







# 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 VISION**

An Institute of Distinction: Leading the Future of Education

# **NIE MISSION**

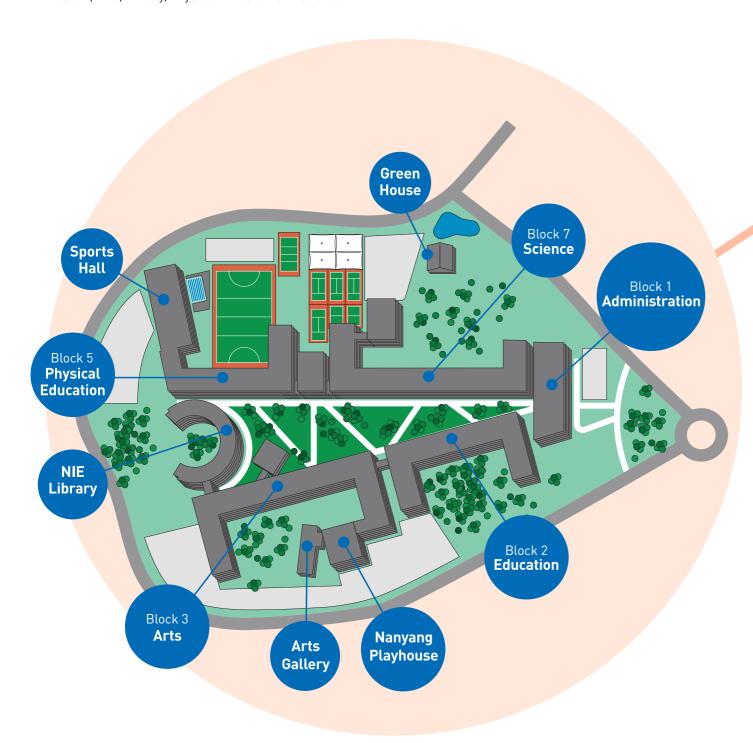
Inspiring Learning, Transforming Teaching, Advancing Research

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.



# An Autonomous Institute in a World-class University

Located in NTU's Yunnan Garden Campus, the purpose-built NIE campus spreads across 16 hectares with six blocks, namely Administration, Education, Arts, Library, Physical Education and Science.





# Governance & Leadership

## NIE Council

The NIE Council is the governing body of the Institute. Its responsibilities include:

- Setting objectives and providing direction for the Institute.
- · Reviewing, evaluating and approving current programmes and facilities provided by the Institute and suggesting future developments.
- Assisting in the liaison with outside bodies including organisations that have an interest in the Institute.
- Approving major operating and budgetary plans of the Institute.
- · Appointing working committees or panels to assist the Council in charting out the directions of the Institute.

The Council is chaired by the Permanent Secretary of the Ministry of Education and comprises distinguished members from the public and private sectors.

### Composition of NIE Council (as of 1 January 2024)



**MR LAI CHUNG HAN** Permanent Secretary Singapore Ministry of Education



MR WONG SIEW HOONG Advisor Singapore Ministry of Education



**PROF CHRISTINE GOH** NIE Director National Institute of Education Nanyang Technological University Singapore



**PROF ANDREW BROWN** Emeritus Professor of Education and Society Institute of Education University College London



Deputy Director-General Development) Singapore Ministry



**MS BEATRICE CHONG** of Education (Professional



**MS GWENDA FONG** Deputy Secretary (Development and Regulation) Singapore Ministry of Communications and Information



**PROF TAN OOI KIANG** Deputy Provost (Education) Nanyang Technological University Singapore



**PROF TAN TAI YONG** President Singapore University of Social Sciences



MR JAMES WONG Deputy Secretary (Services) / Group Director HR Singapore Ministry of Education

# NIE Senior Leadership

NIE's strategic goals and operations are led by a senior leadership team comprising senior academics and professionals equipped with vast experience and a deep passion for inspiring learning, transforming teaching, advancing research and developing a dedicated core of education and management service officers.



**PROF CHRISTINE GOH** NIE Director



**PROF LOW EE LING** Dean, Academic and Faculty Affairs



PROF KENNETH POON Dean, Education Research



**ASSOC PROF ANG KENG CHENG** Dean, Graduate Studies and Professional Learning



**PROF TAN OON SENG** Dean, Special Projects



**PROF LIU WOON CHIA** Dean. Teacher Education

(Information correct as of 1 January 2024)



**DR TRIVINA KANG** Chief Strategy and Partnerships Officer



**MR KRISTOPHER** O'BRIEN Divisional Director Academic Computing and Information Services



**MR CHAN TEE MIANG** Divisional Director, Corporate Planning and Development



# NIE Strategic Vision 2025

With the theme, 'A Future-ready NIE: Transformation, Growth and Sustainability', the NIE Strategic Vision 2025 ('NIE 2025') is NIE's strategic plan for the academic years 2023 to 2025. It focuses on continued excellence as well as transformation and growth in the key areas of 'Programmes & Research', 'Partnerships & Networks', and 'People & Institutional Capacity'.

Building on the success of the NIE Strategic Vision 2022, the previous strategic plan for the academic years 2018 to 2022, the new NIE 2025 includes a key thrust in boosting the institute's reputation and engagement efforts to strengthen its position as a leader of the future of education. It also includes a thrust towards sustainability education and environmental sustainability on campus.

## **NIE Vision**

An Institute of Distinction: Leading the Future of Education

## **NIE Mission**

Inspiring Learning, Transforming Teaching, Advancing Research

## **NIE Core Values**

Integrity, Professionalism, Collegiality, Valuing Diversity, Embracing Change

# **KEY STRATEGIES**

Area 1

# Programmes & Research

Harnessing NIE's evergreen strengths, distinctive capabilities and growth areas to empower educators and other professionals for the future.

Leading transformative pedagogies and practices with experimentation and research.

Implementing the NIE research strategy and strengthening the research-practice-policy nexus.

Area 2

# Partnerships & Networks

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

Deepening affiliations with regional and international partners.

Strengthening alumni relations towards a lifelong NIE engagement.

Area 3

# People & Institutional Capacity

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

Strengthening enablers for NIE as an employer of choice.

