

SQA Executive Summary



2011 WINNER





CONTENTS



FOREWORD

Nanyang Polytechnic (NYP) plays an important role in manpower development by providing industry-relevant polytechnic education and training. It pursues excellence by building on foundations anchored on organisational culture, concept, capability, and connection.

Moulded by our values and shaped by our heritage and history, the NYP culture unites our people for a common purpose. It engages us in our work and guides us in the way we deliver on our mission and vision. It energises us to work borderlessly as individuals, as teams, and as an organisation.

In NYP, we create and innovate. We develop effective approaches and systems to succeed in our endeavours. Underpinning them are clear concepts on how we want to accomplish our tasks and achieve the outcomes we desire – be it in teaching and learning, individual and organisational learning, or partnerships and collaborations.

As a Polytechnic committed to "working with industry, training for industry", the capabilities of our people as individuals and as an institution is paramount. We stay up-to-date with advances in science and technology to keep our programmes current. We build up our capabilities to work better with industry and to remain relevant to its needs.

We can do a lot as an institution. But, we can do much more together with partners, both local and international. NYP invests in our connections and collaborations with key industry players, government agencies, and other educational institutions. These partnerships synergise the strengths, share the expertise, and pool the resources to achieve benefits for all parties involved and for the community.

NYP stays ahead by being innovative and enterprising. These qualities have helped the Polytechnic in its pursuit of excellence. We are proud that, along that journey, NYP's success has been recognised with the People Excellence Award, the Innovation Excellence Award and, most recently, the Singapore Quality Award.

NYP's accomplishments and achievements have been made possible by the dedication and hard work of its people. Moving forward, we will continue to take on new challenges and venture into new territories. And, our vision to be a premier polytechnic of global distinction will continue to be the beacon to guide us into the future.

Mr Chan Lee Mun Principal & CEO Nanyang Polytechnic















Organisational Profile

Introduction

Nanyang Polytechnic (NYP) was established on 1 April 1992 to meet the national need for more technologists and professionals to support Singapore's technological, economic and social development. NYP's mission is to provide pre-employment training for secondary school leavers; to provide continuing education and training for adult learners; and to support business and industry through professional and technical services.

The history of NYP dates back to its predecessor institutions of the late 1970s and early 1980s - the German-Singapore Institute (GSI), French-Singapore Institute (FSI) and Japan-Singapore Institute (JSI), set up by the Economic Development Board (EDB) of Singapore. With the transfer of the EDB institutes to NYP in 1993, the experience, expertise and proven methodology of technical education became part of NYP's heritage. In July 1998, the entire Polytechnic was relocated to its present campus in Ang Mo Kio. Spread over 30.5 hectares, the campus includes state-of-the-art equipment and facilities.

NYP has seven schools and more than 1,300 staff, working together as a borderless team, offering 50 full-time diplomas to about 16,000 students. NYP also offers a wide range of continuing education and training programmes to adult learners, at the diploma, specialist diploma and advanced diploma levels as well as customised professional development programmes.

Organisation's Mission, Vision and Values

Vision

To be a Premier Polytechnic of Global Distinction

Mission

We provide quality education and training to prepare students and adult learners for work and life, equipping them to be life-long learners and to contribute to the technological, economic and social development of Singapore.

We will harness our resources, expertise, creativity and innovation to support the development of business and industry and to complement Singapore's globalisation efforts.

Values

"Can-do" Spirit

Borderless Teamwork

Development Orientation

Innovation & Enterprise

Nurturing & Caring Culture

Regulatory Environment

NYP is a statutory board under the Ministry of Education (MOE). In key academic matters such as courses, student numbers and fees, NYP has to comply with the rules and regulations set out by the Ministry. NYP also upholds the financial, personnel and administrative regulations drawn up by the MOE and the Ministry of Finance (MOF).

Stakeholders / Customers / Suppliers & Partners

Stakeholders	Government (MOE) and Singapore SocietyIndustry
Customers	Students (Pre-Employment Training)Adult Learners (Continuing Education and Training)Industry
	(Includes international students, participants, organisations and agencies)
Suppliers & Partners	Partners • Technology leaders and key industry players Suppliers • Term contractors & adjunct lecturers



Organisational Directions - Foundation for Organisational Excellence

What differentiates us is the NYP++ Foundation for Organisational Excellence comprising Culture, Concept, Capability and Connection (4Cs).

Culture: We believe that, by design, we have people with a set of common organisational values including, among others, "the can-do spirit" and "borderless teamwork";

Concept: We believe that we have many innovative systems and processes to deliver the desired outcomes of our mission. They include, among others, the Teaching Factory® concept for effective teaching & learning, the "Innovation Everywhere Framework" to promote innovation & enterprise, and the Accumulated Experience Sharing System (AES®) for knowledge management;

Capability: We know that, to stay relevant to the needs of our customers and stakeholders, our staff and the entire Polytechnic have to possess a strong and comprehensive set of capabilities. Hence there is a lot of emphasis on systematic human capital development and capacity building;

Connection: We are effective and innovative because we are able to collaborate with a wide network of strong partners, leveraging on each other's resources, expertise and capabilities. Our partners include industry and technology leaders, educational & research institutions, and economic & development agencies – both local and international.

Organisational Challenges

The polytechnic system is set up to ensure broad-based training for students inclined towards practice-oriented studies at tertiary level. It therefore plays a critical role in building up a skilled workforce for the Singapore economy. There are five polytechnics in Singapore. Geared towards school leavers with "O" and "A" level qualifications, as well as graduates from the technical institutes, the five polytechnics offer a wide range of courses in diverse fields. Organisational challenges for NYP as a public education institution are:

Relevance and Responsiveness

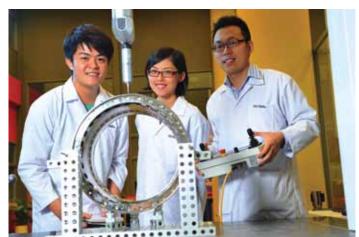
We have to remain nimble to respond to the transformation of Singapore's economy, even as we continue to expand. We will continue to forge strategic partnerships and collaborations with key industry players and government agencies and together with our staff and students, continue to develop solutions, innovative products and new services demanded by industry. Our graduates have a strong technical foundation. We also need to develop graduates who are enterprising & innovative and have a "can-do" attitude to work and learning. Our strategic goals include an expanded focus to enhance the balanced education and holistic development that we currently provide.

Staff Capability Development

All NYP staff - the critical resource for an educational institution - are recruited on the suitability of their qualifications and work experience. NYP has a strong tradition of capability development; upgrading staff to maximise their capabilities and competencies. Through Career Unlimited, staff are presented with multiple pathways to grow and keep updated with new knowledge/experiences, which opens up unlimited opportunities for career development.









Enhance NYP's Brand Name Internationally

Our staff and students need to understand that - as an individual, as a polytechnic, or as a nation - we cannot afford to be insular. Very often, we need to see events and interpret developments from an international - even global - perspective. NYP continues to focus on enhancing its brand name in technical education and training beyond Singapore. We aim to strengthen existing international partnerships and collaborations and create more opportunities for students and staff to be engaged in international exchange and attachment programmes. We also conduct courses for international participants who wish to learn more about us.

NYP has many innovative systems and processes to deliver the desired outcomes of our mission













Chapter 1 – Leadership

NYP is known for its robust, relevant and innovative curricula that meet student, industry and stakeholders' needs and requirements, dedicated and highly qualified staff and state-of-the-art teaching and campus facilities. Led by Principal & CEO (PCEO), Mr Chan Lee Mun and the Senior Management team, what drives us is the need to:

- provide training that employers value in our graduates so that they hit the road running
- form value-adding and win-win partnerships with industry leaders
- provide an effective, up-to-date, practice-oriented training environment in the face of rapid technology advancement and equipment obsolescence
- attract staff with sound theoretical knowledge and practical experience and ensure they keep abreast with developments in their respective disciplines and industry sectors.

NYP pioneered many innovative systems and concepts, including the Teaching Factory® concept which has proven to be an effective tool to enable a technical education institution to engage meaningfully with the industry to provide a realistic and vibrant teaching and learning environment while at the same time to develop the capability of its staff and renew itself.

NYP's Leadership System

NYP is a statutory board under the Ministry of Education, Singapore. A statutory board is an autonomous government agency formed by statute to perform a specific function. NYP is responsible to its own governing board called the Board of Governors (BOG), which oversees various committees as shown in Figure 1.1. Besides the PCEO, every BOG member is independently appointed by the Minister for Education. Through these committees, BOG establishes governance over the finances, accounts, investments, property, and other affairs of the Polytechnic. The governance structure including the powers of the BOG and provisions relating to audit of accounts are also spelled out under the Nanyang Polytechnic Act. Reviews by external organisations include those under MOE's Polytechnic Quality Assurance Framework (PQAF) and external audit by the Auditor-General's Office.

