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ROADMAP
2013-2017
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2013-2017

An Institute of Distinction :
Reaching New Frontiers of Excellence

Contents

Chairman's Foreword	02
Director's Message	04
Vision, Mission and Core Values	06
About NIE	07
The Journey So Far – A Stocktake of the 1 st 3:3:3 Roadmap (2007 - 2012)	08
Refreshing the Roadmap – Our Journey in Charting the Next Phase	12
Chronology of a Strategic Planning Exercise	14
3:3:3 Roadmap (2013 - 2017) – Strategies for Global Success	16
Key Strategic Thrusts	
Teaching	20
Research	22
Talent	23
New Strategic Development Initiatives	24
Destination 2017	26
Acronyms	28
Acknowledgements	29
Envisioning the Future	30



The futuristic cover design contextualises the nature of NIE's strategic journey in the next five years, heading towards uncharted territory in an unpredictable future. The roadmap is the guiding force, shining its light on the path ahead, at the same time representing continuity and stability in the transition from the first 3:3:3 Roadmap conceived in 2007 to the new 3:3:3 Roadmap refreshed in 2013; with 3:3:3 representing the 3 pillars that articulate our aspirations; the 3 strategic core areas that will propel us forward in the next phase of growth and development; and the 3 drivers of excellence that will lead us towards success. The vibrant colours reflect the dynamism, enthusiasm and commitment of the NIE community in translating strategy into action as well as the hope and promise of a better future.

Chairman's Foreword

It has often been said that the quality of teachers determines the quality of education. In this regard, the National Institute of Education (NIE) plays a vital role in upholding the quality of the Singapore education system.

Technological advancements have redefined how we teach and how we learn. Higher expectations from parents have placed greater demands on teachers. Rising aspirations of students have resulted in greater demand for limited university places. Widening income inequality and the need to ensure social mobility have also posed new challenges for the education system. All these are current realities that need to be addressed now. At the same time, we need to continue to keep a watchful eye on the future as we consider how we can better prepare our children today for tomorrow's challenges.

NIE needs to re-tool and re-calibrate its programmes regularly to ensure that it not only keeps up with, but stays ahead of the challenges. Over the years, NIE has transformed itself and has implemented many innovative pedagogical approaches such

as the e-Portfolio, enhanced practicum, and collaborative classrooms. But the challenge to innovate continually so as to keep up the high quality of teacher training still remains.

The close partnership and alignment among the Schools, NIE and the Ministry of Education (MOE) is a model that is unique to Singapore and something that we can be proud of. The strong theory-practice linkage and research-teaching nexus that we see today have allowed us to improve teaching practice in the Schools as well as inform policy at the Ministry. We need to continue to strengthen and leverage on these linkages.

NIE's Strategic Plan for 2013 to 2017 has set out the broad directions and key initiatives for the next five years. But it is just a guide, not a blueprint. In a fast-changing environment, we need to be nimble and be prepared to make adjustments where necessary. The Strategic Plan is also not a finished product. The outline may have been drawn, but we need to add the colours and the details. I look forward to everyone in NIE contributing actively in making this Strategic Plan a living and breathing document.

Ms Chan Lai Fung
Chairman, NIE Council and
Permanent Secretary, Ministry of Education



Director's Message

I am pleased to share with you the National Institute of Education's Strategic Plan for 2013 to 2017.

Not long ago, NIE's senior management embarked on an exercise to envision NIE's future story – what will be the milestones to be achieved by 2017, and how will we get there. As the sole teacher education institution in Singapore, we are faced with the great responsibility of nurturing teachers who are highly qualified to raise a new generation of 21st century learners. Thus, in identifying our goals we have considered how NIE should strengthen its role within the Singapore education system as well as make an impact in the international education fraternity.

NIE's value proposition is built on a simple but powerful premise – that our teacher education programmes will continue to emphasise strong theory-practice linkages that nurture quality teachers who are future-ready despite constantly evolving education outcomes. Our aim is to produce teachers with a global perspective and who are responsive to learners' needs. This is achieved by giving them a strong grounding in theory, equipping them with competencies that are honed by practice, and most importantly, underpinned by strong values and ethos. We recognise that to successfully accomplish this in our university-based educational setting, NIE will need to establish deeper partnerships with the schools to enable our student teachers to have meaningful experiences and

develop reflective practices to make sense of their university and school classroom experiences.

This steadfast commitment to ensure the quality of our teacher education programmes has borne fruit. In the last five years, two major studies, first by McKinsey and lately by Pearson, have placed Singapore in the top five of the world's best performing education systems. A key success factor cited in both studies is the quality of teachers. Our initial teacher preparation programmes gives beginning teachers the strong grounding needed at the start of their teaching careers. NIE has made some key improvements particularly in the theory-practice linkage which have made fellow educators around the world take notice, and we will continue to maintain our core strength in initial teacher training. At the same time, our graduate programmes which cater to the diverse needs of serving teachers have also begun to attract excellent reviews from education experts. We have already put in place strong fundamentals in our higher degree and educational leadership programmes, as well as the short-term professional development programmes. In the next stage of NIE's journey, it is likely that a stronger research-teaching nexus will evolve, thus giving impetus to the potential development of a graduate school.

The pursuit of excellence in the areas of teaching and research must be accompanied by parallel growth in organisational

development. By 2017, NIE's goal is to be transformed into a knowledge-driven educational eco-system, powered by knowledge professionals performing in a highly challenging and technologically advanced environment. Every member of the NIE community will be able to meaningfully contribute to the collective intellectual capital which in turn creates new knowledge that will aim to impact and influence the global education fraternity, advancing NIE's stature as a global education thought leader.

