







# CONTENTS

#### **FOREWORD**

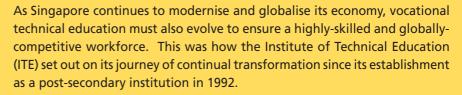
ORGANISATIONAL PROFILE	01
CATEGORY 1 - LEADERSHIP	09
CATEGORY 2 - PLANNING	15
CATEGORY 3 - INFORMATION	18
CATEGORY 4 - PEOPLE	23
CATEGORY 5 - PROCESSES	30
CATEGORY 6 - CUSTOMERS	36
CATEGORY 7 - RESULTS	43

**GLOSSARY** 

## **FOREWORD**

# Business Excellence Today, Global Excellence Tomorrow.

### **Evolving Transformation**



We adopted a total systems approach by restructuring our training courses, remodelling our curriculum and pedagogy, upgrading the physical infrastructure, enhancing staff capability and strengthening our organisational systems. Aligning our systems and processes against the **Singapore Quality Award** (SQA) framework, we built a dedicated team of leaders, managers and staff who are passionately committed to providing the best quality technical education for our students. In particular, we have inculcated a strong culture anchored on the *ITE Care* values, especially the care and concern for students, so as to ensure their success.

ITE's transformation was dynamic and fast-paced. Over a decade, two strategic roadmaps, the *ITE 2000 Plan* (1995-1999) and *ITE Breakthrough* (2000-2004), have helped transform ITE into a unique "one-of-its-kind" technical education institution in the world. From small campuses to mega-Colleges, we have consolidated into a "One ITE System, Three Colleges" Model of Education and Governance. In the process, we have created a unique ITE Brand of Hands-on, Minds-on and Hearts-on College Education that is now well-recognised locally and internationally.

The constancy of purpose and focus in our mission and vision has led to successful world-class results in our drive towards organisational excellence. ITE has become attractive to over a quarter of the school cohort in Singapore, with student enrolment growing by more than 100% from 1992. We have received consistently high student and graduate satisfaction with ITE's courses – 92% and 95% respectively – in the past few years. More importantly, our graduates have a place in today's global economy, demonstrating their high employability and potential for higher education and entrepreneurship. ITE's Brand Equity, reflecting the public image and perception of ITE, has observed a significant 47% improvement over the last eight years.



#### **Beyond Business Excellence**

Winning the SQA is a milestone in our journey towards organisational excellence. It means a national recognition of our transformation into a world-class post-secondary education institution. It also reaffirms our belief in offering a unique ITE Brand of *Hands-on, Minds-on and Hearts-on* College Education. It is about our attitude and pro-active approach in always asking ourselves how we can better serve, add value and meet the changing needs and expectations of our customers and stakeholders.

It is indeed an honour to receive the SQA. As the First Education Institution in Singapore to win the SQA, we are inspired to seek new challenges in our journey of transformation. Appropriately, the SQA will be our springboard to thrust ITE into the global arena, as we aspire to be **A Global Leader in Technical Education** under our third strategic roadmap, **ITE Advantage** (2005-2009).

As we strive for global excellence, I take this opportunity to share our rewarding experience of the SQA journey through this Report. While it attempts to shed light on the uniqueness of ITE's transformation, it also serves to remind us that our journey towards excellence is never-ending, and our work is never done. We will continue to do our best for our students and help Singapore develop a globally-competitive workforce.

**DR LAW SONG SENG** 

Director & Chief Executive Officer Institute of Technical Education

## ORGANISATIONAL PROFILE

#### ORGANISATIONAL DESCRIPTION

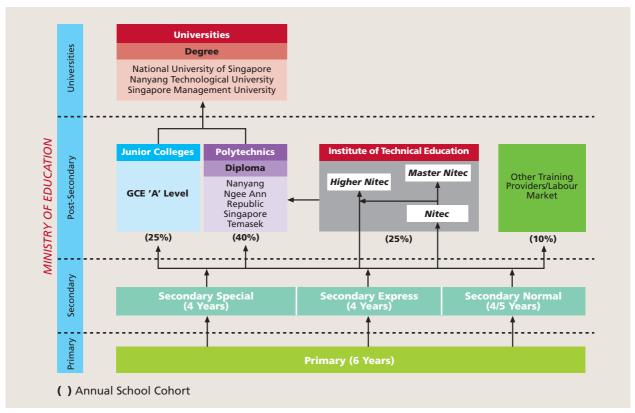
The **Institute of Technical Education**, Singapore, or ITE, was established as a post-secondary technical education institution in 1992 under the Ministry of Education (MOE). ITE is Singapore's principal provider of technical education and the principal authority in developing national occupational skills certification and standards to enhance the competitiveness of Singapore's workforce.