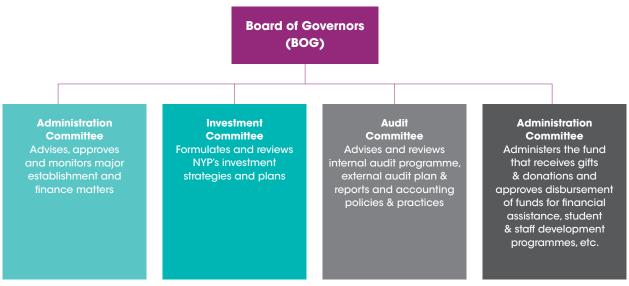


Figure 1.1: Board of Governors and its committees

The Principal & CEO leads the Senior Management team which also comprises Deputy Principals (DyPs), Directors, and Deputy Directors of Schools and Corporate Departments. The team is responsible for formulating, reviewing and implementing strategies, policies, systems and processes to drive NYP's mission to achieve our vision. This leadership structure operates under the guidance of the BOG to ensure accountability to our stakeholders, customers and staff.

Each of NYP's Schools has its own School Advisory Committee comprising senior management staff from related industries. The School Advisory Committee provides guidance and advice to the School on curriculum and development matters. The NYP Senate, in addition, advises the Schools on all academic matters. The Assessment Board, Syndicates and Committees ensure the quality and fairness of assessments and academic results.

Development of Mission, Vision and Values (MVV)

Senior Management spearheads the development and review of NYP's MVV to ensure that it remains relevant. NYP Organisational Excellence Framework as shown in Figure 1.2, depicts how MVV are aligned and integrated with other elements: strategies, organisational effectiveness enablers, values and the NYP++ Foundation for Organisational Excellence.

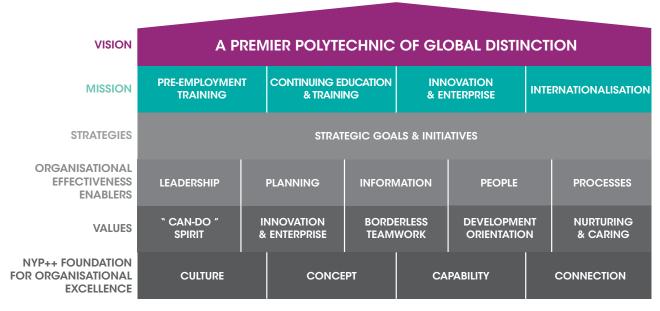


Figure 1.2: Organisational Excellence Framework

The NYP++ Foundation for Organisational Excellence with its four elements of Culture, Concept, Capability and Connection serves as our strategic foundation for organisational excellence. Senior Management and staff together are actively involved in:

- shaping the culture in line with our core values of "Can-do" Spirit, Innovation & Enterprise, Borderless Teamwork, Development Orientation, Nurturing & Caring;
- leveraging on concepts like the Teaching Factory®, among others, to bring the real world environment into the Polytechnic;
- enhancing and expanding staff capability at individual, functional and organisational level, enabling us to take on complex projects that require multi-disciplinary inputs;
- forging strategic alliances and connections with industry leaders so that staff capabilities and market value are constantly enhanced and our curricula kept relevant to industry.

Strategic goals and initiatives are formulated based on this foundation. The strategy development and implementation process is guided by our five values ("Can-do" Spirit, Innovation & Enterprise, Borderless Teamwork, Development Orientation and Nurturing & Caring) and supported by five organisational effectiveness enablers (pertaining to Leadership, Planning, Information, People and Processes). The outcome is to fulfil our mission in the four areas of Pre-Employment Training, Continuing Education & Training, Innovation & Enterprise and Internationalisation, with the ultimate objective of realising the NYP vision.

NYP's vision to be a "Premier Polytechnic of Global Distinction" can be further defined by attributes and descriptors in Figure 1.3. Defining and characterising "Premier Polytechnic" and "Global Distinction" serve to provide a greater level of clarity in our organisational excellence journey towards the desired future state.

Vision: A Premier Polytechnic of Global Distinction

"Premier Polytechnic" means:

- Clear vision, well-articulated mission, strong values
 Strength in staff and institutional capabilities
 Pervasive culture of innovation & enterprise
 Strong linkage with industry, agencies & institutions
 Relevant programmes & balanced curriculum
 Good quality applicants and student intake

- Effective teaching and learning pedagogy
 Enriching educational experience for students
 High employability & good salaries for graduates
 Wide acceptance of graduates into further studies
 Strong, supportive and engaged alumni

"Global Distinction" means:

- Internationally recognised brand name for TVETWide network of valued international partners

- Success at international competitions
- · Diversity of international students & staff

Figure 1.3: Providing greater clarity to NYP Vision

Our values are integral in shaping the NYP spirit and culture, and inspire judgment, decisions and actions. Our policies are crafted to support the NYP culture, and programmes and practices are drawn up and implemented to bring forth the desired behaviour in every staff (Figure 1.4). NYP inculcates in students these core values - Development Orientation (All-rounder), Innovation & Enterprise, and Nurturing & Caring. These values support our strategic goals of developing an all-rounder graduate and cultivating student talents.

Org Values	Desired Behaviour	Policies	Practices
"Can-do" Spirit	To have positive mindsets, grasp opportunities when they knock and be willing to try something new	Providing an environment that encourages a positive mindset, an open-mindedness to change and to comfortably handle uncertainty and challenges	 Strategic goals "Nurturing the Spirit of Innovation & Enterprise" and "Selling our Ideas" Launch of three-level (Beginner, IP Management, Technology Transfer Specialist) manpower development programme
Innovation & Enterprise	To constantly seek new and better ways of doing things, be inventive, create opportunities, being entrepreneurial and business-oriented and business-friendly	Providing time and resources for staff and students to research and develop ideas into tangible products	in technology transfer and IP commercialisation for NYP staff Participation in local and international competitions
Borderless Teamwork	To work seamlessly across Schools and Departments to achieve synergy and maximise organisational capacity	Providing cross-departmental/ School project/learning opportunities and job expansion/rotation	Multi-disciplinary projects, e.g. projects for hospitals which tap expertise from technology and health sciences schools Hybrid courses
Development Orientation	To strive to achieve dynamism, growth, pioneering spirit and never being satisfied with status quo	Providing wide-ranging and varied learning opportunities	Local and overseas attachments and collaboration projects with industry leaders Participation in new initiatives, e.g. SIRS, CPLD, CTIC, NYPi, provides learning opportunities, job enrichment and broadens staff's horizon
Nurturing & Caring	To help students acquire new knowledge, develop new skills and maximise their potential. To support colleagues in their work as well as to encourage their growth and success in their careers at NYP	Providing opportunities to cultivate interests and groom talents; instilling mutual respect and showing concern and support for each other; and providing a family-friendly environment	SOLID sessions Personal Mentors for students Care-&-Share Committee NYP in Action for the Community (NYPAC) Workplace Health Promotion programmes and activities Succession planning

Figure 1.4: Translating values into policies, practices and desired behaviour (staff)

Development of NYP Culture

NYP develops and propagates a culture in support of its organisational mission and goals. Such a culture has enabled NYP to turn ideas into opportunities and to achieve results far greater than the sum of our individual's efforts, bringing us a step closer in realising our vision of becoming a premier polytechnic of global distinction.

The NYP culture is further reinforced through regular communication and through engagement of every member - from the formulation of the NYP's MVV that charts NYP's directions and goals to living the NYP culture. Incentives and rewards are introduced to acknowledge and recognise pro-MVV behaviour.

Our efforts to promote organisational culture are summarised as follows (Figure 1.5):

DEMONSTRATE Role-Modelling	REINFORCE Communication	ENGAGE Active Involvement	ACKNOWLEDGE Recognition	MOTIVATE Rewards
Examples: STAFF Value Champions DyP/D: Innovation & Enterprise & Borderless Teamwork DyP/A: "Can-do" Spirit & Development Orientation DHR & Registrar: Nurturing & Caring	Examples: STAFF • Staff Induction • Staff Conference/ PCEO's dialogue with staff • Staff Association/ Staff Union • StaffAssist/StaffLink	Examples: STAFF NYP Executive Prog/ Team Building Prog Cross-departmental/ school learning & development Values Focus Groups/ Strategic goals/ Work plans	Examples: STAFF • Promotion/ Merit incomperformance bonus • ExCEL Day recognition	•
STUDENTS • Student leaders	STUDENTS • Student Orientation • Meeting with SM/ Personal Mentor • Student Clubs/ Students' Union • Student Portal/ Student Handbook	• Projects/ Attachments • Cross-disciplinary teaching & learning • Student feedback	• Scholarships & Award • Project showcase	ds

Figure 1.5: Permeating the organisational culture

Commitment to Community

NYP is committed to corporate social responsibility and in line with the Value of Nurturing & Caring culture, NYP provides opportunities and encourages staff and students to contribute to the community. A wide range of activities and programmes for both staff and students have been organised in support of the four thrusts as shown in Figure 1.6. Many NYP staff also serve in external committees to share and contribute their knowledge and experience to the local and international community.