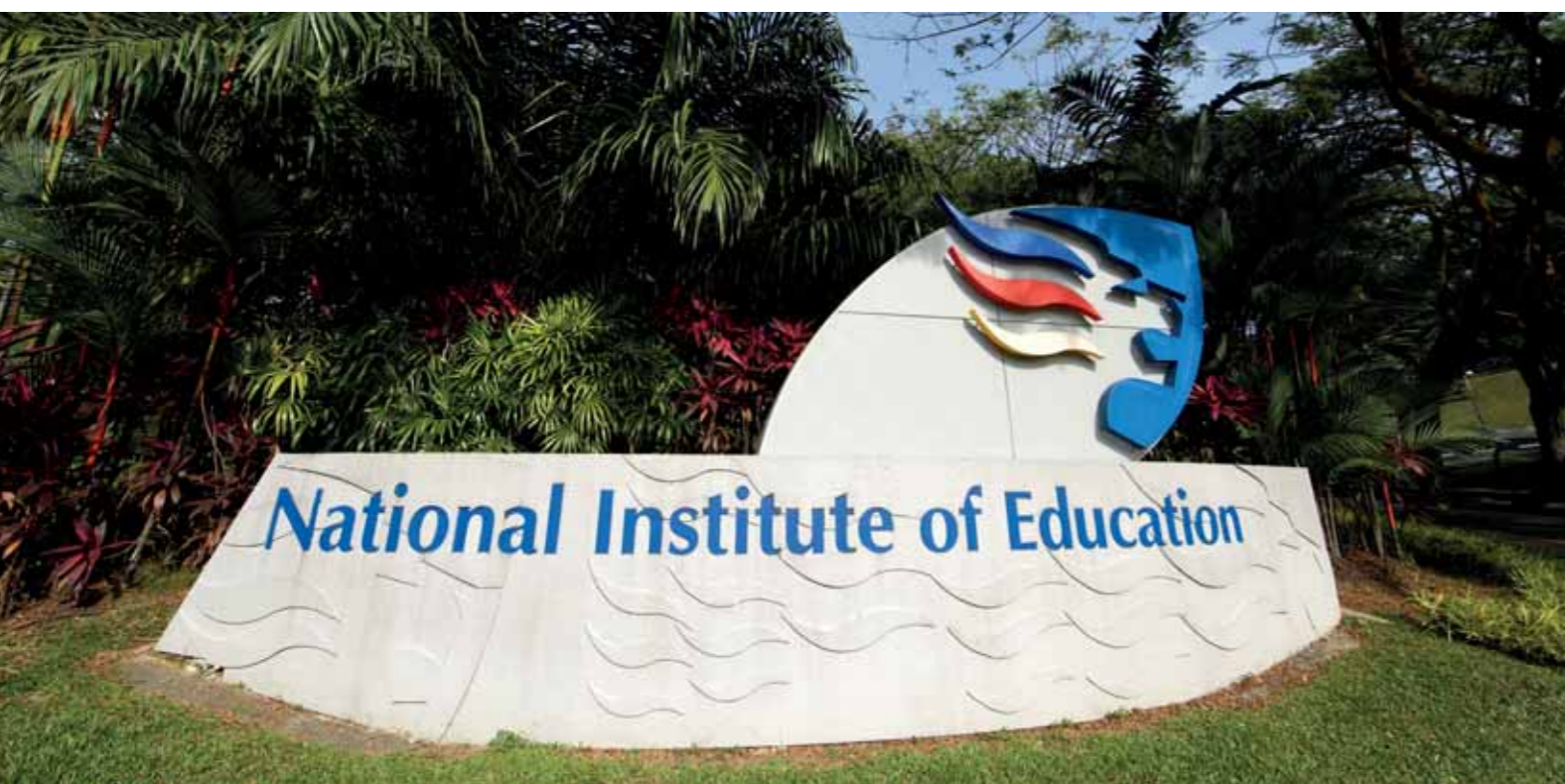
At the core is the enduring vision of an institute of distinction, which will drive our journey for the next five years. This vision is anchored by our mission of excelling in teaching and research, and guided by the new strategic roadmap – the 3:3:3 Roadmap (2013 – 2017), which will spell out what we intend to do to get to Destination 2017. The 3 Pillars - partnership, knowledge capital and impact & influence will support and uphold all our initiatives and endeavours in the 3 Strategic Focal Areas of teaching, research and talent. The 3 Drivers of Excellence – responsiveness, relevance and rigour will define our actions and outcomes.

The education landscape and operating environment is anticipated to be a very challenging one. There will be risks and opportunities alike. We will most certainly face completely new scenarios. For one, the healthy growth rates in pre-service student intakes will fairly quickly plateau, bringing with it a significant impact on NIE's existing operating model. It is inevitable that we will have to respond decisively with new and innovative approaches and adapt quickly to new paradigms.

As we stand at the crossroads, we have much to be thankful for, even as the future beckons. Our accomplishments under the first 3:3:3 Roadmap 2007 – 2012 would not have been possible without the extraordinary contributions of each and every staff of NIE. I would also like to put on record my gratitude for the wisdom and support from the previous Chairperson of the NIE Council, Mrs Tan Ching Yee, as well as the members of the NIE Council who served from 2007 to 2012. In charting the new course ahead, I am thankful for all the efforts put in by the Strategic Planning Department, the Focus Groups, the Task Forces, Appointment Holders, and all staff who contributed their input into the new Five-year Strategic Plan. Last but not least, my appreciation for the guidance, encouragement and commitment of the NIE Council.

The next lap towards Destination 2017 represents a future full of promise. I am confident that NIE will grow from strength to strength, reaching ever higher peaks of excellence.

Professor Lee Sing Kong
Director
National Institute of Education Singapore



Vision

To be an Institute of Distinction

Mission

To Excel in Teacher Education and Educational Research

Core Values

Giving our Best Professionally

Being People-centred and Collegial

Upholding Integrity

Appreciating Diversity of Backgrounds and Strengths

Embracing Change



Established in 1950, the National Institute of Education (NIE) has for more than 60 years been an integral part of the Singapore education system, preparing beginning teachers for careers in the education service and providing continuing education pathways for serving teachers.

As an autonomous institute of the Nanyang Technological University, NIE has been at the forefront of raising teacher quality through our initial teacher preparation programmes, master's and doctorate degrees as well as professional development and education leadership programmes.

NIE's close partnership and alignment with the Education Ministry and Schools is one of the unique features that places Singapore in the world's top 5 best performing education systems. Our teacher education model is based on the

trivale of Values, Skills and Knowledge (V³SK) which puts the learner at the heart of our teacher education goals and nurtures the child as a whole. A research philosophy based on impacting school practices and informing policy formulation has generated a vibrant research culture that has placed us in the top 11 in Bibliometric Indicators of Publications in education-related research and in the top 20 QS World University Rankings in Education.

As a founding member of the International Alliance of Leading Education Institutes and through partnerships with over 60 international organisations and educational institutions, NIE has through its thought leadership contributed to and advanced the global understanding of education issues and challenges in the 21st century.

The Journey So Far – A Stocktake of the 1st 3:3:3 Roadmap (2007 – 2012)

Since its original inception as a Teachers' Training College in 1950 to the establishment of the National Institute of Education on 1 July 1991 as an autonomous institute within Nanyang Technological University (NTU), NIE has been a key node of the Singapore education system through its high quality programmes in initial teacher preparation (ITP), teacher professional development (TPD) and higher degree programmes.