#### **Roles and Functions of ITE**

- To provide **Full-Time Education** to post-secondary students as part of preemployment training for the Singapore workforce
- To provide **Part-Time Education** to ITE graduates and other working adults to ensure "career relevance" in a fast-changing workplace
- To provide Industry-based Training to develop a competitive workforce through training partnerships with industry
- To develop National-level Certification and Standards in various industry sectors to support the global competitiveness of the Singapore workforce
- To provide Industry Linkages and International Collaborations to strengthen the relevance of ITE's Certification and Training System in a global economy

Our **key customers** include (1) **secondary school leavers** [General Certificate of Education 'Ordinary' & 'Normal' (GCE'O' & 'N') levels] who take up ITE's comprehensive and holistic **full-time education**, and (2) **ITE graduates and adult learners** who enrol in our diverse range of **part-time programmes**. Our programmes are highly valued by industry and serve as a benchmark for the region and beyond.

ITE is the single largest provider of post-secondary education in Singapore, taking in **25%** of the nation's annual secondary school cohort (a national target for ITE). Besides our full-time and part-time programmes, we also work closely with industry to offer a suite of industry-based programmes for the workforce. With unprecedented changes in ITE's operating environment, ITE has risen to the challenges of optimising its intellectual property and Vocational and Technical Education (VTE) expertise by offering our programmes overseas, too.



ITE's Position in Singapore's Education System

ITE plays a pivotal role in Singapore's economic progress and modernisation into a global economy. Our success has contributed towards a world-class technical workforce for Singapore, resulting in the perfect score Singapore has chalked up in the Business Environment Risk Intelligence (BERI) Labour Force Evaluation Measure (LFEM) Assessment, under the sub-index "Technical Skills", for four straight years since 2001.

Since its establishment as a post-secondary institution, ITE has succeeded in producing knowledgeable, well-trained, active, confident and active graduates for the global economy. Minister for Education, Mr Tharman Shanmugaratnam, said: "We take great pride in the fact that our ITE graduates have enjoyed high marketability among employers, even at times when the economic climate is less than favourable." The high employability of our graduates and strong market endorsement by employers, politicians as well as local and overseas partners, bear strong testimony to the success of ITE Education, its value and outcomes for its customers and stakeholders.

#### 1. ORGANISATIONAL ENVIRONMENT

**Products and Services.** ITE offers four key programmes. The uniqueness of our full-time programmes stems from our unique "Hands-on, Minds-on, Hearts-on" Education Philosophy, which nurtures all-rounded students under an ITE College Brand of Education.

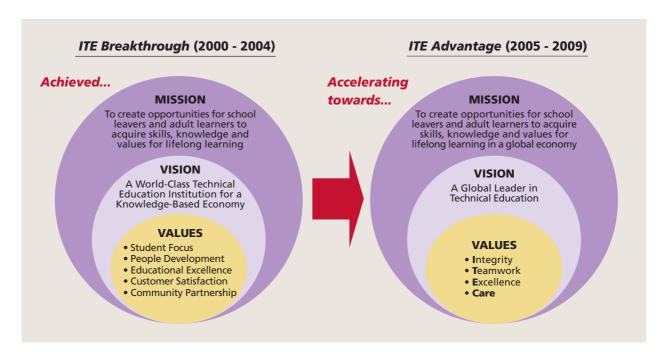
Key Programmes	Product Range	
1) Full-time (F/T) institutional programmes leading to <i>Nitec</i> and <i>Higher Nitec</i> certifications for GCE 'O' and 'N' secondary school leavers	Wide choice of programmes (13 Higher Nitec and 28 Nitec) in Applied & Health Sciences, Business & Services, Engineering and Info-Communications Technology	
2) Part-time (P/T) programmes in <i>Master Nitec/Higher Nitec/Nitec</i> , short courses and other academic programmes offered on a modular basis for ITE graduates and adult learners. This includes Fast Track, Top-up Certification and <i>Post-Nitec</i> under <i>ReNEW</i> Scheme	<b>134 Master Nitec/Higher Nitec/Nitec</b> skills-based modular courses, <b>5</b> trainer instructional programmes and <b>22</b> academic subjects from Secondary 1 to Pre-University 2 levels	