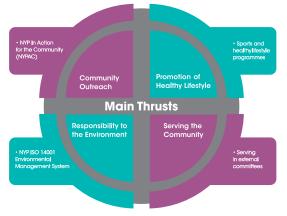
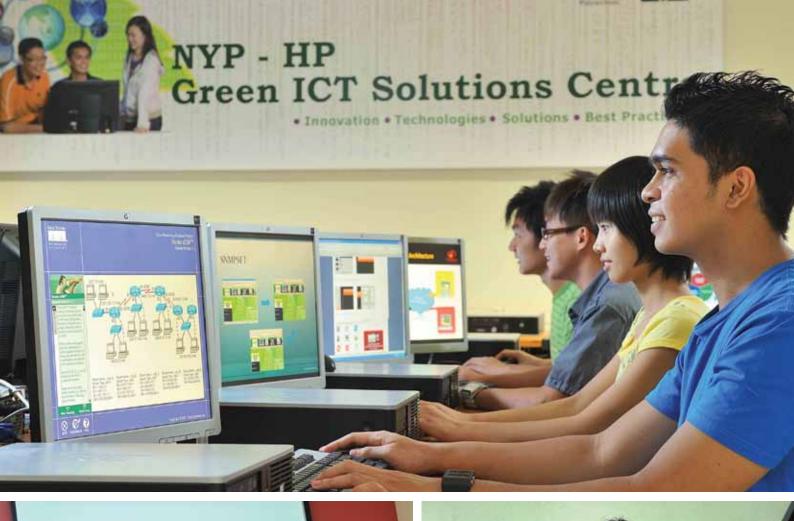


Figure 1.6: Responsibility to community and the environment









Chapter 2 – Planning

NYP's strategies are formulated to serve our stakeholders and customers and to address our strategic challenges. These are cascaded throughout NYP to facilitate the development of department and school work plans. We have defined indicators, chosen to measure our progress towards meeting stakeholders and customers' requirements as well as achieving our vision of a premier polytechnic of global distinction. Our leadership, together with this planning framework, has helped us to achieve and sustain our student and graduate performance, industry presence as well as local and international recognition.

The Strategic Plan is premised on the four areas of our mission – Pre-Employment Training, Continuing Education & Training, Innovation & Enterprise, and Internationalisation. The strategic initiatives focus on students, innovations in teaching & learning and in industry linkages, enable us to deliver an industry relevant education and equip our graduates with the relevant knowledge, skills and mindsets for the new economy.

Strategic Development and Deployment in NYP

Development

In the development of our strategic objectives, the management ensures that NYP's mission, vision and strategic goals are aligned to national needs considering the following:

- ·National Manpower Council (NMC) planning parameters for Singapore
- MOE directions, policies, guidelines on manpower planning for polytechnics, financial allocation model
- EDB, IDA, MDA, WDA directions
- PQAF External Review Panel assessors (local and international) validation report
- Market and latest technological trends and changing demographic profiles

Our BOG, Senior Management and key staff involved in planning have a wealth of experience from academia, government and industry and are currently or were previously from MNCs or international Singapore companies. Their inputs and experience with emerging markets, technologies, business perspectives and global trends, together with our other planning platforms have enabled NYP to have a global perspective in planning.

Focus groups gather relevant information, conduct analysis and review benchmarking studies. This information also enables greater foresight when determining new areas of development. NYP's strategic planning exercise is conducted every three to five years. Since the mid-90s when the initial six Strategic Thrusts were developed to provide the long term directions for NYP, we have gone through four cycles of re-alignment.

The NYP Strategy Map (Figure 2.1) is used to depict NYP's strategic objectives, critical business processes and key indicators. It is cascaded throughout NYP to facilitate the development of Department and School work plans that "roll up" to the individual strategies.

Deployment

Schools and Corporate Departments translate the strategic initiatives and add them to their annual work plans. These work plans are presented and deliberated during the annual Planning Exercise to ensure alignment and prioritisation. Work plans developed are adopted upon endorsement by Senior Management. Directors of Schools/Departments communicate their work plans to their staff through their Schools'/Departments' work plan sessions.

The deliverables and targets specified in the work plans are monitored at School/Department management meetings and functional committee/workgroup meetings. All Schools are required to submit a mid-FY interim progress report on their annual work plans to PCEO. This serves to update Senior Management on the latest developments and facilitates timely allocation of more resources, if necessary. A full-FY progress report is presented during the Planning Exercise in February.

NANYANG POLYTECHNIC STRATEGY MAP

	NOISIN	Wed	We provide quality e	ducation and tra	TO BE A P	REMIER POLYTECH students and ad	TO BE A PREMIER POLYTECHNIC OF GLOBAL DISTINCTION We provide quality education and training to prepare students and adult learners for work and life, equipping them to be life-long learners and to onstitute to the technological economic and social development of Singapore We will braness our resources expedition and social development of Singapore We will braness our resources expedition and social development of Singapore We will braness our resources.	STINCTION rk and life, equip	oping them to b	e life-long learn	ers and
			innovati	ion to support the	development	of business and in	innovation to support the development of business and industry and to complement Singapore's globalisation efforts.	plement Singa	oore's globalisa	ion efforts.	
	STAKEHOLDERS / CUSTOMERS	STAKEHOLDER - GOVERNMENT	GOVERNMENT (MOE)		STAKEHOLDER – SINGAPORE SOCIETY	DRE SOCIETY	STAKEH	STAKEHOLDER - INDUSTRY	STA	(EHOLDER – INTERN	STAKEHOLDER - INTERNATIONAL COMMUNITY
		Present & fu industrys m are met to s. deve	Present & future Singapore industry's manpower needs are met to support national development	confr de de	Responsible citizens who contribute to the fechnological, economic and social development of Singapore	ns who nnological, social ngapore	Graduates v up-to-date kno including life adaptak	Graduales with relevant skill sets, up-to-date knowledge, positive affitude including life-long learning and are adaptable and innovative	sets, attitude nd are e	Support for developme of Singapore as an education hub to augment talent pool	Support for development of Singapore as an education hub to augment talent pool
			cus	CUSTOMER - STUDENTS (PET)	ET)		CUSTOMER – ADULT LEARNERS (CET)	:ARNERS (CET)	CUSTOMER - INDUSTRY (SERVICES)		CUSTOMER – INTERNATIONAL PARTICIPANTS, INSTITUTIONS & AGENCIES
		Competence in relevant skills & knowledge, employability, enhanced career potential		Excellent facilities, nurtuing & innovative environment and quality services		Opportunities to develop leadership potential, entrepreneurial & global mindset	Competence in relevant skills & knowledge	relevant Nedge	Services & projects customised to the needs of industry		Support for TVET Programmes, Consultancies
					-	*	L			_	
	STRATEGIES				PET			СЕТ	INNOVATIC	INNOVATION & ENTERPRISE	INTERNATIONALISATION
		1. DEVELOP ALL ROUNDER GRADUATES	2. CULTIVATE OUR STUDENT TALENTS	3. ENHANCE THE NYP EXPERIENCE	4. INTEGRATE OUR INTERNATIONAL STUDENTS	5. CULTIVATE OUR NYP PROSPECTS	6. BUILD LASTING RELATIONSHIPS WITH OUR ALUMINI	7. GEAR-UP FOR LIFELONG LEARNING	8. NURTURE SPIRIT OF INNOVATION & ENTERPRISE	9. SELL OUR IDEAS	10. INTERNATIONALISE NYP
						+					
	ORGANISATIONAL EFFECTIVENESS ENABLERS	LEADERSHIP	RSHIP	PLAN	PLANNING	INFOR	INFORMATION	E	PEOPLE	紹	PROCESSES
Cha	CORE	, CAN-D	" CAN-DO" SPIRIT	INNOVATION	INNOVATION & ENTERPRISE	BORDERLES	BORDERLESS TEAMWORK	DEVELOPMEN	DEVELOPMENT ORIENTATION	NURTUR	NURTURING & CARING
pter 2	NYP++ FOUNDATION FOR ORGANISATIONAL EXCELLENCE		CULTURE		CONCEPT	Ld.		CAPABILITY		CONNECTION	STION

Figure 2.1 NYP Strategy Map

Planning

Enterprise Risk Management

Pro-active consideration of risks has been an integral part of NYP's planning and decision making. As part of the structured and comprehensive approach to organisational excellence and in support of strategic planning, an Enterprise Risk Management framework (Figure 2.2) provides for a practical and holistic approach to enable NYP to understand the risks associated at the organisational and activity levels and embed the effective management of risk into the way NYP operates. The framework is supported by management structure as well as NYP's risk profile, mitigation plans and risk indicators.