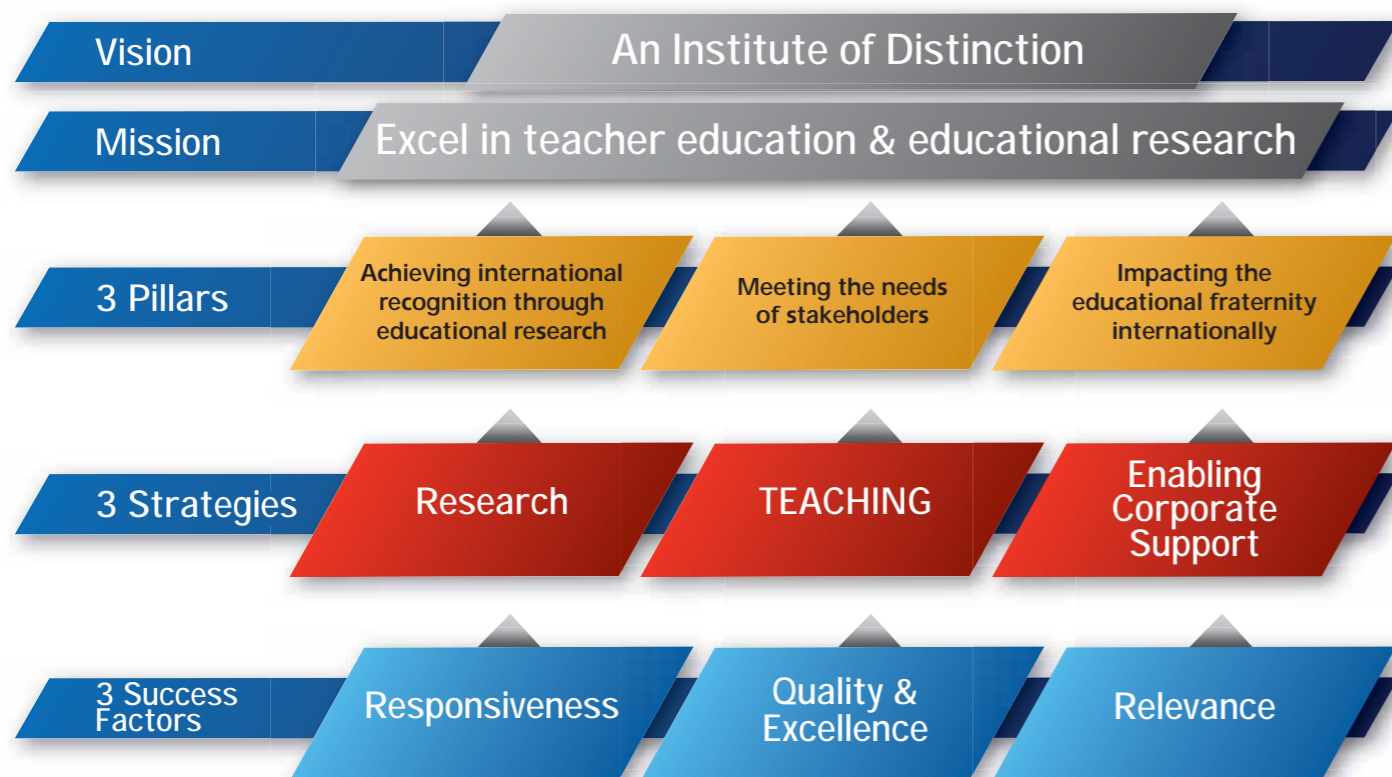
In today's globalized, knowledge and technology-driven economy, the needs of the 21st century learner have also evolved. The Strategic Plan for 2007 – 2012 was prepared as part of an on-going effort to maintain NIE's relevance,

responsiveness and unrivalled standards of excellence within Singapore's education system.

The 3:3:3 Roadmap, conceived to guide NIE's strategic growth and development from 2007 to 2012 comprised three overarching pillars which defined the broad institutional aspirations and obligations to stakeholders. These were driven by three broad strategies, so named after the focal areas in which initiatives and action plans were launched. Last but not least were the three fundamental enablers: responsiveness, relevance and quality and excellence, which would lead us towards success in the future.



3:3:3 Roadmap (2007 – 2012)



Key Teaching Highlights

NIE's 'Teacher Education Model for the 21st Century' or TE21 as it has since been successfully branded, was the outcome of a major transformative initiative to review and enhance our teacher education programmes as a timely response to the global challenges and changing educational needs. TE21 produced some highly influential and impactful outcomes which have come to define the unique identity and success of the NIE teacher education model. Key among these are the Values³-Skills-Knowledge (V³SK) model, the Graduand Teacher Competencies (GTCs), the Graduate Commitments, Capacities and Competencies (GC3) framework, the e-Portfolio, and the enhanced practicum.

The V³SK was a refreshing of the core philosophy underpinning NIE's teacher education model. While the Skills and Knowledge component was updated, it was the Values dimension that made NIE's model unique in the education arena. It was expanded three-fold to encompass three value paradigms – Learner-centred, Teacher Identity and Service to the Profession. **Learner-centred values** put the learner at the centre of teachers' work, requiring awareness of learner development and diversity, believing that all children can learn, caring for the learner, striving for scholarship in content teaching, knowing how people learn best, and learning to design the best learning environment possible. **Teacher Identity values** refer to having high standards and a strong drive to learn in view of the rapid changes in the education milieu, and being responsive to students' needs. The **values of service to the profession and community** focus on teachers' commitment to their profession through active collaborations with the fraternity and striving to become better practitioners to benefit the community.

The GTC framework articulated a set of professional standards, benchmarks and goals for NIE graduands. It outlines the kind of 21st century skills expected of beginning teachers using three performance dimensions – professional practice, leadership management, and management and

personal effectiveness. Likewise for experienced teachers undergoing professional development programmes at NIE, a Graduate Commitments, Capacities and Competencies Framework was drawn up to articulate the expected outcomes of candidates who have completed NIE's graduate programmes.

The introduction of student teachers' e-Portfolio reflected a new direction and approach to assessment and validation of their learning journey. It is a developmental tool to help student teachers aggregate and integrate their learning by charting their learning journey, including the development of their personal teaching philosophy over time. The e-Portfolio provided student teachers with a structure within which they could document what they knew and were able to do as teachers. It also afforded on-going opportunities for them to reflect and converse about their growing understanding of what constitutes good teaching. The highly positive feedback from both the student teachers and the schools has given NIE the confidence to scale up this initiative from a pilot into the mainstream.

The practicum is an important component of the ITP programmes as it enables student teachers to put in context the theories learned and to apply the skills of teaching. The main structural changes to the new Enhanced Practicum are introduction of Focused Conversations, and the structuring of pre- and post-practicum conferences with supervisors. These now provide a structured platform for sharing. The new Enhanced Practicum for the Postgraduate Diploma in Education (PGDE) Junior College (JC) cohort was successfully piloted in February 2011 and has been fully rolled out to all cohorts together with the e-Portfolio.

Key Research Highlights

While NIE had conducted small scale education and content research prior to 1999, there was no regular or dedicated funding for research. It was only in 2003 when MOE made a strategic investment of S\$48m, representing the first funding tranche from FY2003 – 2007. This was followed by a second tranche of S\$96.6m from FY2008 – 2012.

Under the Research Development and Innovation (RD&I) framework, NIE's Education Research Funding Programme has evolved from being subject domain focused (e.g. Science and Mathematics Education, Language Education, ICT in Education in the first tranche) to cover broader programmatic areas of strategic importance in the second tranche.

Research in NIE has grown substantially since 2003 and especially so under the 3:3:3 Roadmap (2007 – 2012). The quantum leap in research activities and output is also a result of a deliberate research development strategy. In the first funding tranche, research centres such as Centre for Research in Pedagogy and Practice and Learning Sciences Laboratory were set up as research wings to spearhead nascent research activities. In the second funding tranche, the Office of Education Research (OER) was established to foster NIE-wide research participation. Using research performance over the last five years as a yardstick, this strategy and its implementation have proven to be successful in achieving its objectives.

NIE's research output is continuously broadening its reach in the international academic community as well as attaining a higher profile in top international journals. More aptly, the contribution of education research in building NIE's

reputational capital as a leader in teacher education is reflected in how research findings are improving teaching and learning in classrooms and influencing school and classroom practices, as well as at the policy level.