#### **Key Programmes**

- Industry-based programmes developed with industry partners through Approved Training Centre (ATC), Approved Training Provider (ATP) and Certified On-the-Job Training Centre (COJTC) Schemes
  - Under the ATC Scheme, ITE endorses companies' training as part of fulfilling the developmental needs of their manpower. It promotes skill standardisation leading to nationally-recognised ITE Certifications
  - ITE also accredits private schools to conduct its courses leading to nationallyrecognised qualifications under the ATP Scheme. ITE is the only public institution in Singapore, which accredits other educational providers to offer its national certification courses
  - ITE also certifies companies with quality OJT as COJTC Centres
- 4) International Programmes offered through the Overseas Training and Certification (OTC) Scheme for local providers offering ITE courses on a commercial basis outside Singapore, as well as International COJTC accreditation to support COJTC partners with overseas operations. ITE is the first and only public education institution in Singapore to offer its national qualifications (International Higher Nitec and Nitec) overseas

**ITE Education Model.** Upholding the ITE Brand of Education is a **"One ITE System, Three Colleges"** Education and Governance Model introduced in January 2005. The Model builds on the ITE brand name and identity under "One ITE System" to deliver consistent standards, quality programmes and successful graduates. The three Colleges (**ITE College East, ITE College West** and **ITE College Central**) are now empowered with greater autonomy to develop niche courses, in addition to delivering ITE's trademark courses, with accountability for desired outcomes. Each College will build its competencies by aligning with broad industry clusters under four Schools – Engineering, Business & Services, Applied & Health Sciences and Info-Communications Technology – for enhanced responsiveness.

**Mission, Vision and Values (MVV).** Since our establishment in 1992, ITE's MVV (or **ITE Heartbeat**) has, driven by its visionary leaders, undergone major reviews under Three Waves of Transformation.



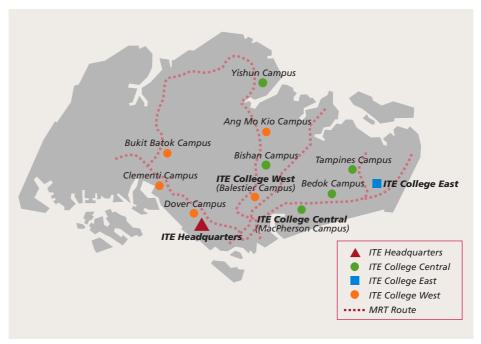
The first Two Waves of Transformation propelled by its strategic plans, the *ITE 2000 Plan* (1995 -1999) and *ITE Breakthrough* (2000-2004), has revolutionised the National VTE System in Singapore into a unique 'one-of-its-kind' in the world, befitting ITE's status as a World-Class Technical Education Institution. ITE is now recognised not only locally, but internationally, for the quality of its programmes, facilities, successful graduates and unique organisational practices. From 2005 onwards, ITE, guided by the latest vision of its newest plan, *ITE Advantage* (Third Wave), will see itself continuing its transformation with courage and determination to innovate, compete and benchmark against the league of global leaders in VTE.

**Employee Profile.** The successful transformation of ITE would not have been possible without our people who live the **ITE Heartbeat**. ITE has the unwavering support of its **2,200** strong professional and highly-engaged staff who show strong passion in the roles and mission of ITE. Through their diverse knowledge, skills, expertise and talents, our people form the core pillar, which supports the successful transformation of ITE over the last decade.

