NIE LOCATION MAP

- Block 1
 Administration
- Block 7 Science
- 3 Green House
 - 4 Sports Hall
- Block 5 Physical Education 6 NIE Library
- 7 Block 3 Arts
- 9 Nanyang Playhouse 8 Arts Gallery
- Block 2 Education



lational Institute of Education (NIE), Singapore

© 2025 Nanyana Technological University

Acknowledgements

All content contained in this document (including all text, images, graphics, video and audio) is the property of the National Institute of Education, Nanyang Technological University, Singapore and should not be copied, reproduced or forwarded to non-NIE email addresses without express written consent. Please contact NIE Strategic Planning & Engagement (spenie@nie.edu.sg) on the use of any content in this document.



Visit the NIE official website www.ntu.edu.sg/nie/about-us/nie2025-strategic-vision/institutional -profile-and-highlights or scan the QR code to view the digital version.

Strategic Planning & Engagement

National Institute of Education NIE1-03-18, 1 Nanyang Walk, Singapore 637616