Key Enabling Corporate Support Highlights

There were several significant initiatives which contributed to organizational excellence in NIE. In particular, attention and resources were focused in building a world-class academic talent pool. The implementation of differentiated academic tracks helped strengthen the faculty profile while giving the necessary recognition and impetus to academic staff to pursue their area of interest and strengths.

The collaborative classrooms project was a fine example of the joint effort by the academic and administration divisions to transform the teaching and learning environment. This effort at pedagogical innovation garnered good feedback from both the faculty and the students. All the old tutorial rooms have been refurbished to the new collaborative classroom design, which have since become something of a showcase, drawing rave reviews from overseas visitors.

Two key initiatives – the Enterprise Architecture (EA) and the Corporate Services Review (CSR) were launched with the intent of streamlining and re-engineering the business processes in order to enhance organizational excellence. While the EA project is still on-going, one of the more evident outcomes of the CSR was the creation of the Office of Academic Administration and Services (OAAS), which will manage the entire Student Lifecycle activities from admission to graduation.

A summary of the key achievements under each strategy is as follows:

Teaching	Research	Enabling Corporate Support
Programme Review and Enhancement / New TE21 Model Values3-Skills-Knowledge Model Graduatand Teacher Competencies Enhanced Practicum e-Portfolio Student Teachers' Learning Journey & Mindmap 21st Century Competencies Mentorship Framework Collaborative Classrooms PGDE JC track Part-time Bachelor in Education Programme Master of Teaching Joint MA (Leadership and Educational Change) with Teachers College Enhanced Professional Development Continuum Model EdD Dual Degree with University of London NIE EdD New Leadership in Education (LEP) Programme New LEP International PGDE International 60+ MOUs Established Office of Academic Quality Management LIBRIS 21	OER established in 2008 1st RD&I Strategic Plan Buy-out Scheme Key communication platforms with MOE established Visits by top researchers Senior Research Fellowship Programme Key international conferences Key posts in world education bodies Best Prizes / Awards Exponential growth in NIE's research output (No. of Publications in 2011 = Web Of Knowledge @ 199 and Scopus @ 159) 5-year average citation index of 3.43 (Web Of Knowledge) and 3.82 (Scopus) Ranked 20 in QS World University Rankings in Education Ranked 11 in Bibliometric Indicators of Publications in Education-Related Research	Differentiated tracks for academic staff Appraisal aligned with NTU's Appraisal, Promotion and Tenure Revised Overseas Graduate Scholarships MOE-NIE Secondment Framework New research staff scheme Succession Planning Framework New facilities – Teachers Language Development Centre, Primary English Language Classroom, Collaborative Classrooms Unified staff - student portal IT infrastructure upgrade Enterprise Architecture Corporate Services Review



Refreshing the Roadmap – Our Journey in Charting the Next Phase

Engaging in a strategic planning exercise requires an enormous amount of time and effort but it is a process borne out of necessity. The crafting of a new five-year roadmap to be launched in 2013 began as early as 2010.

Environmental Scanning and SWOT Analysis

The usual essential pre-planning work such as environmental scanning and SWOT analysis were conducted. The environmental scanning included both the internal and external perspectives of various scenarios that would have implications on the future of NIE.

External perspective :

Stakeholders

Scenarios	Questions, Challenges, Implications
Aligning with MOE New initiatives by MOE – 21st Century Competencies (21CC), PE, Arts and Music, Assessment literacies	<ul style="list-style-type: none"> • Are we reactive or proactive? • How do we contribute our professional input to changes in the education policy & curriculum?
MOE's target of 33,000-strong teaching force by 2015 appeared to be on track. The shift from the peak growth years to replacement mode would mean a decline in capitation grant.	<ul style="list-style-type: none"> • What would be the impact on NIE's budget? • Would we have excess capacity (staff headcounts)? • Can we develop new programmes targeted at non-traditional markets?
Supporting NTU NTU is pursuing a strategy that is aimed at becoming a top global university	<ul style="list-style-type: none"> • How could NIE actively contribute to building reputational capital? • How does NTU value NIE's contribution to its standing as a research-intensive university?
Engaging Students Needs and demands of student teachers	<ul style="list-style-type: none"> • How will NIE respond?
Convergence of educational goals across the world, with emphasis on 21CC, grounded in maths, science & literacy	<ul style="list-style-type: none"> • What would be the impact on our programmes? • What would be the next paradigm in programme development?

School Environment

Scenarios	Questions, Challenges, Implications
Learning environments in schools are being revamped to improve teaching & learning	<ul style="list-style-type: none"> • Are faculty up-to-date on what's happening in schools? • Are we using ICT quickly enough to revolutionize education?
School system becoming more diversified - emphasis on specialisations (Music, Art, PE, English, and Mother Tongue). MOE may also extend beyond current mainstream education to Special Education and Early Childhood	<ul style="list-style-type: none"> • How well is NIE geared to responding to changes and opportunities beyond the mainstream education needs?

Professional Development

Scenarios	Questions, Challenges, Implications
There is a market of 35,000 serving teachers requiring professional development	<ul style="list-style-type: none"> • How can we tap this market more effectively? • Where do we want to focus our resources? • What will be the new relationship dynamics between NIE, Academy of Singapore Teachers and MOE academies?

Global Market

Scenarios	Questions, Challenges, Implications
Education as an international business	<ul style="list-style-type: none"> • Where does NIE stand? What is our strategy?
Opportunity for NIE to be recognised as a global education leader and knowledge trust	<ul style="list-style-type: none"> • How do we get there? • How can we improve our reputational capital?
Scarcity of academic talent in teacher education field	<ul style="list-style-type: none"> • Do we have a clear strategy on which areas and who to target, and how to attract and retain?

The World Economy

Scenarios	Questions, Challenges, Implications
The macroeconomic fundamentals (growth, unemployment and inflation) are increasingly uncertain	<ul style="list-style-type: none"> • Are our faculty prepared for this climate of uncertainty? • How can support staff move up the value chain as knowledge workers?

Critical Talent

Scenarios	Questions, Challenges, Implications
Staff profile of NIE : 46% academics 37% Management and Corporate Support Officers (MCSO) 17% research / research admin 44% of academic staff are below 46 years	<ul style="list-style-type: none"> • Do we have a clear talent strategy given the demographic profile and our priority areas? • Do we have sufficient capacity in terms of strategic talent and skills set to support NIE's academic / research agenda for the 21st century? • Does the skills & competency profile of MCSOs need to change?
Academic staffing – manpower planning currently based on distribution of student Full Time Equivalents (FTE), which has been on a declining trend	<ul style="list-style-type: none"> • Is it timely to move towards a new resource planning model which is driven by strategy and workload, aligns to available budget, and balances teaching and research needs?
Target of 10% full professors looks a long way off from being achieved	<ul style="list-style-type: none"> • Is 10% full profs even a financially sustainable target?
Career pathways for academic and non-academic staff	<ul style="list-style-type: none"> • What is the 'right mix' of career tracks, both vertical and lateral? • Does our system give enough room for progress and development to retain critical talent?

Financial

Scenarios	Questions, Challenges, Implications
The decline in pre-service FTEs is unlikely to be reversed to the previous peaks. Can higher degrees and in-service programmes fill the gap?	<ul style="list-style-type: none"> • What are the key strategies that need to be developed to grow the TPD market?