Job Category	Number (%)	Qualifications	Number (%)
Management & Supervisory Staff	233 (11%)	Degree & above	800 (37%)
Teaching Staff	1,225 (56%)	Diploma &	769 (35%)
Non-Teaching Executive Staff	332 (15%)	Advanced Diploma	
Support Staff	391 (18%)	Others	612 (28%)
Total	2,181 (100%)	Total	2,181 (100%)
(Non-Teaching includes Management and Supervisory Staff)			

**Major Equipment, Facilities and Technologies.** Under our "One ITE System, Three Colleges" Education Model and Governance, the set-up comprises an ITE Headquarters and three ITE Colleges, with 11 campuses spread across Singapore. We occupy a total land area of **48.2 hectares**, with a total built-up area of **402,100**,

square metres. ITE College East, operational in January 2005, has set a new benchmark in Singapore and the world, for providing a "tertiary" standard learning campus for the technically-inclined school cohort, who would otherwise have been marginalised in most countries. As for ITE College West and ITE College Central, they will be transformed into two comprehensive Colleges by 2009 and 2011, respectively, under the ITE Expansion and Campus Consolidation Plan announced by the former Prime Minister in 2001.



One ITE System, Three Colleges

ITE invests heavily in its infrastructure and training facilities to ensure that students learn in a stimulating and enriching environment. ITE's training facilities are equipped with the latest technology, and its equipment is of world-class standards. ITE continually updates and renews its equipment through its replacement and augmentation of training equipment exercises, conducted every three to five years per programme.

Under its IT Masterplan 2000, ITE has also implemented a comprehensive and integrated information systems architecture, supported by two Best Practice educational innovations, viz, **eTutor Learning System** and **eStudent Administration System**, to provide a fully-integrated online learning environment. High speed (5MB) broadband access is used and "hotspot" wireless access is available at all campuses. ITE students enjoy a comprehensive range of facilities and amenities catered to total development, such as modern workshops, laboratories, smart IT classrooms, sports and recreational centres and performing arts studios and theatres.

#### 2. ORGANISATIONAL RELATIONSHIPS

**Relationship with Parent Organisation.** ITE is guided by the broad national education policies and directions set by MOE. We are accountable to MOE for the effective use of the ordinary and development budgets allocated.

**Relationship with Customers.** ITE's key market and customer segments comprise **secondary school leavers** from GCE 'O' and 'N' cohorts, who take up full-time educational programmes, as well as **ITE graduates and adult learners** who take up part-time programmes. Their key requirements are:

Key Customers	Key Market/Customer Requirements
Full-time students	<ul><li>Responsiveness</li><li>Relevance</li><li>Value</li><li>Quality</li></ul>
Part-time students	<ul><li>Responsiveness</li><li>Value</li><li>Flexibility and Accessibility</li><li>Quality</li></ul>

Other indirect customers include participants in ITE-accredited IBT programmes offered under the ATC, ATP and COJTC Schemes, as well as employers who sponsor their employees for training at ITE.

**Relationship with Suppliers and/or Partners.** Our partners and suppliers play an instrumental role in enhancing the organisational capabilities of ITE and the achievement of our visions under our previous two strategic plans. Our **Key Partners** include:

- (1) School Partners
- (2) Training Partners
- (3) MOU Partners

ITE works closely with its partners to enhance the diversity of its product and services and strengthen its core capabilities. ITE also benchmarks with VTE leaders of international repute for its pursuit of global leadership in technical education. It has forged strategic alliances with institutions in Canada, Germany, Hong Kong, and the United States of America, viz:



- Ministry of Education, Youth and Sports, Baden Württemberg, Germany
- Gottlieb-Daimler-Schulen (GDS) I & II, Baden Württemberg, Germany
- Ohio State University, United States of America
- Southern Alberta Institute of Technology, Canada
- Hong Kong Vocational Training Council

#### Our **Key Suppliers** comprise:

- (1) Part-time teaching personnel
- (2) Works and building contractors
- (3) Other term contractors and suppliers

#### **ORGANISATIONAL CHALLENGES**

#### 1. COMPETITIVE ENVIRONMENT

ITE's VTE is unique in Singapore and the world. We occupy a special and indispensable position in Singapore's education system. As the only government-financed post-secondary technical education institution offering *Nitec*-level Certificates in Singapore, ITE does not have any direct competitors. The "main competitors" for our students are the "labour market" and private education providers. ITE takes in a quarter of an annual school cohort.