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

KEY STRATEGIES ENABLERS

Innovative Pedagogies

Transformative Assessment Vibrant Research Ecosystem A Strong Global Academic Reputation

Well-engaged Stakeholders An Enabled, Immersive & Sustainable Campus

Leadership Excellence & Advancement

Holistic Talent Development

SELECTED KEY INITIATIVES

TE<sup>21</sup>: EMPOWERING TEACHERS FOR THE FUTURE

EDUCATION RESEARCH FUNDING PROGRAMME (5<sup>TH</sup> TRANCHE) LIFE@NIE SG®

NIE LEADERSHIP EXCELLENCE & ADVANCEMENT PROGRAMME (1 FAP

NIE CAMPUS RENEWAL

NIE SUSTAINABILITY PLAN

TECHNOLOGY ROADMAP FOR THE FUTURE OF EDUCATION (TRFE

NΩ

# Programmes & Tracks

NIE's programmes combine a legacy of educational excellence with innovation and creativity aimed at propelling its graduates into an exciting future, developing academic skills alongside character and leadership skills with a strong emphasis on positive values.

# Undergraduate

 NTU-NIE Teaching Scholars Programme / Bachelor of Arts/Science (Hons) in Double Major - 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)

#### SCAN OR CODE to find out more









## **Graduate Education**

Doctor in Education (EdD)

PhD and Masters by Research

Master of Arts (MA) (Research) Master of Science (MSc) (Research) Doctor of Philosophy (PhD)

Masters 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<sup>1</sup>

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

# 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 (TLP1) - designed for Senior Teachers

Teacher Leaders Programme 2 (TLP2) - designed for Lead Teachers and includes an overseas learning component

Teacher Leaders Programme 3 (TLP3) - designed for Master Teachers (planned)

# Continuing Education and Training

Professional Learning and Continuing Education (PLaCE)



**SCAN OR CODE** 

to find out more

















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.

# Centres and Labs

### NIE Centres of Excellence



# Singapore Centre for Character and Citizenship Education (SCCCE)

The Singapore Centre for Character and Citizenship Education was officially launched at the Teachers' Conference and ExCEL Fest (TCEF) on 30 May 2023. The Centre seeks 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)

The Centre for Research in Pedagogy and Practice was established in 2002. Its team of researchers 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)

The Centre for Research in Child Development was established in 2017. The centre conducts studies focusing on factors that influence the course of development from early to middle childhood.



## Science of Learning in Education Centre (SoLEC@NIE SG)

Established in 2021, the Science of Learning in Education Centre serves as a nexus for interdisciplinary research fields such as psychology, neuroscience, physiology and learning sciences.

SoLEC@NIE SG 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, the Centre for Assessment & Evaluation is a one-stop hub and catalyst for research and teaching in Assessment and Evaluation to encourage greater growth in these two areas. To this end, CAE promotes literacy in Assessment and Evaluation among educators so that they can make better-informed decisions on teaching and learning.



### Other Centres and Labs

Plasma Sources and Applications Centre (PSAC)



## Centre for Arts Research in Education (CARE)





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





#### Sustainability Learning Lab (SLL)



Plasma Engineering and Applied Research Lab (PEARL)



Motivation in Educational Research Laboratory (MERL)



Mediated Learning Laboratory (MLL)



Motor Behaviour Lab (MBL)



# NIE Professorships

# C J Koh Professorship in Education



Professor James Arthur, Director of the Jubilee Centre for Character and Virtues, School of Education, University of Birmingham was appointed as the 15<sup>th</sup> C J Koh Professor in Education. During his visit to NIE in May 2023, Prof Arthur spoke at the MOE Teachers' Conference and EXCEL Fest where the Character and Citizenship Education (CCE) Centre at NIE was launched.

Past C J Koh Professors have included Marilyn Cochran-Smith from Boston College (in 2006); Susan Fuhrman from Teachers College, Columbia University (2009); Robin Alexander from University of Cambridge (2010); Andy Hargreaves from Lynch School of Education, Boston College (2011); Andreas Schleicher from OECD (2011); Linda Darling-Hammond from Stanford University (2013); Dennis Shirley from Lynch School of Education, Boston College (2014); Fernando Reimers from Harvard Graduate School of Education (2015); Pam Grossman from Graduate School of Education at the University of Pennsylvania (2018) and George Siemens from University of Texas, Arlington (2019).

#### **Other NIE Named Professorships**

- E W Barker Professorship (for Physical Education and Sports Science)
- Dr Ruth Wong Professorship in Teacher Education
- Lee Sing Kong Professorship in Early Childhood Education
- Lien Ying Chow Professor in Education

Visit *ntu.edu.sg/nie/faculty/professorships* for more information on the NIE professorships and past recipients.



# Creating Knowledge and Advancing Research Across Disciplines

## LIFEONIE SG®

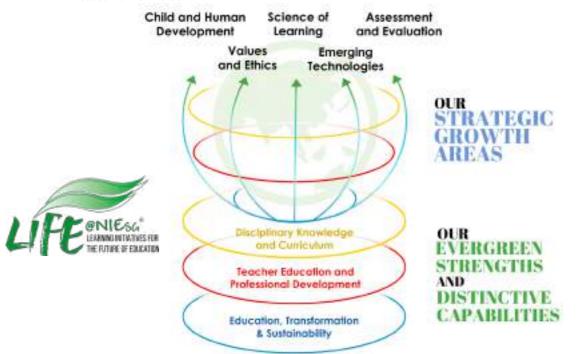
Developed upon the foundations of NIE philosophies since its establishment in 1991, namely, a) values-driven paradigm; b) responsiveness, relevance, rigour and c) futureorientation, Learning Initiatives for the Future of Education (LIFE@NIE SG®) comprises a set of Institute-level key priority areas and initiatives for NIE's next lap of growth. They serve to create knowledge and advance research across disciplines. As the Institute builds capacity and reputation in these areas, they also serve as a focus for the investment of NIE resources for the next few years.

#### **Strategic Growth Areas**

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

#### **Evergreen Strengths and Distinctive Capabilities**

Disciplinary Knowledge & Curriculum Teacher Education & Professional Development Education, Transformation & Sustainability



The nomenclature of 'LIFE' is inspired by the national 'Learn for Life' movement and builds upon NIE's current '4-Life' philosophy of providing life-long, life-deep, life-wide and lifewise<sup>2</sup> education and education-related thought leadership.

The key priority areas and related initiatives under LIFE@NIE SG® are currently being developed and implemented as part of the current and next NIE strategic plans. Following the Science of Learning in Education Centre in 2021, Al@NIE (niews.nie.edu.sg/sep2022/ report-card/introducing-artificial-intelligence-nie-ainie/) and a Centre for Assessment and Evaluation were launched in 2022. The Singapore Centre for Character and Citizenship Education was officially unveiled by the Minister for Education in May 2023.