Chronology of a Strategic Planning Exercise

Senior Management Retreat

Following completion of the pre-planning activities, a senior management retreat was held in June 2011 to chart the way forward. There was consensus that the existing framework for the strategic roadmap was still valid, but needed to be refined and refreshed to strengthen its relevance to the current and emerging landscape.

Envisioning Exercise

Senior Management went through an envisioning exercise where they each articulated their vision for NIE in 2017. Their input was crafted into an envisioning statement which comprised of four key thematic threads:

- Future-ready Teachers
- Advancing 21st Century Learning through Research-Practice Nexus
- Leading Graduate School
- Excellence in the Knowledge Age

The envisioning statement provided a 'broad strokes' rendition of Destination 2017, which eventually served as the backdrop and overarching framework for the next rounds of discussions.

Focus Groups Discussions

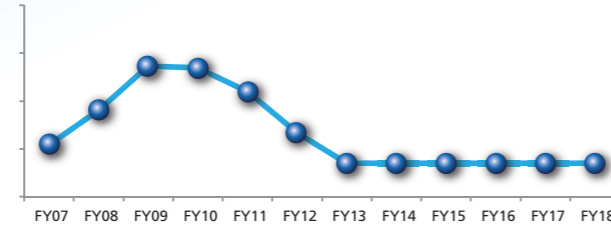
The main platform used to solicit ideas and input beyond the senior management to the larger NIE community was the Focus Group Discussions (FGD). Seven FGDs were formed, with 8 to 12 members in each group. Each member of the senior management team chaired a group to discuss the following topics:

- Teaching
- Research
- Globalisation
- Academic Talent
- Non-Academic Talent
- Technology
- Institutional Culture

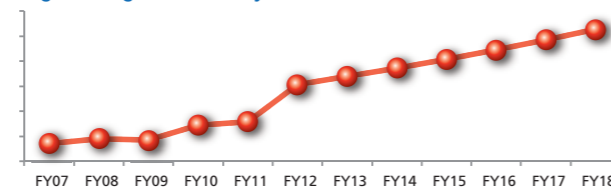
Future Challenges

The FTE projections for Initial Teaching Training (ITT), Higher Degree (HD) and In-Service had significant implications for NIE's future strategies for growth and development. FTEs for ITT were projected to decline quite sharply while the projections for HD and In-Service were conservatively upbeat indicating a gradual increase.

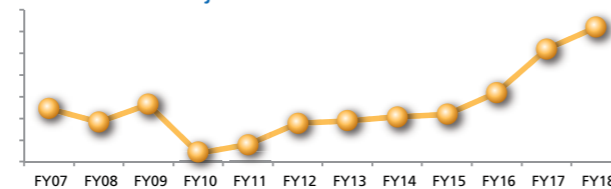
Initial Teacher Training FTE Projections



Higher Degree FTE Projections



In-Service FTE Projections



The sobering picture before us was this: NIE was facing a completely new future scenario as never before in its history. Being the sole teacher training institute, NIE's raison d'être had been very much tied to meeting MOE's requirements. Between pre-service and in-service programmes, pre-service was the bigger 'breadwinner'. NIE's annual budget is funded primarily from the capitation grant, and with about 80% of revenue being derived from MOE-sponsored programmes, there was insufficient capacity to fall back on alternative revenue streams. This meant that NIE's financial and operating model will need to be re-examined and revamped in order to maintain future growth and sustainability.

The conclusion was that NIE's new five year strategic plan will have to be underpinned by the following two approaches:

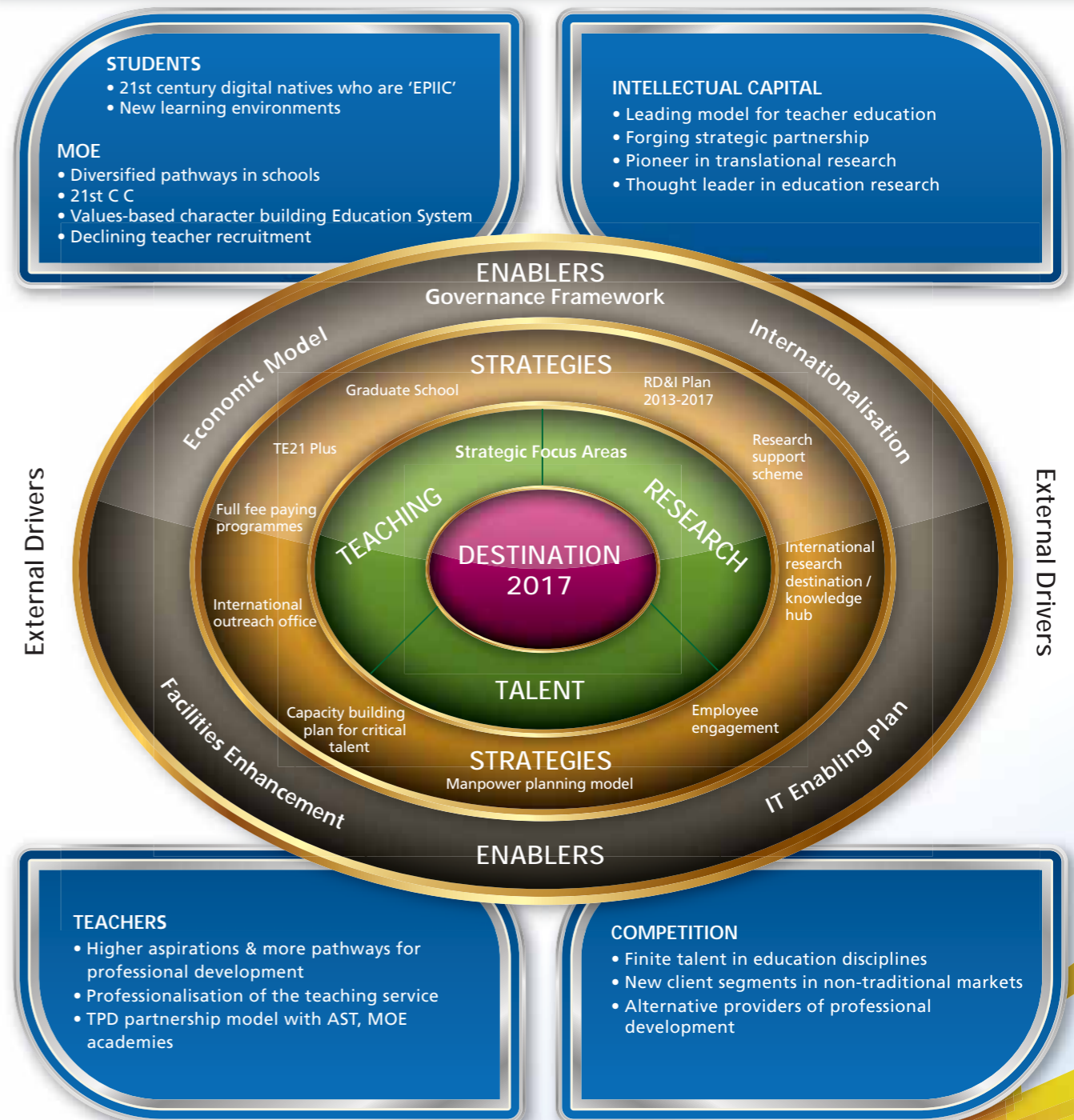
1. Grow new revenue streams by developing new programmes for both MOE Education Officers, and especially new full-fee paying client segments in non-traditional markets
2. Lower our cost base. It will be at least two years before the new markets can be developed and revenue streams materialise. In the meantime, NIE will have to step up cost management efforts in the following areas:
 - a. Improve resource utilization through productivity gains and prudent spending
 - b. Enhance competitiveness through qualitative improvements and innovation
 - c. Optimize manpower resources through stringent performance management

Building the New Roadmap

In building the new roadmap, we began with the end in mind. The envisioning statement provided an initial mindmap of NIE in 2017. The strategies were crafted based on the relevant input from the environment scan, SWOT analysis,

the FGDs' input, the workload, revenue and expenditure forecasts, and finally the desired outcomes and deliverables. Once the framework of the NIE Strategic Plan (2013 – 2017) was created, the 3:3:3 Roadmap itself could be refreshed and refined.