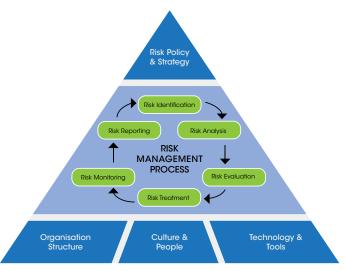


Figure 2.2 NYP ERM Framework

Management Review of Performance

NYP has in place platforms like SMM and key management committees to review performance and support our continuous improvement efforts. Targets are set for indicators based on trends, normal operating band, industry/national norms, best practices, benchmarks and comparisons where available. Capability development needs, mission/vision directions and new technology developments are also considered when setting stretched targets.

Senior Management Review of Planning Process

NYP's strategic planning process runs from November to March with a mid-term review due in September. Senior management will then review staff feedback, benchmarking studies and observations from best practices and information captured during external audits. Comparisons are also made with other statutory boards and world class organisations on improvements made to their planning process, with relevant ideas adopted.

MOE Review of Performance - Polytechnic Quality Assurance Framework (PQAF)

This once-in-five year assessment by MOE, together with a panel of international and local assessors holding senior positions in academia and industry provides the Polytechnic with an added opportunity to take a critical look at its systems, structures and processes in the areas of governance and leadership, management and strategic planning, teaching and learning, industry linkages and service.

Nanyang Polytechnic Organisational Excellence Milestones

1992	NYP was officially established
1996	NYP certified to ISO 9002 quality standards and this started the journey for our subsequent OE certifications and achievements
1999	NYP certified to ISO 14001
1999	Singapore Quality Class and People Developer Standard
2000	Singapore Environmental Achievement Award
2000	Public Service Award for Organisational Excellence
2003	Singapore Innovation Class
2004	Singapore Health Award (Gold)
2004	ASEAN Energy Efficiency Award
2005	NYP awarded Green Mark Platinum Award
2005	NYP conferred People Excellence Award
2006	NYP received Distinguished Public Service Award for Organisational Excellence
2008	Singapore Health Award (Platinum)
2009	NYP received Hewitt Best Employers in Singapore Award
2009	NYP recognised with Innovation Excellence Award
2009	MIT Asia IT Excellence Award for Knowledge Management
2010	Singapore Quality Class (Star)
2010	NYP received WSQ Distinguished Partner Award
2010	Public Service Achievement Award
2011	NYP is conferred Singapore Quality Award

Chapter 2

Planning









Chapter 3 – Information

NYP has established a culture that recognises the importance of capturing tacit knowledge and sharing it. Staff have many platforms to acquire and share tacit knowledge on emerging technologies and industry practices. Platforms such as SOLID (Sharing, Organisational Learning, Interaction and Dialogue), study missions and industry visits, staff attachments (locally and overseas), in-house seminars with invited industry speakers as well as internal and external publications serve the purpose of sharing a broad spectrum of tacit knowledge for continuous improvements and organisational learning.

Our Knowledge Management System, consisting of our award winning AES®, comprehensive tacit knowledge databases and community sharing platforms, is shared in an explicit, transparent and user-friendly manner and is used as part of our planning and improvement cycles in conjunction with the outcomes of our benchmarking studies

NYP also serves as a benchmark for others and has responded to frequent requests from local and international organisations to share its innovative teaching pedagogy, knowledge management, progressive HR practices and organisational excellence journey. Such requests recognise NYP as a leader in its field. Our AES® system is the proud recipient of the MIS Asia IT Excellence Award 2009 for the category of "Best Knowledge Management".

Management of Information & Knowledge Information Systems Planning Process

The information requirements are based on key business processes, strategic plans as well as long and short term goals that are drawn up to support our mission, vision and strategic goals. NYP takes into consideration market and latest technological trends and National IT Initiatives. Information selected must help in ensuring quality and effectiveness of operations at the school and corporate levels.

Information Selection

Information is selected and collected to meet the operation requirements, based on the following criteria:

i. Planning needs:

This is required to facilitate the development of policies, strategies, as well as short and long term goals.

ii. Operational needs:

This is required for day-to-day business operations and management.

iii. Performance measurements:

This is required for gauging how well the organisation is performing. Comparative and benchmarking information is required

by Management for identifying gaps in key processes and reviewing the implementation of new plans/initiatives.

iv. Feedback:

This includes survey results on customers' satisfaction and their requirements. This is also channelled back for the review of strategic plans.

v. Knowledge sharing:

This is information sharing to promote a learning culture. It includes platforms for knowledge sharing on industry projects/services engaged, in-house capability development, industry trends, etc.

Information Capture and Consolidation

Our Knowledge & Information Systems (KIS), as illustrated in Figure 3.1, is a holistic and comprehensive KM system for capturing and facilitating the sharing of information within NYP. A high degree of consistency, accuracy, uniformity and standardisation of the data access and information management across the organisation is ensured via adoption of enabling technologies.

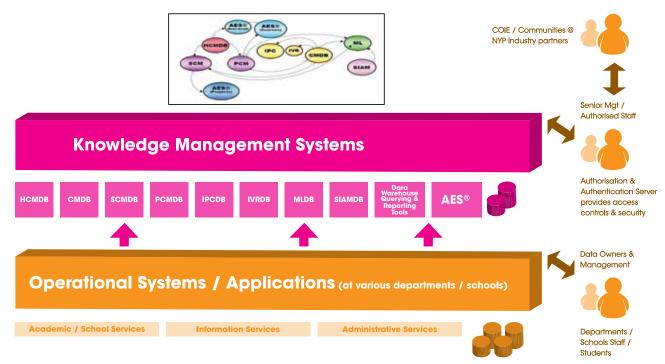


Figure 3.1: Integrated Knowledge & Information Systems

Sharing Information to Encourage Learning

NYP's knowledge management databases, AES® and tacit knowledge (e.g. knowledge gained from collaborations) are captured and shared in an explicit, and user-friendly manner via the integrated KMS. The KMS includes the Learning & Staff Development System, Innovative Staff Suggestion System, Electronic IP Registration System and AES®.

In view of the wide variety of information used by NYP, the management of information and knowledge is evaluated and reviewed on a regular basis at the SM meeting. These reviews are aimed at enhancing the reliability and relevance of information.

Prior to review by SM, initial reviews and evaluations of our management of information and knowledge will be conducted at the Corporate Department and School level. The review and evaluation findings will be reported and inputs will be gathered where necessary for further discussion and decision-making at the SMM.

Comparison & Benchmarking

Comparisons and benchmarking activities are carried out with other organisations renowned for similar practices, to determine the NYP's capabilities in the respective areas. NYP selects comparative and benchmarking information via knowledge of business and market trends, environment and technology scans, networking studies and reflective practice.

Our selection criteria include:

- Organisational objectives and business processes;
- Value add to customers and stakeholders;
- Enhancing capability level of the organisation;
- Key recommendations from external assessments or directives.

Four types of benchmarking are carried out:

- Internal benchmarking where best practices are shared through platforms such as Accumulated Experience Sharing database.
- Competitive benchmarking where NYP has benchmarked ourselves against the other polytechnics.
- Industry benchmarking where process owners (e.g. Schools) have conducted benchmarking in their core areas e.g. curriculum and course development, technology development.
- Organisational level processes where NYP teams have visited other best-in-class organisations to learn best practices (e.g. in the area of IP commercialisation).

Chapter 3
Information







Chapter 4 – People

Our comprehensive HR strategy begins with recruiting the right people, developing their capabilities, providing for a challenging and engaging work environment that is complemented with a fair rewards and recognition system to build the pool of high quality, flexible and dedicated people that we have today.

These include capability development in new and emerging technologies, staff reprofiling, collaboration projects with industry, secondment/work attachments with technology leaders in industry, job rotations and exposure to R&D work in new/advanced areas.

Our strong commitment to continuous learning and development has been recognised as early as 1999 when we were the first educational institution to attain the People Developer Standard. NYP was also the first and only the educational institution to garner the *People Excellence Award* in 2005, the highest accolade given to organisations with excellent people development practices.