#### 2. ORGANISATIONAL DIRECTIONS

The organisational directions of ITE are articulated in the **Four Goals** of our third strategic blueprint, *ITE Advantage*, in support of our Vision to be *A Global Leader in Technical Education*. ITE has two previous strategic blueprints with their respective Visions, *ITE 2000 Plan* (1995-1999) and *ITE Breakthrough* (2000-2004).

The Four Goals to realise ITE's Vision and build the next generation of globally-competitive and highly-skilled workforce are:

Goal 1 - An ITE Education for a Global Economy

Goal 2 - Lifelong Employability for ITE Graduates

Goal 3 - An Increased Global Presence for ITE

Goal 4 - An Enhanced Capability for Organisational Excellence

#### 3. STRATEGIC CHALLENGES

As an institution providing market-relevant programmes to school leavers and adult learners, ITE operates in a highly-volatile environment. ITE has aligned itself with national imperatives and directions and responded to rapid changes in our socio-economic environment, such as a better educated population, with higher expectations, and impact of changing technology.

The key **Strategic Challenges** facing ITE are:

- (1) Relevance
- (2) Responsiveness
- (3) Resilience

ITE has overcome many challenges over the last decade in the pursuit of Total Organisational Excellence (TOE). We have earned accolades and recognition as a "World-Class" VTE institution by local politicians, visiting dignitaries and international technical education experts. As we steer along our TOE journey, the many awards which we have received (**Table 1**) will continue to keep ITE's name up in lights for many years to come.

**Table 1: Key Organisational Excellence Awards (1999-2005) Achieved by ITE** 

Title/Name of Award	Year of Award	Conferring/Organising Body
1. Singapore Quality Award	2005	SPRING Singapore
2. Distinguished Award & Public Service Award for Organisational Excellence	2005 2003	Prime Minister's Office
3. Singapore Quality Class	1999	SPRING Singapore
4. ISO 9001 : 2000 Certification for ITE's Quality Management System	2002	International Organisation for Standardisation
5. People Developer Award	2000	SPRING Singapore
6. Outstanding Innovation & Quality Circle Organisation Award	2005 2000 (& 1996)	SPRING Singapore
7. 2002 Commonwealth Association for Public Administration and Management (CAPAM) International Innovations Award (Semi-finalist)	2002	Commonwealth Association for Public Administration and Management
8. NTUC Medal of Commendation (CEO)	2001	National Trades Union Congress
9. Singapore HEALTH Award  • Platinum  • Gold  • Gold  • Gold  • Silver  • Silver	2005 2004 2003 2002 2001 2000	Health Promotion Board
10. SHARE Programme Award	2005 2004 2003 2002 2001 2000	National Council of Social Service
Sporting Singapore Inspiration Award     (known as Singapore Sports ACE Award prior to 2003)     - Sporting Singapore Inspiration Award - Organisations (Educational Institutes Category)     - Commendation Award	2004 2003	Singapore Sports Council
12. Public Relations in the Service of Mankind (PRISM) Award - Excellence Award for Best Public Campaign (Government)	2000	Institute of Public Relations
13. Singapore Marketing Award (Plaque of Recognition)	2000	Marketing Institute of Singapore
14. Corporate Volunteer Award (Public & Government-Linked Sector) (Commendation)	1999	National Council of Social Service
15. <b>Meritorious Defence Partner Award</b> (Formerly SAF Award for Employers)	2005 2004 2003	Ministry of Defence
16. Asia MIS Innovation Award (Finalist)	2003	MIS Asia
17. MIS Asia Top 100 Users (ITE was among top 10)	2002	MIS Asia
18. <b>CIO Asia Top 100</b>	2002	CIO Asia

## **LEADERSHIP**

### 1.1 SENIOR EXECUTIVE LEADERSHIP

#### **Visionary Leaders**

The senior executive leadership of ITE is collectively known as the **Group of 7** or **G7**. The G7 comprises Director & CEO/ITE, his three Deputy CEOs and the three Principals of ITE Colleges. The G7 takes the lead in developing ITE's Mission, Vision and Values (MVV), also known as **ITE Heartbeat**, which has undergone three reviews since ITE was established in 1992. The latest **ITE Heartbeat** is shown in **Figure 1.1**.