NIE Strategic Plan 2013 - 2017: A Framework



3:3:3 Roadmap (2013 - 2017) – Strategies for Global Success





The three overarching pillars – Partnership, Knowledge Capital and Impact & Influence reflect NIE’s commitment and aspirations to excel in Teacher Education and Education Research and provided the direction for crafting the strategies. The three strategic focus areas of Teaching, Research and Talent contribute to achieving our mission and vision through various strategic initiatives. The three drivers of excellence - responsiveness, relevance and rigour will in turn ensure that the strategies will be executed effectively and deliver the desired results. The framework is underpinned by NIE’s core values that will guide the governance and decision making processes.

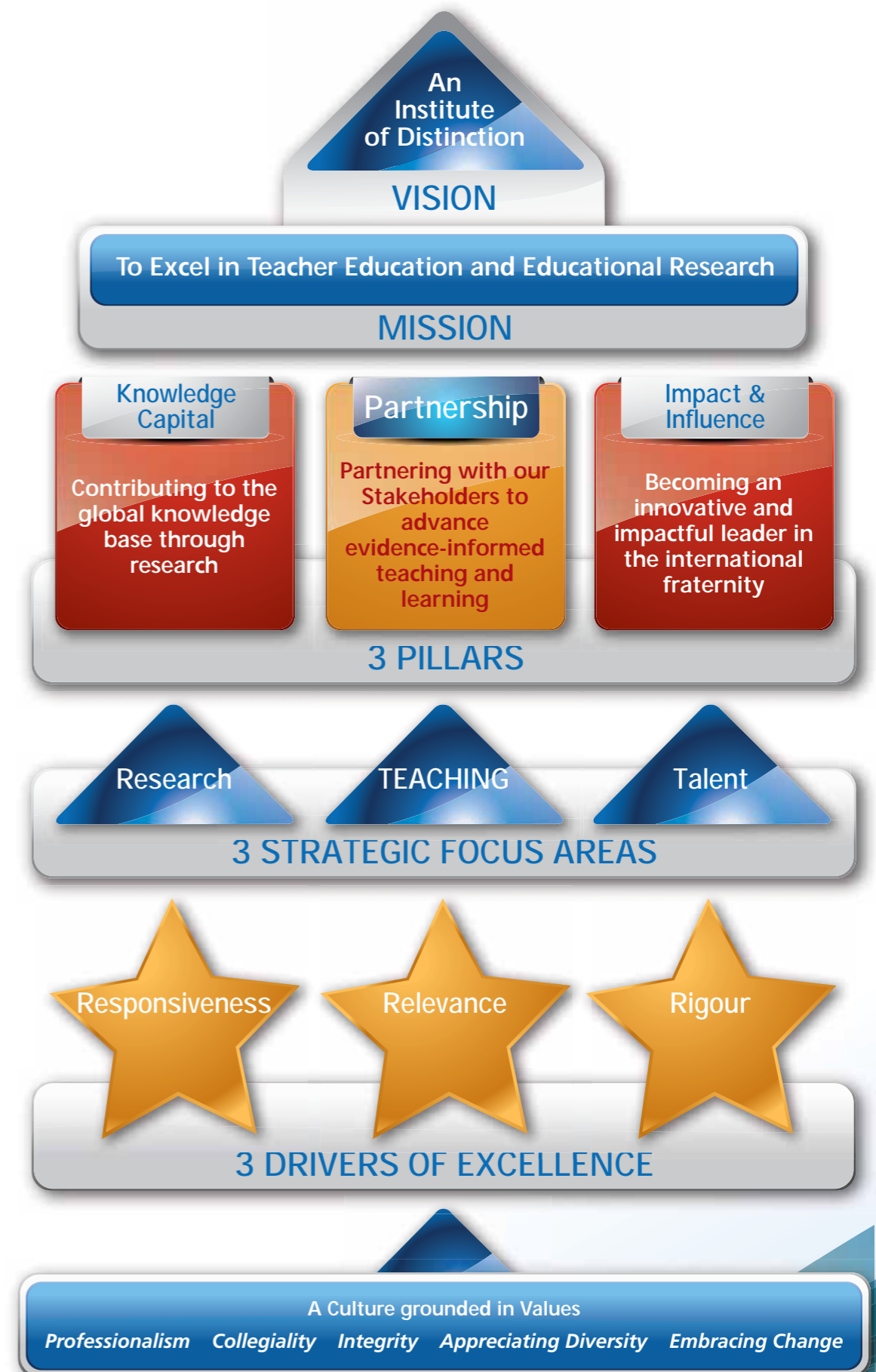
NIE Advance

What followed was a ground-up iterative process. The refreshed 3:3:3 Roadmap (2013-2017) was hosted on the Staff Portal for comments and feedback from the staff. The strategic plan was further refined and presented to the NIE Council for their insights and input. A strategic planning event for appointment holders, the NIE Advance was held

in July 2012 for another level of iteration as well as to chart out the implementation roadmap. The following focus areas were flagged out for discussion as they were identified as the more critical pieces in the strategic plan:

- Preparing Future-Ready Teachers for the 21st Century Classrooms
- The Art, Science and Scholarship of Teaching
- Developing a Highly Professionalised Teaching Force
- A Top 5 Graduate School
- Keeping the Talent that Makes NIE a Great Teacher Education Institution
- Transforming a Future-Ready Workforce
- Transforming the Way We Teach, Learn and Work with ICT

The implementation plan was then finalised and endorsed by the senior management. The action agenda and initiatives will be implemented in a phased approach, with the progress being tracked and reported at timely intervals.



Key Strategic Thrusts

Teaching

NIE will remain steadfast in its commitment to provide quality teacher education programmes along the whole continuum from initial teacher preparation to professional development, for beginning teachers, serving teachers and education leaders. Pre-service programmes such as DipEd, PGDE and BA/ BSc (Ed) will continue to be offered to give student teachers a robust foundation to begin teaching in the schools, while the various higher degree programmes at the masters and doctorate level provide candidates with opportunities to advance their knowledge, pedagogy and research capabilities in particular fields.