NYP has been recognised for its progressive HR practices. Awards conferred on NYP in HR include People Excellence Award (2005), SHRI Corporate HR Award (2005), Finalist HRM Awards – Best Use of Technology (2005) and Hewitt Best Employers in Singapore (2009).

Human Resource Planning

In aligning HR goals and objectives with NYP's mission, vision and values, our HR plans and programmes address key HR requirements encompassing five focus areas - Recruitment & Selection, Capability Development, Employee Engagement, Employee Well-being, Rewards & Recognition, as shown in Figure 4.1.

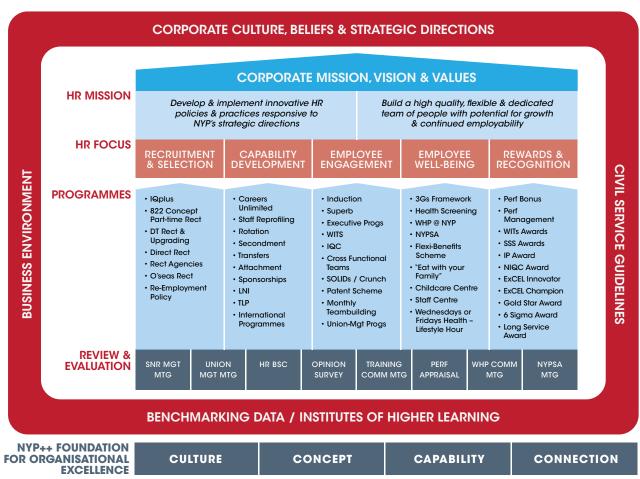


Figure 4.1: NYP HR Planning Framework

Underpinning the HR Planning Framework is the NYP++ Foundation for Organisational Excellence. This is a holistic framework of four essentially inter-related elements – Culture, Concept, Capability and Connection – linked as building blocks for the development of innovative people practices, aligned and integrated with our organisational excellence journey.

Capability Development

NYP is committed to develop its staff capabilities. All staff, in consultation with their reporting officers, chart out their learning roadmap incorporating various skill sets aligned with NYP strategic thrusts as well as the LEAP competencies of the NYP Staff Development and Appraisal (SDA) framework. Staff at every level have unlimited learning and development opportunities to ensure they stay relevant in today's competitive environment.

An overview of the learning and development framework for staff at various levels is shown in Figure 4.2.

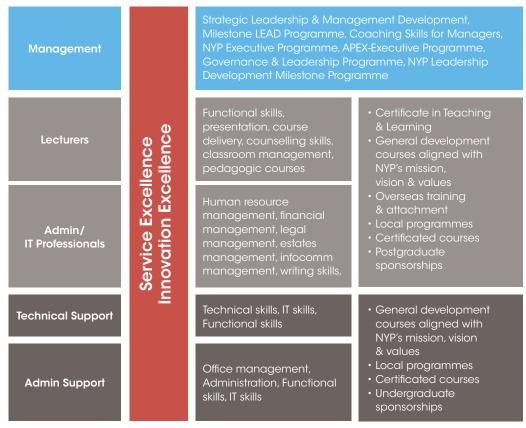


Figure 4.2: Learning & Development Framework

We formalised the NYP Leadership Development framework for officers identified for leadership positions to be sent for milestone programmes aligned with the NYP LEAP model (Figure 4.3). Career Unlimited is our unique framework to offer multiple pathways and avenues for staff development. These avenues include job rotations, sponsorships, upgrading programmes, local and international attachments, transfers/secondment, international programmes, industry projects development, etc. (Figure 4.4).

NYP LEAP Model

Leadership & Organisational Qualities

- Sense of Perspective & Judgment
- Leadership & Initiative
- Developing Capability

Engagement & Motivation of People

Communicating & Influencing

Achievement Orientation

- Commitment & Reliability
- Managing Change
- Fostering Innovation

Professional Qualities

- Professional Expertise & Knowledge
- Building Relations & Networks
- Teaching & Developing Students (only for academic staff)

Figure 4.3 NYP Leadership Development Milestone Programmes

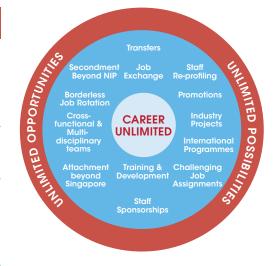


Figure 4.4: Career Unlimited

Chapter 4
People

Staff Engagement

NYP staff are engaged in various individual and teambased activities, such as staff suggestions, interest groups, projects development, work improvement teams, etc.
Our engagement strategy is to connect borderlessly for individual/team excellence and organisational excellence (Figure 4.5).

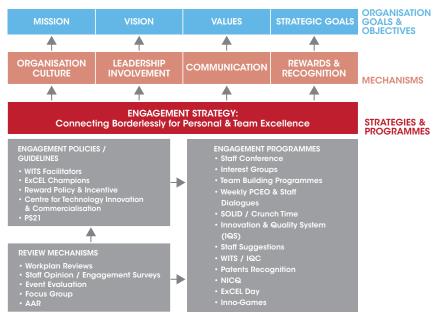


Figure 4.5: NYP Employee Engagement Framework

Staff Well-being

Our 3Gs (Go! Grow! Glow!) incorporating three core areas - lifestyle, mind and relationships – provides us with a holistic approach towards creating a conducive working environment that impacts employee well-being and satisfaction.

A multitude of programmes to support the needs of a diverse staff profile are in place for promoting and enhancing healthy lifestyle, minds and relationships, thus reflecting the organisation's values and commitment as an employer of choice. Supportive employeemanagement relationships are developed through various avenues reflected in the 3Gs framework (Figure 4.6).

GO! GROW! GLOW!

BODY, MIND & SOUL

QUALITY WORK-LIFE @NYP

OUR 3Gs

GO! (Sustaining healthy lifestyles)	GROW! (Sustaining healthy minds)	GLOW! (Sustaining healthy relationships)
• WHP Committee • Health - I Lifestyle Hour • Sports for Life • Mass Walk & Run • Health Bazaars • Voice Care workshops • Health Screening • In-House Gym & health Screening • In-House Gym & health equipment • ProHealth Clinic • Dental Clinic • Pharmacy • Anti-Smoking • Water-Coolers & Pantry Facilities • Nature / Greenery Corners • CARE Officers • Volunteerism Campaign • Healthy Catering Policy	SOLIDs Formal & Informal Courses In-house Workshops Talks by Industry & Visiting HMDP Experts NYP Learning Day WITS Financial Planning Workshops Will Writing Talks Retirement Planning Talks Mental Health Programmes & Talks	Staff Welfare Fund Leave Benefits Corporate Passes Singles Networking Parenting Workshop Children's Programme Staff Spouse Day Family Day Festive Gatherings NYP Anniversary Dinner ExCEL Day Union-Management Programmes Teambuilding Programmes Sloff Centre Flexible Benefits Work-Life Advocate & Ambassador Childcare Centre
EVALUATION & REVIEW Staff Opinion Survey	•Dialogue Sessions	•Work-Life Harmony Survey

- Staff Opinion Survey
 After Action Reviews
 Health Needs Survey
- •Staff Engagement Surve •Focus Group Discussions
- •Work-Life Harmony Surve •Event Evaluation

Figure 4.6: 3Gs Framework (Go! Grow! Glow! for the Body, Mind & Soul)

In reviewing our overall approach and effectiveness in enhancing employee well-being and satisfaction, the appointment of an external survey partner enabled broader measurement of employee engagement. This allows us to benchmark with high-performing organisations locally and globally in the areas of leadership & culture, supervisory practices, performance management, rewards, job motivation & growth, etc. In addition to such surveys, we also benchmark against best practices of other Polytechnics, Civil Service, Statutory Boards and private organisations.

Staff Recognition

Staff are appraised on the NYP LEAP qualities using the SDA framework where goal setting and 2-way communication strengthens the link between organisation expectations, staff aspirations and development. Staff are also given due recognition and reward to encourage behaviours aimed at supporting learning, service and innovation excellence. Other than merit increments, performance bonuses and promotion increments for staff in the annual performance management exercise, NYP has implemented various other rewards and recognition schemes.









NYP engages staff in various individual and team building activities, and develops a conducive working environment that impacts employee well-being and satisfaction

Chapter 4

People



Microsoft

iDA SINGAPORE

MOU Signing Ceremony

Cloud Innovation Centre









Chapter 5 – Process

The pursuit of innovation at NYP is detailed within the Innovation Everywhere Framework which sets the stage for nurturing the innovative spirit within NYP. It covers teaching and learning, organisation, people and environment with practices defined for each area.