Key developments, new initiatives and upcoming plans for the SGAs, as well as the faculty and staff involved, can be found at the official LIFE@NIE SG® microsite: lifeniesq.nie.edu.sq.

# Major Highlights

#### **V & E**

- Visit of 15th C J Koh Professor, Prof James Author (31 May 2023)
- Launch of Singapore Centre for Character & Citizenship Education (30 May 2023)

# CHD

A & E

- Visit of 1<sup>st</sup> Lee Sing Kong Professor, Prof Iram Siraj (20-24 February 2023)
- Launch of the Singapore **Longitudinal Cohort Study** (May 2023 - October 2027)

(25 July 2022)

for Evaluation

• Roundtable Sessions

• Stree Symposium (27 April 2023)

## Child and Human Assessment Learning Development and Evaluation Emerging and Ethics Technologies • Launch of NIE Centre for **Assessment and Evaluation** eacher Education and Professional Developmen **Education**, Transformation

#### SoL

OUR

GROWTH

EVERGREEN

STRENGTHS

DISTINCTIVE

CAPABILITIES

AREAS

- Launch of SoLEC@NIE SG (24 March 2021)
- Science of Learning Symposium
- Science of Learning Seminar Series

#### ET

- Launch of Al@NIE (25 May 2022)
- Online Al Literacy for Educators package
  - Learning Sciences and Assessment (LSA)
  - Colloquium Al in Education (AIED)
  - Courses

Harnessing NIE's Evergreen Strengths, Distinctive Capabilities and Growth Areas

#### Artificial Intelligence@NIE

In the drive to transform teaching and learning in 21st Century education, NIE launched Artificial Intelligence@NIE or AI@NIE in 2022. The initiative aims to establish facilitative structures to prepare Singapore educators to lead and exemplify the use of AI in pedagogies effectively, as well as advance research on the innovative and ethical applications of AI for education. The AI Literacy for Educators programme is a self-directed online courseware that aims to equip pre-service teachers and educators in Singapore with an understanding of the basics of AI, its impact and ethical use in education. The course will be piloted in the NIE pre-service teachers from the PGDE Dec 2023 cohort onwards. The microlearning modules provide an engaging learning experience for learners via interactive and mediarich, bite-sized contents accompanied by quizzes and reflections. This initiative is also a partnership with AI Singapore (AISG) and the rollout of the full suite of services would be available on the AISG website for all Singapore educators after the pilot concludes.

#### **Inaugural LSA Colloquium 2023**

Organised by the Learning Sciences and Assessment (LSA) Academic Group in partnership with the Office of Graduate Studies and Professional Learning (GPL) on 7 September 2023, this interdisciplinary colloquium comprised three keynote talks and six concurrent workshops. With the theme 'Lead, Sustain & Aspire: Transforming Learning & Assessment', topics discussed included artificial intelligence, blended learning, augmented reality, technology-assisted differentiated instruction and assessment, self-regulated learning and neurophysiological affordances for assessment design and feedback.

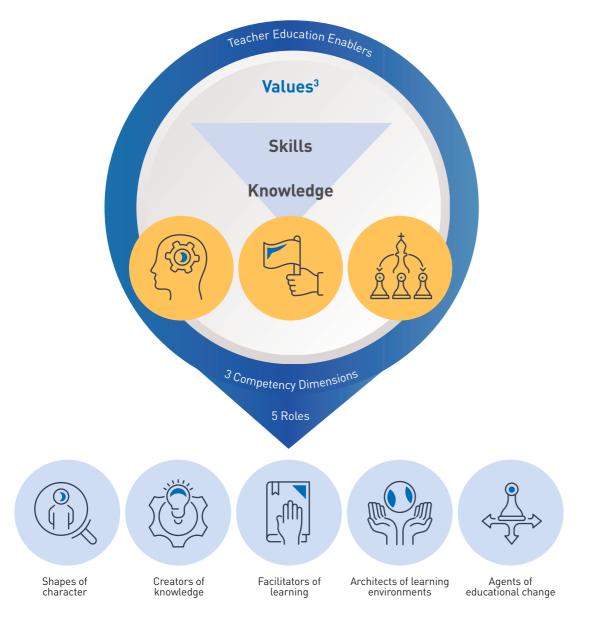
Kwek, D., Hung, D., Koh, T. S., & Tan J. (2017). OER-CRPP Innovations for Pedagogical Change: 5 Lessons. Singapore: National Institute of Education. 17

# Innovating in Programmes & Research

# TE<sup>21</sup>: Empowering Teachers for the Future

TE<sup>21</sup>: Empowering Teachers for the Future with the Enhanced Values<sup>3</sup>, Skills & Knowledge (V<sup>3</sup>SK) Model builds on the NIE Model of Teacher Education for the 21<sup>st</sup> Century ('TE<sup>21</sup>') first published in 2009 and aims to nurture student teachers to become future-ready teachers. The emphasis of TE<sup>21</sup> is to equip educators with the values, skills and knowledge to be able to create new knowledge and value in education, achieving sustainable development for society and being cognisant of the broad ecosystem where their work will impact the lives of the next generation. Most importantly, NIE student teachers are empowered to become self-directed and lifelong learners.

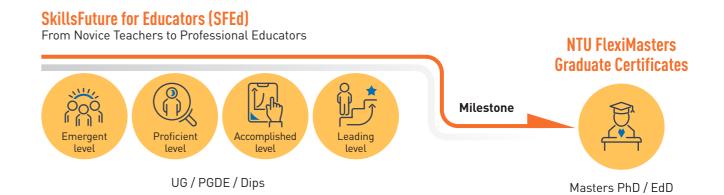
ntu.edu.sg/nie/about-us/programme-offices/office-of-teacher-education/te21



## Teacher Education & Professional Development '4-Life'

NIE views teacher education and professional development as a life-long continuum.





NIE offers a total of 16 FlexiMasters & 18 Graduate Certificates

(as of 30 September 2023).

# NTU-MCE Partnership

To arm educators with the latest knowledge and advance their skill sets in an increasingly digitalised world, NTU Singapore is working with Marshall Cavendish Education (MCE), publisher and leading provider of educational solutions, to develop bite-sized online learning courses designed to build up specific skillsets for the modern educator.