In the next five years, NIE's strategy in the area of teaching will focus on enhancement of teacher education programmes through strengthening of the theory-practice linkages; improvements in curricula; injecting a more global perspective; new programmes for full-fee paying students, particularly from non-traditional markets; building capacity

in our faculty to enhance quality of teaching; and finally, raising our reputational capital through the establishment of a graduate school.

Some of the key ideas that have been identified for further development include:

- Formalising the teaching accreditation framework
- Developing a PGDE-Master's degree pathway, with Master of Teaching as a possible terminal qualification
- Establishing an adjunct staff scheme for practicum mentors
- Broadening the curriculum to embrace international perspectives – for example, by offering international practicum, increasing opportunities for international student exchanges, working with international schools in Singapore, using pedagogical tools to learn about teaching in overseas contexts
- Benchmarking of best practices for TPD and evolving a new TPD model



Key Strategic Thrusts



Research

In the last five years, NIE has focused on building a strong foundation for education research to take off and the significant results achieved have repaid the initial faith put in the value of evidence-based, research-informed improvements to teaching and learning. In the next lap, the goal is on sustaining the momentum by enhancing the critical aspects of the research infrastructure.

The new 5-Year Research, Development and Innovation Plan (2013 – 2017) sets out the following goals:

- Developing coherent research programmes in 22 identified core areas
- Developing emerging niche research areas that show promise
- Increasing and diversifying sources of funding
- Creating a knowledge management platform that will facilitate the sharing of research information throughout NIE, MOE and the international research community; allowing for the distillation and synthesis of the culmination of NIE research findings; enabling the building of research networks locally and internationally; and facilitating the development of a research repository for NIE

There are also plans to develop NIE as an international destination and knowledge hub for educational research by:

- Attracting proven and promising faculty and leaders
- Building school and teacher capacity to improve educational practices and student outcomes through knowledge-in-action initiatives
- Developing capacity to do programmatic research throughout NIE
- Building research capacity of faculty and research support staff through avenues such as research collaboration and workshops
- Developing cutting edge research by investing in key expertise
- Improving the quantity and quality of Masters and PhD students by providing research scholarships or subsidies
- Positioning NIE as a constructive partner of the Singapore education system by being a brain trust in research on teaching and learning; providing useful research findings for MOE's policy development and formulation; and being a critical friend of MOE in policy discussion

The building of a core research support team will be another critical aspect of capacity building needed to enhance research development. One of the key initiatives involves the development of communication and reporting mechanisms to facilitate the implementation of an intellectual property and resource plan. Another priority will be to rationalise the administrative and policy formation functions of the Office of Education Research to enhance its service delivery capacity in implementing the research agenda.

Talent

NIE recognises the importance of nurturing and developing our human capital. 'Talent' has been identified as one of the three strategic focus areas in the new Roadmap. In the challenging landscape that lies ahead, the ability to attract and retain top talent will be critical to effectively support and grow the core business of NIE.

One of the first key initiatives that will be undertaken will be to develop a new model for academic manpower planning and development which will facilitate the following objectives:

- right-size and right-fit academic staffing to student intake and profile
- manage academic staffing resources optimally through stringent quality and performance management
- identify strategic recruitment requirements
- enhance professional learning pathways to ensure that faculty acquire up-to-date skills and competencies that make them 21st century relevant teacher educators
- develop capacity building programme for critical staff groups

A robust talent strategy for Management and Corporate Services Officers is equally critical. Key initiatives being planned include:

- development of an effective mechanism for reviewing and updating workforce profile
- skills and competency development programmes and organisational learning pathways that will enable MCSOs to acquire relevant new skills, ensure employability and increase value-addedness in the 21st century landscape
- capacity building programme for future leaders, high performers, appointment holders

Efforts will also be made to strengthen employee engagement in critical areas of the employee life cycle. Emphasis will be on creating a sense of belonging and identity as well as improving career progression, recognition and rewards systems.

One of the new approaches being taken to address the critical talent issues is by way of appointing new steering groups

to oversee the two key areas of manpower planning and review, and talent development strategies. Having steering groups support senior management in key decision areas represents a more ground-up approach that engages middle management leaders and assigns collective ownership in strategic management and decision making.



Manpower Planning and Review Steering Group

One of the first key tasks of the Manpower Planning and Review Steering Group is to implement the new manpower planning model to achieve optimal deployment and sustainability of academic human resources. Their role will also be to make recommendations on strategic talent management issues such as staffing and workload levels, requests for new staff positions and job scopes to the senior management in line with annual workplanning and budget, and annual performance appraisal cycles.

Talent Development Strategy Steering Group

The main role of the Talent Development Strategy Steering Group is to develop a robust capacity building model that will facilitate mapping and deployment of talent development plans for critical staff such as those on the tenure track, future leaders track and appointment holders. Other proposed areas of oversight for the steering group include developing a mentoring framework and system to support development of staff for specific roles and responsibilities; forming communities of practice or standing committees of experts to facilitate building of NIE's knowledge capital; and developing a competency framework for MCSOs to facilitate career development and progression, job rotation and job enlargement.

New Strategic Development Initiatives

Three multi-disciplinary taskforces will be assembled to formulate strategies in areas critical to NIE's future development and sustainability.

New Business Development Taskforce

The Taskforce aims to establish a new Business Development Model which will drive the creation of new revenue streams and also facilitate the push into non-traditional markets. The key outcomes expected are to:

- identify new markets, client groups and programme offerings
- develop an international outreach strategy including the exploration of international programmes

- increase the cohort of full-fee paying students from non-traditional local and international sectors
- establish a new partnership agreement between NIE and NIE International which would strengthen core and niche segments and ultimately broaden NIE's overall reach in the international market

NIE Academy Taskforce

An NIE Academy will serve as the focal point for developing excellence in teaching and educational leadership. The Taskforce will undertake to:

- propose the charter of the NIE Academy, which would include the mission and goals, definition and scope of the Academic and Professional Chapters, the organisation structure and operational framework, and office holders

- articulate the role, scope of work and unique value proposition of the NIE Academy
- develop a professional development framework that enables NIE academic staff to lead and excel in the delivery and scholarship of teaching
- develop a professional development framework that enables MCSOs to lead and excel as knowledge workers in the education sector
- develop a leadership learning framework for NIE's current and future leaders that would enable them to perform their roles with the greatest impact on NIE's goals

NIE Graduate School Taskforce

NIE's goal in the next five years is to become the leading graduate school for teacher education in Asia, and raise

its standing in the international education fraternity. The Taskforce will explore and propose what might be the best model that will serve NIE needs. Other goals are to:

- establish the scope and nature of an NIE Graduate School, including value addition, through an engagement process involving internal and external stakeholders
- determine the foundational attributes of a desired model of an NIE Graduate School
- determine the positioning of the proposed NIE Graduate School in relation to the current and future organisational structure of NIE, and with particular regard to the positioning of NIE's ITP programmes and education research
- define implementation steps and resources required to establish an NIE Graduate School



Destination 2017 – What Will Success Look Like?