Our systems, policies and processes are designed to encourage ideas to flourish, to empower our people to explore and build upon their ideas while at the same time, guide and manage the steps to bring good and impactful ideas to fruition. With the increasing number of patents filed, CTIC was created in 2008 for IP protection, technology transfer and commercialisation of patented innovative processes and products.

NYP has an outstanding record of cultivating long-term, high value-added connections and successfully fostering strong regional and global links with world class organisations, key industry players, government agencies and institutions. We are able to create value in areas like industry projects, communities, incubators, applied R&D and CET courses. These partnerships are of immense benefit to staff and students in terms of staff capability development, learning and training opportunities, work placements/attachments and overseas development programmes for students. NYP works with more than 240 partners a year. Key partners include industry leaders Cisco Systems, HP, IBM, Microsoft, Rohde & Schwarz, Autodesk, Oracle, Nokia, Agilent Technologies, Siemens, Matsushita, Yokogawa and SingTel.

NYP was the first educational institution to receive the **Singapore Innovation Award** in 2009, the highest accolade given to organisations whose outstanding innovation capability development approach has contributed significantly to business excellence.

Innovation Everywhere Framework

Our Innovation Everywhere Framework is the primary strategy for nurturing and cultivating the innovative spirit within NYP (Figure. 5.1).

Organisation	Teaching & Learning	People	Environment
Borderless concept	 All-Rounder education 	 Connections 	 Intelligent campus
 Learning organisation 	 Pedagogic concepts 	 Capability 	 Innovation showcase
Spirit of Enterprise	 Applied R&D 	Culture	 Ideas incubator

Figure 5.1: Innovation Everywhere Framework

Organisation: NYP is a borderless organisation. It continuously affirms the concept of "borderless teamwork" as an essential ingredient for innovation. As a learning organisation, our award-winning Accumulated Experience Sharing (AES®) knowledge management system provides a rich reservoir of intellectual resources and best practices to support its learning needs.

Teaching & Learning: NYP's all-rounder education ensures that students gain new knowledge, learn new skills and develop competencies within contextually meaningful training environments that emulate the real-world workplace on campus. Complemented with innovative pedagogies such as the Teaching Factory®, we provide an excellent platform for industry projects and collaborations.

People: NYP believes in capabilities development to support innovation. It provides many opportunities for people development to keep abreast of advances in science and technology. We channel the capabilities and can-do spirit of our people towards applied R&D projects and technology development. NYP also has a wide network of local and international collaboration partners in industry, government agencies, and institutions.

Environment: NYP's environment is conducive for innovation and ideas to flourish. Facilities and institutional policies facilitate borderless and cross-disciplinary teamwork. Opportunities are created for students and staff to participate in projects and competitions to challenge and develop their innovative talents. Building links with international communities provide exchange and attachment opportunities for cross fertilisation of knowledge.

Innovation Management Process

Our Innovation Management process has five steps, which comprises gathering, assessing and validating ideas; and in implementing and reviewing innovation outcomes (Figure 5.2). Instead of a "one-type-fits-all", our process caters for innovation clusters as follows: Management Concepts & Ideas, Course / Programme Development, Industry Projects and Intellectual Property Development.

	GATHER	ASSESS	VALIDATE	IMPLEMENT	REVIEW
MANAGEMENT CONCEPTS & IDEAS	•Snr Mgmt Network / Connect	•Snr Mgmt Meetings	•Snr Mgmt Reviews	•Schools / Dept Implement	•Snr Mgmt / Tech Park Meetings
COURSE / PROGRAMME	•Students •Staff •Industry •Govt Agencies	•Course Design & Devt Comm	•Advisory Comm •NYP Senate	•Course Delivery & Assessment	•Curriculum Review
PROJECTS (INDUSTRY, INNOVATION & COMPETITIONS)	•Students •Staff •Industry •Govt Agencies	•i-3S / i-3D •Risk Assessment •Project Committees	Feasibility StudyPOCPilot StudyAcceptance Test	IncubatorsIPGCommission ProjectCompetitions	Project meetingsAARMonthly Update
INTELLECTUAL PROPERTY	•Students •Staff •Industry •Govt Agencies	Patentability Evaluation / Prior Art Searches	•IP Task Force	•AES •IPR	•Snr Mgmt / Tech Park Meetings
					

Figure 5.2 Innovation Management Process

Process Management & Improvement

NYP has three key processes for its PET and CET courses, namely Course Design & Development, Course Delivery, and Student Assessment (Figure 5.3). These key processes form the main portion of our approach to provide our students the "NYP Experience".

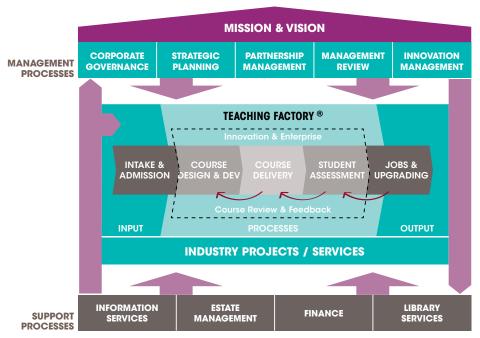


Figure 5.3 Key & Support Processes

Academic Quality Assurance

NYP's academic quality assurance spans our value chain from the initial intake to course design & development, delivery, assessment and review. We have boards and committees to guide, monitor and review processes that affect academic quality. School Advisory Committees advise on curriculum matters, while the Senate advises NYP on all academic matters. The Assessment Board, Syndicates and Committees ensure the quality and fairness of assessments and academic results.

Industry and Partnership Management

NYP has been able to capitalise on its capabilities to attract technology leaders and key industry players to collaborate in joint projects and initiatives, (e.g. applied R&D projects and development of capability, services and training programmes) to meet the needs of industry and Singapore. Over the years, many world class organisations and key industry players have set up innovation and specialist centres, business centres and incubators with NYP. NYP adopts a structured approach in identifying the right partners for project partnerships and collaborations (Figure 5.4).



Figure 5.4 Working with our partners







Chapter 6 – Customers

In line with its mission and business focus, NYP broadly segments its customers into three key groups; Students (local and international) in Pre-Employment Training (PET), Adult Learners (local and international) in Continuing Education and Training (CET) and Industry who engage NYP in industry projects and services. We place great importance on meeting our customers' needs and continually cultivate good relationships with them.

In particular, for our students in PET, our business is the provision of education & training services. They "buy" our service and, over the three years, gain knowledge, skills, and competencies while immersed in our Teaching Factory® environment. We offer them the NYP Students' Experience which is characterised by an open and stimulating environment, excellent curricula, caring and supportive staff, easily accessible help and support networks and a vibrant campus life. They leave NYP with much value-add. Many of them find employment in industry and we even help match-make and assist them to land those jobs.

We have established a holistic Customer Relationship Management framework to ensure customers' needs are not only met but relationships are also cultivated and nurtured before, during and after their engagement with NYP, with the aim of having delighted customers. NYP engages potential students or prospects even while they are still in secondary schools. Relationship building and customer care programmes are carefully managed throughout the different phases of their engagement – pre-admission, admission, enrolled, graduate. Customer care for industry starts from pre-engagement through listening and establishing their needs and providing options and information to finally support given after the delivery to facilitate technology transfer and prepare for the next generation of development.

Customer Definition

The products/services our customers require and their current and future requirements are identified and summarised in Figure 6.1. NYP's focused customer-centric approach not only takes care and responds to customer needs and stakeholder views but also anticipates offerings that customers may feel are important and going to be important in the future.

CUSTOMER SEGMENT	PRODUCTS/SERVICES	CURRENT REQUIREMENTS	FUTURE REQUIREMENTS
Students (prospects & enrolled) in Pre-Employment Training (PET)	Education through Diploma courses	Industry relevant courses Excellent facilities Excellent teaching methods Acquisition of necessary skills and knowledge Highly experienced staff Good learning experience Development opportunities Wide range of CCAs Employability and competitive starting salary Further education & advanced standing Nurturing and caring environment	New courses New electives/ tracks New modules
Adult Learners (prospects & enrolled) in CET and Part-time Formal courses	Upgrading & re-skilling opportunities through CET courses and Part-time Formal Award courses	Wide range of relevant courses Acquisition of necessary skills & knowledge Further education & advanced standing Flexibility and accessibility Excellent facilities Highly experienced staff Caring staff	New courses New electives/ tracks New modules
Industry engaging NYP in industry projects and services	Product development/ R&D. IP commercialisation. Services (consultancy, customisation)	Customised CET courses Wide range of courses Flexibility and accessibility Excellent facilities Highly experienced staff Strong development capabilities Projects and services that meet specification, cost, quality and timeline	Courses in new/ emerging areas New areas of capabilities and expertise

Figure 6.1 : Current & future customer requirements

Customer Relationship

NYP places great importance on meeting customers' needs and continually cultivates good relationships with them. There are clear touchpoints for the three customer segments together with service standards established to monitor and continually improve service. NYP endeavours to meet the needs of our customers that are in their best interest so that customers will obtain the NYP Experience.