These courses will be offered to K-12 educators (the equivalent of primary and secondary school educators) outside Singapore on a subscription basis through MCEduHub for Professional Development (PD) – MCE's 24/7 learning portal designed for educators to access certified courses, anytime and anywhere.

This collaboration builds on the success of a pilot two-hour online course launched in 2021, when schools had to implement home-based learning in light of the COVID-19 restrictions. Under this collaboration, PaCE will tap on the expertise of the University's faculty (including NIE) to design these courses. MCE will then package the content into courses with interactive elements to make them more engaging for learners.

# Blended Learning Initiative for The Future of Education

Since 2003, NIE has been offering technology-mediated courses in the form of blended courses and technology-enabled lessons. In 2006, NIE implemented 'NIE e-Learning week' where all AGs offered an online lesson during a stipulated week for all courses. To date, blended learning at NIE has evolved to a point whereby some courses (3 AUs) are already having 25% to 40% of online learning.

The **Blended Learning@NIE** policy document was launched in January 2021 and helped enable NIE to achieve 100% courses with blended learning elements by end of 2021.

As part of this policy, NIE established its definition of Blended Learning and the criteria for a course to be considered 'Blended', i.e., 30% to 60% of the course must have online components.



## Space:

Learning is not restricted to places such as classrooms and homes



#### Time:

Learning is not restricted to formal learning hours



#### Pace:

Learning is not restricted to the pace set by the tutors.

Learners have the flexibility of setting a schedule to fit their needs.



#### Path:

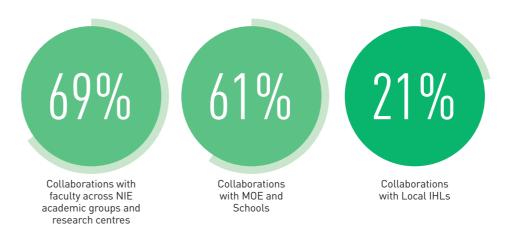
Learning is not restricted to the sequence of learning and content designed by the tutors

# Strengthening Research-Practice-Policy Nexus

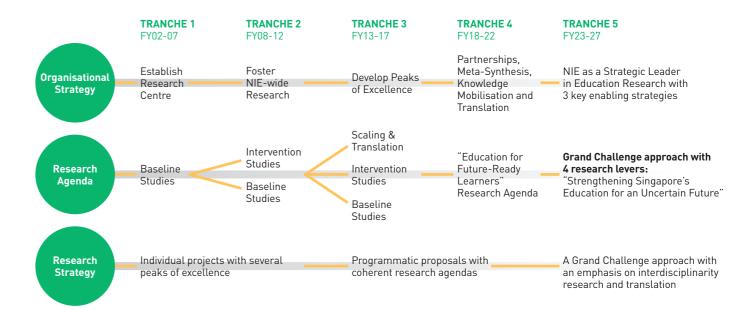
# Education Research Funding Programme (ERFP)

Education research at NIE has expanded over the years from exploratory, baseline to intervention studies. In later tranches of the Education Research Funding Programme (ERFP), scaling and translation work were increasingly highlighted.

The ERFP  $4^{th}$  Tranche ran from FY2018 to FY2022. The ERFP  $4^{th}$  Tranche indicated an encouraging uptick towards research collaborations between NIE and other strategic partners and stakeholders.



In the ERFP 5<sup>th</sup> Tranche implemented from the second quarter of 2023, the focus is on the grand challenge to 'Strengthen Singapore's Education for an Uncertain Future'. As other IHLs start to engage in education research, NIE is also challenged to take on a leadership role within the Singapore research ecosystem for education research. The ERFP 5<sup>th</sup> tranche fully aligns with NIE, NTU and MOE's agendas and strategies to engage in, promote and **bolster interdisciplinary research and multi-stakeholder collaborations.** 



# Major Research Projects (Selected)

NIE's research reputation and impact can be gleaned from the steady rise in research grants attained over the years.

#### 'Climate Transformation Hub (CTH) of Singapore'

Assistant Professor Edward Park from the NIE Humanities and Social Studies Education (HSSE) Academic Group is Lead PI of the project 'Climate Transformation Hub (CTH) of Singapore', which was awarded an MOE AcRF Tier 3 grant of nearly S\$46 million. The project involves collaborators from various NTU schools.

Since 2021, Ast/P Park has won three external competitive grants as PI for projects such as 'Sand mining in Southeast Asia: Monitoring System, the First Budget and Sustainable Harvesting' and 'Impact on environmental pressure on livelihood transformation in the Mekong Delta'.



Ast/P Edward Park



A/P Stuart Springham



**Prof Rajdeep Singh** 

#### 'Embarking on Fusion Science for Clean Energy'

Associate Professor Stuart Victor Springham (Team PI) & Professor Rajdeep Singh Rawat (Co-PI), both of the NIE Natural Sciences and Science Education (NSSE) Academic Group, won a major National Research Foundation (NRF) research grant for the 'Fusion Science for Clean Energy' project, which is led by Temasek Chair Professor Xavier Garbet (SPMS/NTU) as Lead PI and involves research collaborators from various NTU schools.

The total grant awarded to the project amounted to nearly S\$12 million, with S\$3 million going to NIE. The project will be implemented from August 2023 to August 2028.

# 'Project LOVING' ('Learning about Our Behavior is Valuable for Increasing Nurturing relationships and healthy Growth')

Project LOVING is a research project spearheaded by Lead Principal Investigator (PI) Associate Professor Anne Rifkin-Graboi, Deputy Centre Director at SoLEC@NIE SG, and funded by A\*STAR Human Potential – Parental/Early Childhood Grant. The research team includes renowned researchers from organisations such as A\*STAR's Singapore Institute for Clinical Sciences, the National University of Singapore (NUS), Duke-NUS Medical School and NUS' Saw Swee Hock School of Public Health.



A/P Anne Rifkin-Graboi

In March 2021, NIE received a S\$7.5 million gift from the Lien Foundation to establish **Project GeNIE ('Greatly Enhanced Networks in Education')**. Launched on 6 April 2022, the goal of this Project is to support the growth of local scholars and experts in early childhood and inclusive education as well as improving the competencies of educators and leaders to create a more robust and inclusive education system. To achieve the above aims, Project GeNIE has embarked on these initiatives:

- Establishment of the Lien Ying Chow Visiting Professorship and a Lien Foundation
   Chair Professorship to contribute to the educational and scholarly development of
   our programmes and research. Professor Vivienne Riches from the University of
   Sydney was appointed the inaugural Lien Ying Chow Professor in Education in 2023.
- Development of two leadership programmes ('Inclusion Matters' for leaders within the mainstream and special education and social service sectors' and 'Principal Matters+' for senior leaders in the early childhood sector).
- Development of local teaching resources and inclusion of educational experiences to enable educators to learn more about local best practices in inclusive education.
- Establishment of the Lien Foundation Book Prizes for the NIE Master in Education (Special Education) and Diploma in Special Education programmes.