Acknowledged by peers as one of the top 5 teacher education institutes globally

- Acknowledged leading model for initial teacher training based on strong theory-practice nexus
- NIE programmes internationally reviewed and recognised as benchmark for quality
- Peer recognised leadership status in international fraternity
- NIE faculty holding key appointments in international education bodies
- NIE-led alliances / networks
- NIE-sponsored conferences highly ranked (top 10) by peers
- Increase in number of international awards and accolades for NIE's 'world-class' talent



Wider diversity of student profile

- Increase in percentage of international students
- Increase in percentage of full-free paying students
- Increase in enrolment for degree programme
- Increase in enrolment for masters and doctorate programmes

Wider range of programme offerings

- New higher degree offerings
- Increase in number of in-service courses

New TPD model launched by 2014

Soft launch of Graduate School by 2015

Increase in number of scholarships

International outreach office set up by 2015

Destination choice for academicians, scholars, policy makers and world leaders

- Increase in number of internationally recognised and highly subscribed conferences

Research impact evidenced in policy and classroom practices

- Increase in number of research publications, keynotes
- Increase in number of research projects scaled up in schools
- Increase in number of research projects translated into commercial applications
- Increase in number activities / publications as a result of tie-ups with publishers

Key partnership and alliances

- Key partnerships with top tier Teacher Education institutes / universities
- Key partnerships with global technology leaders in education



Innovative and ICT-enabled pedagogies

- iTunes university live by 2013
- Increase in number of teaching applications and e-Learning projects developed
- Increase in number of on-line academic courses

Diversified income sources

- Increase in percentage of income from full fee paying courses
- Increase in new endowments / donations

IT-enabled operations and services

- Increase in percentage of service transactions which are on-line
- Reduction in operating costs through IT / sustainability measures
- e-Registry in place by 2013

Regarded as 'Employer of Choice'

- New career development and progression pathways
- Acknowledged 'best practices' in capacity building, organizational learning, customised leadership development programmes
- Innovative, flexible staffing schemes for adjunct staff, specialist research support staff, graduate students
- Higher employee retention rates
- Employee engagement score of >75%

Acronyms

21CC	21st Century Competencies
BA	Bachelor of Arts
BSc	Bachelor of Science
BA/BSc (Ed)	Bachelor of Arts/ Bachelor of Science in Education
CSR	Corporate Services Review
DipEd	Diploma in Education
EA	Enterprise Architecture
EdD	Doctor in Education
EPIIC	Experiential Participatory Imagery-rich Interactive Collaborative
FGD	Focus Group Discussion
FTE	Full Time Equivalent
GC3	Graduate Commitments, Capacities and Competencies
GPL	Office of Graduate Studies & Professional Learning
GTC	Graduand Teacher Competencies
HD	Higher Degree
ICT	Information and Communications Technology
IT	Information Technology
ITP	Initial Teacher Preparation
ITT	Initial Teacher Training
LEP	Leaders in Education Programme
MA	Master of Arts
MCSO	Management and Corporate Support Officers
MOE	Ministry of Education
MOU	Memorandum of Understanding
NIE	National Institute of Education
NTU	Nanyang Technological University
OAAS	Office of Academic Administration and Services
OER	Office of Education Research
OTE	Office of Teacher Education
PDGE JC	Postgraduate Diploma in Education (Junior College)
PE	Physical Education
PhD	Doctor of Philosophy
RD&I	Research Development and Innovation
SWOT	Strengths Weaknesses Opportunities and Threats
TE21	Teacher Education Model for the 21st Century
TPD	Teacher Professional Development
V ³ SK	Values ³ Skills and Knowledge

Acknowledgements

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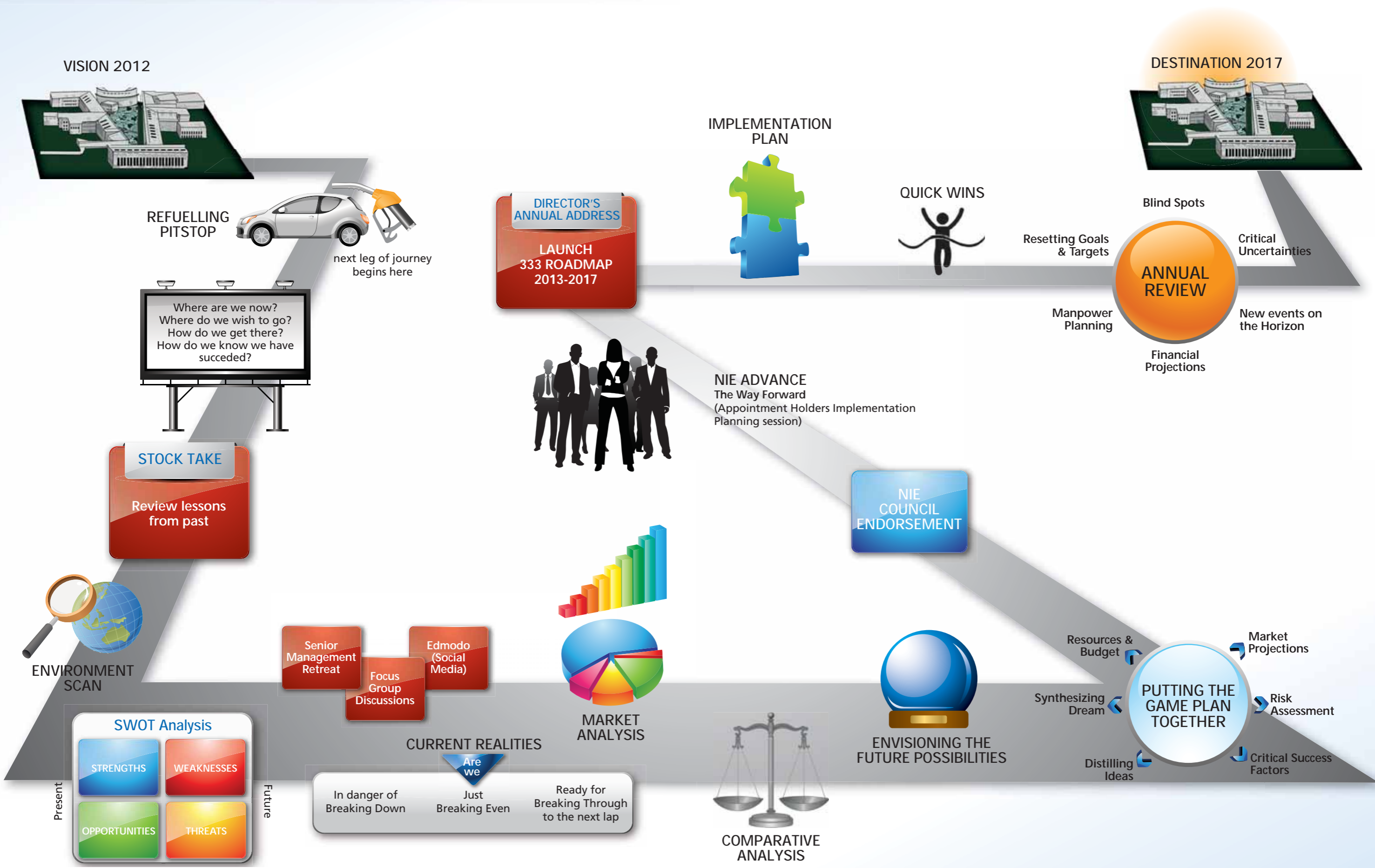
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Envisioning the Future Charting the New Course for the 333 Roadmap



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