The NYP Students' Experience

The NYP Students' Experience is characterised by an open and stimulating learning environment, excellent curricula, caring & supportive staff, easily accessible help and support networks, a vibrant campus life, great friendships, opportunities to benefit from, and moving on from NYP an enriched, all-rounder graduate who is delighted with the experiences at NYP.

Customer relationship development and therefore customer service is manifested in the philosophy of NYP's ACE (Adaptive, Caring and Earnest) service that projects Caring as central to NYP's service to customers and all staff to be Adaptive and draw on collective knowledge and expertise to deliver fast, accurate answers to meet customer needs fully and Earnestly.

The NYP Customer Relationship Management (CRM) Framework to manage and nurture relationships with the customers as part of the NYP Experience is illustrated in Figure 6.2.

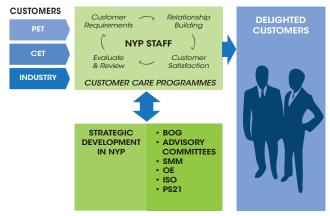


Figure 6.2: NYP Customer Relationship Management Framework

Customer Care Programmes

NYP has holistic Customer Care Programmes to meet customers' needs. Customer relationships are also cultivated and nurtured before, during and after their engagement with NYP. Figure 6.3 shows examples of customer care programmes throughout the entire engagement process for customers attending courses and those engaging NYP in industry projects/services.

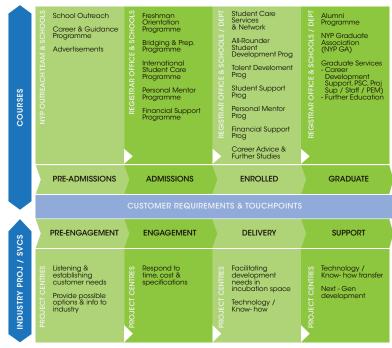
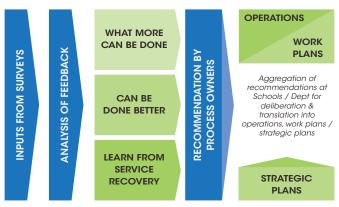


Figure 6.3: Customer Care Programmes

Customer Satisfaction

Substantial effort is expanded to gather the necessary inputs to fully understand customer needs, develop customer-centric focused touchpoints and deliver services, not only in a way the customer expected but also deliver the unexpected that the customer would value. The feedback received helps us determine the level of satisfaction and guides us to improve our customer satisfaction levels towards delighting customers. Through this process, inputs from survey/feedback mechanisms are translated into plans to be implemented immediately or into work plans or strategic plans (Figure 6.4).



Chapter 6
Customers

Figure 6.4: Overview of customer satisfaction improvement process

41









Chapter 7 – Results

Outcomes of success at polytechnics differ from those in businesses. We value both quantitative and qualitative indicators. We measure success by how well-received our graduates are in industry – the time taken to secure employment and starting salaries commanded. We value the recognition NYP has received from local and international organisations and the number and type of high value-added projects with and for industry and companies as well as applied R&D. We are also known for our strategic alliances with industry leaders as well as industry partnerships and collaborations. Other measures include successes at local and international competitions. NYP has received positive comments from many industry partners and visitors ranging from local officials, industry & academic leaders and foreign dignitaries.

In polytechnic education, the results are best measured by the effectiveness of the roles it plays. In Singapore's context, it is to provide quality education and training, and also to harness resources, expertise, creativity and innovation to support the development of business and industry and to complement Singapore's globalisation efforts. NYP has been able to distinguish itself from its peers by way of its unique pedagogical concepts, and its strong links with the industry. Its distinctive training methodology has successfully addressed the challenge of emulating a real world environment within an institutional setting. NYP also believes that industry linkages will enhance its ability to deliver better training and education, which will in turn benefit our students.

Pre-Employment Training (PET) Graduate Performance

The Graduate Employability and Starting Salary are two significant indicators that reflect the performance of our graduates. They illustrate the quality of our graduates which are highly endorsed by the industry. NYP's graduates continue to perform better than those of the other polytechnics in finding employment within six months of graduation and command a higher salary. (Figures 7.1a & b). In addition, our graduates have also received very positive feedback from their employers. Over the last five years, an average of 82% of employers have rated our graduates "good" or "better".

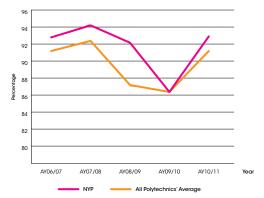


Fig 7.1a Graduate employment rate (within 6 months of graduation)

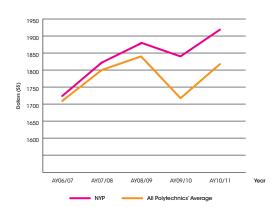


Fig 7.1b Overall mean starting salary of graduates (within 6 months of graduation)

Student Satisfaction

NYP's student-focused strategies to provide our students with an NYP Experience have been very successful and effective, as affirmed by the results of surveys conducted among students. NYP has consistently exceeded students' expectation of the quality of the courses, lecturers, industrial attachment programmes and their experience at NYP (Figures 7.2a & b). Our Graduate Overall Satisfaction rate is comparable or better than the top Institutes of Higher Learning (IHLs) in UK and Australia. More than 95% of our graduates agreed or strongly agreed that they are overall satisfied with their experience in NYP.

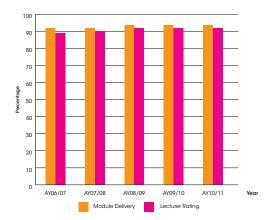


Fig.7.2a Percentage of students who rate lecturer/module delivery "good" or "better"

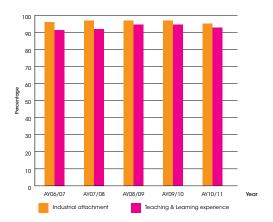


Fig.7.2b Percentage of students who rate teaching & learning experience and industrial attachment "useful" / "good" or "better"

Continuing Education & Training (CET)

Over the years, our efforts to support continuing education and training have been successful and the programmes were well received. The number of participants has increased over the years and customer satisfaction remain high (Figure 7.3).

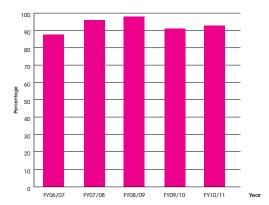


Fig 7.3 Percentage of CET participants who rate CET course "good" or "better"

Our ability to respond to the government's call for support to provide upgrading training for Singapore's workforce is visible. NYP is a pioneer in the WSQ journey, to equip people with the right skills so that they can stay employable or take up new careers in new industries.

- In 2005, NYP collaborated with WDA to jointly establish the Singapore Institute of Retail Studies (SIRS), Singapore's first CET Centre. To-date, SIRS' training programmes and services have benefited close to 38,000 individuals and 500 companies. NYP's contribution towards CET in Singapore received its strongest endorsement when it was conferred the WSQ Distinguished Partner Award by WDA (2010).
- In the field of Precision Engineering, EDB has injected a total investment of \$\$30m in setting up training facilities for Precision Engineering in NYP.
- The Professional Conversion Programmes in Allied Health and Nursing has also been set up in NYP. NYP is also the preferred partner of NTUC under the Skills Programme for Upgrading and Resilience (SPUR) scheme.





Photos courtesy of SIRS.

Training programmes and services from the Singapore Institute of Retail Studies (SIRS) have benefited close to 38,000 individuals and 500 companies

Chapter 7

Results

45

Innovation & Enterprise

Our long-term industry customers, have been increasing over the years.

The range of industries supported has also widened, which illustrates our industry service capabilities have achieved significant performance both in depth and breadth. Key partners include HP, IBM, Microsoft, Oracle, Nokia, Agilent Technologies, Siemens, Matsushita and Yokogawa. More than 92% of NYP's industry partners rated us innovative in the services provided. The number of industry customers served is about 200 annually (Figure 7.4). The cumulative number of patents filed (Figure 7.5), number of licensing agreements, number of IP-infused projects and number of productisation projects have increased over the years. These demonstrate our strength in capability development, which we leverage on, in support of industry.



Fig 7.4 Number of industry customers

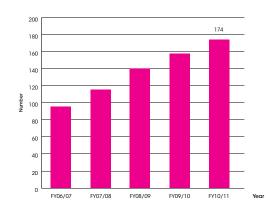


Fig 7.5 Cumulative number of patents

Industry Communities

NYP hosts six industry "communities" comprising industry partners, technopreneurs and start-ups. Through these communities, we help to catalyse the design, development and commercialisation of innovative products (Figure 7.6).