### Academic Journals

The Office of Education Research (ER) collaborated with renowned publishing house, Routledge, to produce the NIE Journals Quarterly – a range of publications featuring articles and special issues published in the suite of three academic journals:

- Asia Pacific Journal of Education (APJE)
- Pedagogies: An International Journal (PED)
- Learning: Research and Practice (LRP)



# Other Key Publications



- SingTeach is an e-magazine for teachers published by the Office of Education Research at NIE Singapore. Bringing together the best of classroom practice and current research in education, SingTeach puts research within the reach of Singapore teachers to inform practice.

  singteach.nie.edu.sg
- ReEd (Research in Education) is a research bulletin aimed at sharing research contributions by NIE Singapore with the global community in everyday language. It reflects the breadth and depth of educational research in NIE. It is also a platform to celebrate the research achievements of NIE colleagues.

  \*\*ntu.edu.sg/nie/research/research-publications/reed-(research-in-education)
- The Local Evidence Syntheses (LES) series documents research from previous years of the Education Research Funding Programme (ERFP). With a focus on local findings and development, each topical synthesis typically draws on findings from research completed in the previous 5 years. Written in a succinct and informative manner, each volume is aimed at informing policy formation, programme design and pedagogical practice in the education realm in Singapore through summarising findings, deriving themes, and suggesting recommendations.

  \*\*ntu.edu.sg/nie/research/research-publications/local-evidence-syntheses\*\*

# Strengthening Research Outcomes and Impact

Five-Year (2018-2023) Average Citations And H-Index Of NIE NTU Singapore In 2023 QS Rankings (Education)

#### Five-Year Average Citations<sup>3</sup> of Top Universities/Schools in 2023 QS Rankings (Education)

QS Ranking	University	School of Education	5-Year Average		
9	Columbia University Teachers College		16.89		
10	University of California, Los Angeles	Graduate School of Education & Information Studies, Department of Education	13.69		
3	Stanford University	Stanford University Graduate School of Education			
2	Harvard University	ard University Graduate School of Education			
4	University of Cambridge	Faculty of Education	12.00		
5	University of Oxford	Department of Education	11.19		
1	University College London	Institute of Education	10.62		
8	University of Hong Kong	Faculty of Education	10.62		
11	Nanyang Technological University, Singapore (NTU)	National Institute of Education	8.97		
6	University of California, Berkeley	School of Education	8.06		
7	University of Toronto	Ontario Institute for Studies in Education	6.56		

#### Five-Year H-index4 of Top Universities/Schools in 2023 QS Rankings (Education)

QS Ranking	University	School of Education	5-Year H-Index	
1	University College London	Institute of Education	69	
9	Columbia University Teachers College		58	
8	University of Hong Kong Faculty of Education		50	
2	Harvard University Graduate School of Education		48	
11	Nanyang Technological University, Singapore (NTU)  National Institute of Education		48	
5	University of Oxford Department of Education		39	
3	Stanford University	Graduate School of Education	38	
4	University of Cambridge Faculty of Education		30	
10	University of California, Los Angeles  Graduate School of Education & Information Studies, Department of Education		29	
7	University of Toronto	Ontario Institute for Studies in Education	29	
6	University of California, Berkeley	School of Education	25	

The five-year average citation is the average number of citing articles for all items in the results set. It is the sum of the Times Cited count divided by the number of results in the set. (Data sources: QS World University Rankings 2023 and Web of Science; correct as of 5 September 2023).

The 5-year h-index is based on a list of publications ranked in descending order by the Times Cited count in the results set. An index of h means that there are h papers that have each been cited at least h times. [Data sources: QS World University Rankings 2023 and Web of Science; correct as of 5 September 2023].

## Global University Rankings

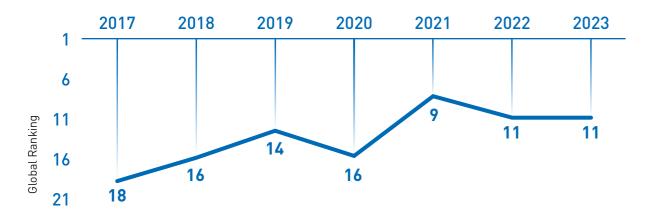
NTU-NIE Singapore climbed 12 places in the 2024 Times Higher Education (THE) World University Rankings, securing the 14<sup>th</sup> position globally with an overall score of 81.6 points, an increase of 11.2 points from the previous year. NTU-NIE rose from the 46<sup>th</sup> spot in 2019 to 14<sup>th</sup> in the 2024 rankings, which was released on 27 September 2023.

Among Asian universities, NTU-NIE moved from 5<sup>th</sup> to 4<sup>th</sup> position for the 'Education' subject, surpassing the Chinese University of Hong Kong and Beijing Normal University.

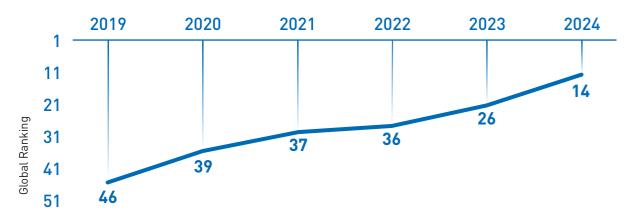
In the Quacquarelli Symonds (QS) World University Rankings By Subject, NTU-NIE has consistently maintained a top-20 QS global ranking in the 'Education' subject since 2017, achieving a high of 9<sup>th</sup> position in 2021. Over the past seven years, NTU-NIE climbed from 18<sup>th</sup> in 2017 to 11<sup>th</sup> in 2023, demonstrating sustained growth and performance in its academic quality and reputation.

Summary of NTU-NIE's Performances in the QS and THE University Global Rankings by Subject (Education) in Recent Years

#### NTU-NIE QS RANKINGS 2017 - 2023



# NTU-NIE THE RANKING 2019 - 2024



(Source: www.timeshighereducation.com/world-university-rankings/by-subject)

# Boosting Impact & Visibility Through Partnerships & Networks

# Global Alliances & Strategic Partnerships

NIE endeavours to develop and deepen 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. Currently, NIE has over 70 active MOUs and agreements with international and local partners.

The linkages with NIE's valued partners create many opportunities for dynamic and fruitful exchanges of intellectual knowledge and collaborative teaching and research activities, which ultimately contributes to raising the quality of teacher education.





# Key International Alliances





In 2022, NIE hosted the International Network of Educational Institutes (INEI) annual conference and meeting from 25 to 27 May, with the theme 'Bridging humanity and emerging technologies for the future of education.' The event featured a keynote speech by Prof Vanessa Evers, NTU Institute of Science and Technology for Humanity (NISTH) and a panel discussion with Prof Jim Watterson, Dean of Melbourne Graduate School of Education.

With the global partnerships in place, NIE student teachers get invaluable experience when they take up the opportunity to be attached to an overseas partner university for a multi-week Teaching Assistantship (TA) stint. During this stint, student teachers will be attached to schools in California, Illinois, Aarhus, Copenhagen, Zurich, Taipei, Waikato, Helsinki, Stockholm, Osaka, Hong Kong or Linköping, among others.

# Major Conferences & Events

NIE continues to optimise collaborative opportunities and facilitate high-level visits from reputable institutions and organisations locally, regionally and internationally. Faculty and staff are encouraged to widen their professional networks to bolster research collaborations and funding opportunities.

# Redesigning Pedagogy International Conference (RPIC)



Minister for Education Mr Chan Chun Sing graced the Redesigning Pedagogy International Conference 2023 as the Guest-of-Honour while NIE Director Prof Christine Goh delivered the opening address.

The RPIC is NIE's flagship education research conference, attended by over 1000 international academics and local practitioners in every edition.

The 2022 conference, themed 'Transforming Education and Strengthening Society,' was held from 30 May to 1 June with Singapore Minister for Education, Mr Chan Chun Sing, as the Guest-of-Honour.

The upcoming edition will take place on the NIE campus from 28 to 30 May 2024. The theme of the 2024 conference, 'Growing future-ready teachers and learners: Collaborative research for educational change', will initiate conversations beyond

the importance of education research, bringing practitioners and researchers into the 'whats', 'whys' and 'hows' of effectively translating research into practice that can help impact the teaching and learning experience.

RPIC 2024 will offer opportunities for fostering multi-stakeholder interactions, disseminating international leading-edge research and sharing best practices across schools and cultures, forging new and innovative directions for educational research and practice, and broadening professional networks throughout the region.



Dr Chua Bee Leng addressing the audience at the WERA-ERAS conference 2023.

# World Education Research Association (WERA) – Education Research Association of Singapore (ERAS) Conference 2023

The ERAS International Conference and WERA Focal Meeting 2023 was co-hosted by ERAS, WERA and the National Institute of Education, Nanyang Technological University, Singapore with MOE Director-General of Education Ms Liew Wei Li as the guest-of-honour.

The 2023 conference highlighted new technologies, techniques and tools in education. As one of the first educational conferences to be held after the pandemic, various educational professionals from around the world, as well as NIE, gathered to share unique challenges, solutions, and the progress they had made since the global pandemic.

## Other Conferences, Seminars and Webinars



CJ Koh Professorship EW Barker Professorship Dr Ruth Wong Professorship in Teacher Education

MENDAKI Education Symposium
Singapore Kindergarten Impact Project (SKIP) Symposium
Lau Teng Chuan Physical Education & Sports Science Symposium

Imagining Educational Futures Webinar Series
Science of Learning in Education Seminar Series
Assessment Colloquium at NIE
NTU NIE Alumni Webinar Series

NIE 'Teachers-as-Thinkers' Series Graduate Student Conference

# Mohammed Bin Rashid Al Maktoum Knowledge Award



NIE Director Prof Christine Goh (centre) and Prof Chang Chew Hung (left) with Mr Low Pit Chen, Consul General, Consulate-General of the Republic of Singapore, Dubai.

NIE was selected as the winner in the Mohammed Bin Rashid Al Maktoum Knowledge Award's government category in 2019. Held under the patronage of Vice President and Prime Minister of the UAE and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum, the award seeks to promote and develop the knowledge economy, in addition to encouraging intellectual and creative achievements by honouring the people and institutions behind them.

The following initiatives were implemented with the MBRKA prize money:

- MSO Innovation Grant launched in 2021 to promote innovation among MSOs.
- International Research Collaboration (IRC) Seed Fund launched in 2022.

# Local Partnerships & Collaborations

NIE has been strengthening synergies within NTU in terms of identity, programmes and pedagogies, research, policies, processes and infrastructural needs. Over the past four years, NIE has successfully leveraged university-wide research initiatives and support to grow its research in areas such as humanities and social sciences, AI and science of learning as well as for interdisciplinary projects. NIE faculty lend their expertise to programmes, courses, centres and initiatives to enhance teaching and learning across the university.

NIE has four chair professors endowed by the university – they are Prof Christine Goh, President's Chair Professor in Education (Linguistics & Language Education); Prof David Hung, President's Chair Professor in Learning Sciences; Prof John Wang, E W Barker Chair Professor in Physical Education and Sports Science; and Prof Kenneth Poon, Lien Foundation Chair Professor of Education (Psychology and Human Development).

NIE faculty and staff are also represented on the Faculty Senate and in university-level boards, committees and special interest groups including those under NTU 2025.

NIE's continuing education and professional development courses are listed on PaCE® NTU. NIE undergraduates take advantage of residential learning and the vibrant student life in the university Halls of Residences. NIE has also benefited from the introduction of enterprise processes, systems and mechanisms to enhance productivity while maintaining cost efficiency.

# Major Highlights

#### University Security Operations Centre (SOC) at NIE

Aimed at harnessed the collective university manpower and knowledge to effectively respond to major cybersecurity incidents, the University SOC was established in collaboration with NTU CITS in June 2020. Situated at NIE and leveraging NIE expertise, the University SOC has enlarged the scope of NIE's current security operations centre to respond to university-wide cybersecurity incidents, as well as synergising and optimising university-wide cybersecurity resources.