Fig. 7.6 Cumulative number of members in industry communities













Local / International Competitions

Competitions are effective platforms to gauge the quality of our training. These challenge and motivate our students as they are pitted against counterparts from other renowned institutions. NYP's performance reflects the calibre of our students and the quality of our teaching and learning.

NYP represented Singapore on the world stage by participating in international competitions (eg. Worldskills) (Figures 7.7a & b). Our students Ms Viridis Liew and Mr Tan Thiam Shui garnered the Albert Vidal Award (Best of the Best Award) in 2005 and 2009 respectively. NYP is the only education institution in the world to produce two Albert Vidal Awardees.

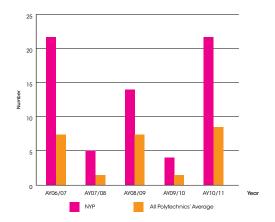


Fig 7.7a International Worldskills Competition – Total Awards

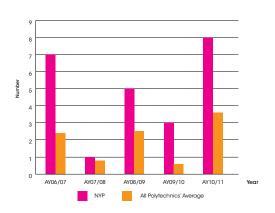
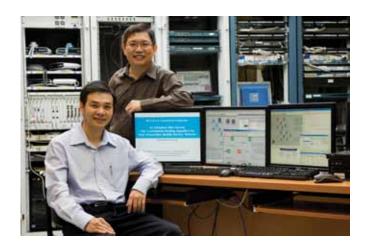


Fig 7.7b International Worldskills Competition – Gold Awards

Research & Development

NYP was one of the nine recipients of the inaugural 2008 NRF-POC scheme and the first polytechnic to be given the award. In February 2010 (3rd POC), NYP was awarded another grant, from among 72 proposals from the local universities and polytechnics. NYP was awarded again the fourth POC grant in October 2010. In addition, NYP has received R&D Grants from many other funding agencies, including MOE, NRF, NEA, IDA, etc.

NYP is one of the top ten local patent filers in Singapore. The number of patents filed per year averaged 21 and is significantly higher than other polytechnics. The cumulative number of patents filed totalled 174 (Figure 7.5), of which 110 were granted. With the inception of CTIC in 2008, commercialisation has increased by two-fold. NYP also has been invited to share with others on its IP commercialisation strategies.



Projects by NYP staff have been selected for the NRF-POC scheme

Chapter 7

Results

People Results

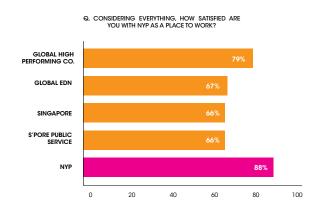
Capability and Staff Development

An average of 24% of staff's capacity is allocated to developmental activities; such as capability development, R&D, industry projects, etc. This keeps them current with prevailing industry best practices, future technology and business trends. Over the years, more than 400 staff have been through attachment programmes to enhance their knowledge and skills sets. Overall, NYP has invested an average of 4% of our payroll in staff training, and the average training hours per staff has reached close to 200 hours per year.

Staff Engagement

The Employee Engagement survey is an avenue to take stock of staff's level of engagement and satisfaction in working for NYP. Almost all staff rated NYP as an organisation to work for over the last three surveys conducted (Figure 7.8).

In a third party (Towers Watson) Employee Engagement survey in FY09/10, results show that in key areas – Leadership, Learning and Development, Teamwork and Engagement, NYP far exceeds the National, Global Education Institutions and Global Top Performing Companies' benchmarks (Figure 7.9).



90
80
70
60
60
40
30
20
10
Leadership Engagement Learning and Development Development Development Development MYP Sipore Nat1 Global Education Global High Perf Co

Fig 7.8 Benchmarks for staff satisfaction

Fig 7.9 NYP Employee Engagement Survey (2010)

Staff Satisfaction and Well-being

A multitude of programmes to support the needs of a diverse staff profile are in place for promoting and enhancing healthy lifestyle, healthy minds and healthy relationships, thus reflecting NYP's values and commitment as an employer of choice. Supportive employee management relationships are developed through various avenues reflected in the 3Gs framework. NYP also promotes work-life balance and provides pro-family environment for its staff.

Internationalisation

NYP has conducted over 300 technical and vocational training programmes for more than 5,000 participants from 50 countries, with high satisfaction levels noted (Figure 7.10). In particular, NYP has attained a reputable name in China where many of their provinces' authorities and agencies have emulated our Teaching Factory® concept for their technical education and training. Thousands of senior officials, principals, trainers, and teachers have been sent to NYP for training on our Teaching Factory® pedagogy, which has also been adopted by World Bank and Suzhou Industrial Park for technical reform in China.

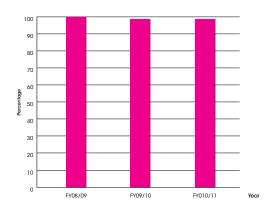


Fig 7.10 Percentage of international programme participants who rated programmes "good" or "better"



NYP has conducted over 300 technical and vocational training programmes for more than 5,000 participants from 50 countries





Chapter 7
Results

Glossary

3Gs	Go! Grow! Glow!	LSD	Learning and Staff Development
4Cs	Culture, Concept, Capability and	MDA	Media Development Authority
	Connection	MOE	Ministry of Education
ACE	Adaptive, Caring, Earnest	MOF	Ministry of Finance
AES®	Accumulated Experience Sharing	MOU	Memorandum of Understanding
AY	Academic Year	MVV	Mission, Vision and Values
BIC	Bioinnovation Centre	NRF-POC	National Research Foundation
		NKF-FOC	
BOG	Board of Governors	NITUO	- Proof-of-Concept
CET	Continuing Education & Training	NTUC	National Trades Union Congress
CITI	Centre for Information Technology	NYPAC	NYP in Action for the Community
	Innovation	NYPI	Nanyang Polytechnic International
CNC	Computer and Network Centre	NYPSA	NYP Staff Association
COI	Centre of Innovation	OE	Organisational Excellence
COIE	Centre of Innovation for Electronics	PCEO	Principal and Chief Executive Officer
CPLD	Centre for Professional & Leadership	PDC	Professional Development Centre
	Development	PE	Precision Engineering
CRM	Customer Relationship Management	PET	Pre-Employment Training
CTIC	Centre for Technology Innovation and	PQAF	Polytechnic Quality Assurance Framework
	Commercialisation	PS21	Public Services for the 21st Century
DyP	Deputy Principal	PSD	Public Service Division
EDB	Economic Development Board	QMS	Quality Management System
EM	Estate Management	R&D	Research and Development
EMS	Environmental Management System	RGO	Registrar's Office
ERM	Enterprise Risk Management	SDA	Staff Development & Appraisal Framework
FIRA	Federation of International Robosoccer	SHARE	Social Help & Assistance Raised by
FSI	French-Singapore Institute	JIIAKE	Employees programme
FY	Financial Year	SHRI	Singapore Human Resources Institute
GES		SIMS	Student Information
GSI	Graduate Employment Survey	SIIVIS	
	German-Singapore Institute	cinc	Management System
GSMs	General Studies Modules	SIRS	Singapore Institute of Retail Studies
HRM	Human Resources Management	SM	Senior Management
i-3D	I Dare-Dream-Do	SMM	Senior Management Meeting
i-3P	Innovative People, Projects & Patents	SOLID	Sharing, Organisational Learning,
i-3\$	Innovative Staff Suggestion System	02112	Interaction and Dialogue
I&E	Innovation & Enterprise	SPUR	Skills Programme for Upgrading and
IDA	Infocomm Development Authority		Resilience
IHLs	Institutes of Higher Learning	StaffAssist	NYP Staff Intranet
IP	Intellectual Property	TKK	Tan Kah Kee Competitions
IQS	Innovation & Quality System	TVET	Technical/ Vocational Education
ISO	International Organisation for		& Training
	Standardisation	WDA	Workforce Development Authority
JSI	Japan-Singapore Institute	WHP	Workplace Health Promotion
KIS	Knowledge & Information Systems	WITS	Work Improvement Teams
KM	Knowledge Management	wsQ	Work Skills Qualification









NANYANG POLYTECHNIC

is honoured to be conferred the

SINGAPORE QUALITY AWARD

We dedicate this Award to everyone, past and present, in the Nanyang Polytechnic community. The unwavering support of our staff, students, alumni and our esteemed partners have given us the confidence and determination to strive for excellence. Thank you!

This Award is a testament to our progress and it will serve as an inspiration for Nanyang Polytechnic to continue working towards our Vision of becoming A Premier Polytechnic of Global Distinction.