#### **NTU-NIE Alumni Association**

The NTU-NIE Alumni Association (AA) was formally established on 9 March 2020 under the umbrella of the NTU Alumni Association. Recognising that alumni can play key roles in boosting NIE's impact and visibility, the Institute leverages the networks and activities of the NTU-NIE AA and strives to strengthen relations with alumni towards a lifelong NIE affiliation.

#### Collaboration with A\*STAR and NTU School of Computer Science and Engineering

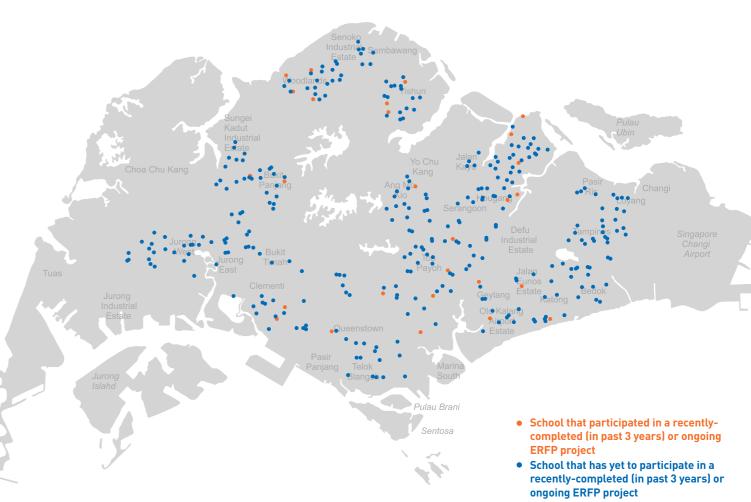
NIE and the School of Computer Science and Engineering are collaborating with the Agency for Science, Technology and Research (A\*STAR) on joint research projects in education that aim to translate research into pedagogy design and intelligent tools for the classroom of the future. The collaboration brings together researchers and academics from NTU and A\*STAR to work on education research through projects focusing on science of learning in education, AI, machine learning and human-artificial cognition, with the aim to help students learn and educators teach more effectively.



# Impacting Pedagogies and Practice in Singapore Schools

#### **Networks with MOE Schools and Educators**

NIE continues to bolster collaboration and networking institute-wide and with MOE, MOE academies and Singapore schools to enhance the links between programmes, pedagogy, research and policy





# Developing People & Institutional Capacity

# Globally-Recognised Faculty

NIE continues to recruit, develop and recognise outstanding scholars and academics who are (or are showing clear promise to be) leaders in their fields, particularly in but not limited to areas such as early childhood education, future learning and emergent pedagogies, learning sciences, curriculum and policy studies, arts and languages, visual and performing arts, social sciences, mathematics, pure sciences (physics, chemistry and biology), sports and physical sciences, and multidisciplinary research.

## **NIE Full Professors**

(As of October 2023, listed alphabetically according to Academic Group)



**PROF GOH YENG SENG** Professor of Linguistics and Language Education

**PROF CHRISTINE GOH** President's Chair Professor in Education (Linguistics and (Applied Linguistics and Language Education)



**PROF LOW EE LING** Professor of Education Teacher Education)



**PROFICY LEE** Professor of English Language & Literature



**PROF CHANG CHEW** HUNG Professor of Geography Education



**PROF HUNG WEI** LOONG, DAVID President's Chair Professor in Learning Sciences



**PROF BERINDERJEET KAUR** 



Professor of Mathematics Education



**CHUAN** Professor of Natural Sciences & Science Education



PROF RAJDEEP SINGH Professor of Physics



**PROF XU SHUYAN** Professor of Plasma Physics Professor of Paediatric



**PROF MICHAEL CHIA** 



KENG, JOHN E W Barker Chair Professor in Physical Education and Sports Science



**PROF ANG PEI-HUI,** REBECCA Professor of Psychology and Child & Human Development



**PROF LIU WOON CHIA** Professor of Psychology and Child & Human Development



**PROF TAN OON SENG** Professor of Education



PROF POON KIN LOONG, KENNETH Professor of Psychology and Child & Human Development

# NIE Faculty Ranked Among World's Top 2% Scientists in 2023

NIE faculty members have been named among the top 2% of academics in the following subject fields according to Elsevier and the Stanford University's ranking of top scientists in the world:

- Education
- Medicinal & Biomolecular Chemistry
- Languages & Linguistics
- Geological & Geomatics Engineering
- Sports Sciences
- Developmental & Child Psychology
- Applied Physics
- General Physics

	Faculty	Field of Expertise	 Faculty	Field of Expertise		Faculty	Field of Expertise
	Professor Ang Pei-Hui, Rebecca	Develop- mental & Child Psychology	Professor Kwek Leong Chuan	General Physics		Dr Tan Lik Tong	Medicinal & Biomo- lecular Chemistry
	Associate Professor Chow Jia Yi	Sport Sciences	Associate Professor Gregory Arief D Liem	Education		Associate Professor Vahid Aryadoust	Languages & Linguistics
	Professor Christine Goh	Languages & Linguistics	Associate Professor Victor Lim Fei	Languages & Linguistics	1	Associate Professor Wang Qiyun	Education
	Assistant Professor Heng Tang Tang	Education	Assistant Professor Edward Park	Geological & Geomatics Engineering		Dr Wong Lung Hsiang	Education
0	Professor Icy Lee	Languages & Linguistics	Professor Rajdeep Singh Rawat	Applied Physics		Assistant Professor Yang Peidong	Education

(Date source: www.elsevier.com/icsr/icsrlab)

# NTU Mentoring for Excellence Programme for Assistant Professors

NIE has been working closely with the Office of Associate Provost (Faculty Affairs) on this programme. Resources made available through the NTU Mentoring for Excellence programme augment those in the NIE Faculty Development Portal. AG-assigned mentors for Assistant Professors receive appointment letters from NTU Provost.

# Specific Mentoring at Academic Group / Research Centre Level

Every new faculty member is assigned a mentor, ensuring that all new faculty members have access to a minimum level of mentorship. The mentor supports the mentee by:

- Offering an experienced and informed perspective on career decisions and scholarly objectives
- Modelling scholarly ethics and professionalism
- Providing emotional support, identifying sources of help, and making connections to these sources

# Faculty Engagement Sessions

Regular engagement sessions are held with the following targeted groups of faculty members to seek feedback and provide macro-level career stage-relevant advice.

- New Assistant Professors
- Assistant Professors in their first contract
- Assistant Professors in subsequent contracts
- New Lecturers
- Lecturers in their first contract
- Lecturers in subsequent contracts

Engagement sessions for Associate Professors and Senior Lecturers first launched in the January 2022 Semester.





# NIE Leadership Excellence & Advancement Programme (LEAP)

To bolster succession planning, build institutional leadership capabilities and develop a pipeline of potential leaders, the NIE Leadership Excellence and Advancement Programme (LEAP) was officially launched in August 2022.

Aligned to NIE's '4-Life' framework with a principle of learning ownership and multiple modes of learning, the programme considers the participants' career trajectory and NIE's deployment of leadership talents. The target audience spans across potential leaders to experienced leaders.

40 NIE young leaders (heads and deputy heads of academic groups, programme offices and departments) received their certificates following a year-long 'Beginning Leaders' programme at the NIE Annual Leadership Retreat in August 2023.

The Induction Programme for the second batch of NIE LEAP Beginning Leaders took place on 23 and 24 November 2023.





# Towards 2030

# Leading the Future of Education by Harnessing Innovations in Pedagogies, Assessment and Talent Development

As NIE moves into the next phase of its strategic growth as a future-ready institute, talent recruitment and development to serve NIE's strategic priorities and evolving needs will continue to be of key significance.

NIE will continue to step up strategic recruitment and professional development of faculty and staff in alignment with evolving needs, particularly for the LIFE@NIE SG® SGAs. This includes reinforcing processes to identify and attract talent to meet the Institute's need for strong expertise in key strategic and fast emerging areas as well as for succession planning.

NIE values its faculty and staff, and it is important to assist able and willing employees to grow and fulfil their professional aspirations. It has developed and is implementing structured mentoring schemes for faculty and staff, putting in place processes and structures for professional development and growth.

Moving forward, plans are underway to develop and implement a holistic faculty development framework. The overall aim is to enable NIE to be an employer of choice for both academic and administrative talent with a passion for education.

#### **Knowledge Creation and Innovations in Assessment & Evaluation**

There is a growing need worldwide and in Singapore for more innovative ways to assess learning and teaching with the widespread use of blended learning and advent of new technologies such as generative Al. NIE is well placed to leverage these opportunities to lead knowledge creation and provide thought leadership in the area of innovative assessment through work spearheaded by the LIFE@NIE SG® Assessment & Evaluation Strategic Growth Area and the Centre for Assessment & Evaluation.

#### Technology Roadmap for the Future Of Education (FY2023 - FY2026)

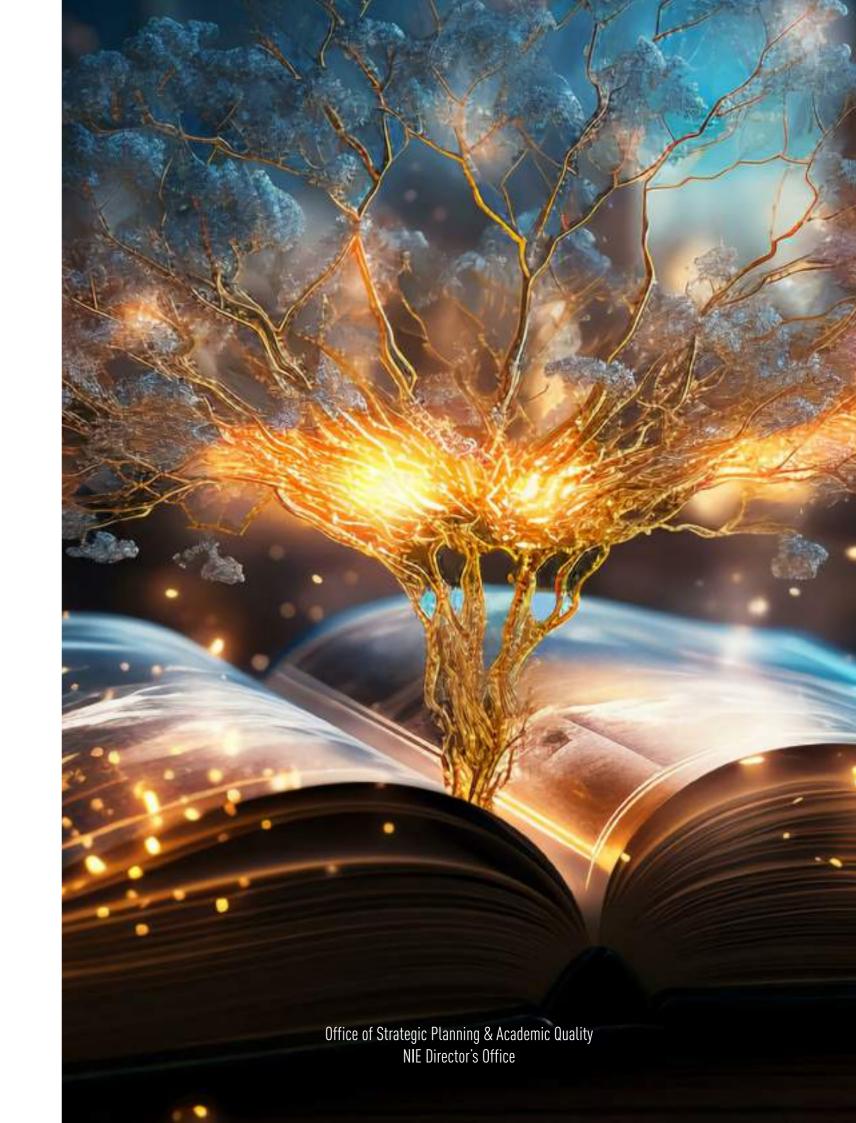
A multi-year Technology Roadmap for the Future of Education (TRFE) has been developed that outlines the IT strategic direction to be taken to achieve NIE's mission of leading the future of education. It will be implemented from FY 2023 to FY 2026 in alignment with the university and the institute's strategic plans and key initiatives.

#### An Enabled & Immersive Campus

Two campus-wide infrastructure renewal projects have begun development and will be implemented in the next few years: i) for teaching and learning spaces and ii) the overall NIE campus. These twin projects will enable NIE to better harness innovative pedagogies and practices as well as emerging technologies to lead the future of education.

#### Development of 'NIE 2030'

NIE will embark on the development of its next institute-level strategic plan, tentatively titled 'NIE 2030', over the next three years. The plan will be aligned with NTU's strategic priorities and unveiled at the NIE Director's Address 2026.



Office of Strategic Planning & Academic Quality

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