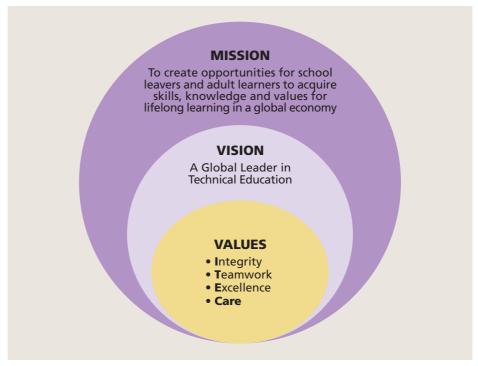


Figure 1.1: ITE Heartbeat (MVV)

#### **Total Organisational Excellence**

To bring staff along the journey towards Total Organisational Excellence (TOE), the G7 also formulated a **TOE Framework** in 2000, which was further refined in 2005 to reflect the new *ITE Advantage* Plan (see <u>Figure 1.2</u>).

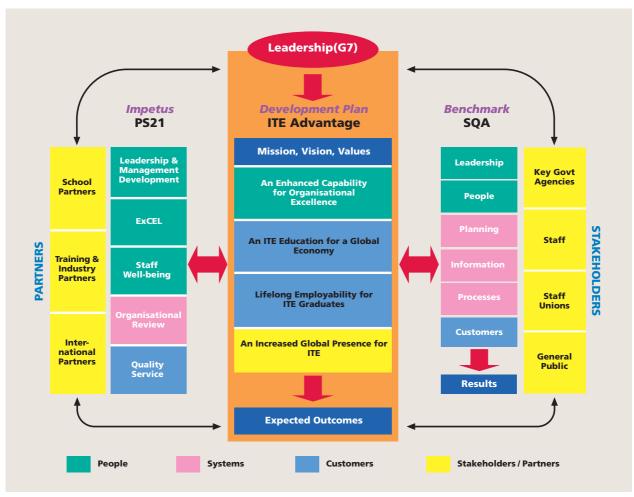


Figure 1.2: ITE's Total Organisational Excellence (TOE) Framework

**Engaging Staff.** The G7 communicates the **ITE Heartbeat** to all staff and stakeholders through different platforms and channels shown in **Figure 1.3**. These platforms include *Upfront with CEO Programme*, CEO Communication Sessions, Leadership Forums/Management-Staff Dialogues and Corporate Work Plan Seminar (WPS).

**Engaging Other Stakeholders.** The G7 uses different communication strategies to reach out to different stakeholders. For example, the Principals communicate through half-yearly Principals' Dialogues with students, and even personally teach a module on "Personal Effectiveness" every semester. As for ITE's industry partners and professionals, Deputy CEO (Industry) and Deputy CEO (Academic) work closely with them through industry visits, dialogues and focus groups.

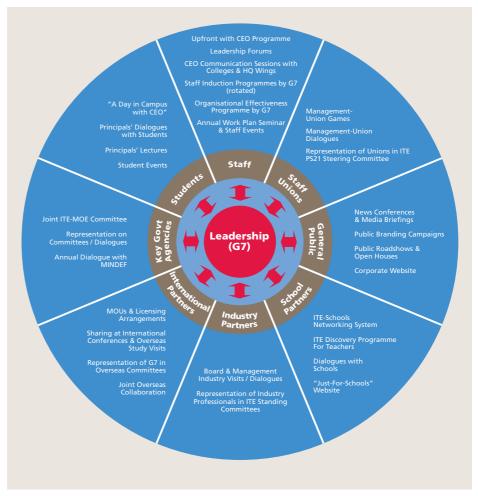


Figure 1.3: Extensive Communication of "ITE Heartbeat" by G7

## 1.2 ORGANISATIONAL CULTURE

#### The ITE Way of Life

ITE Values are represented by *ITE Care*, which stands for Integrity, Teamwork, Excellence and Care. These values were formulated as a result of feedback from a staff e-poll.

To help staff internalise the values, <u>Table 1.4</u> outlines how *ITE Care* is translated into policies and expected behaviours in ITE.



Values	Policy (Belief Statement)	Expected Behaviours
Integrity	We must be honest and sincere in our words and actions towards others	<ul> <li>A good 'blend' of honesty and sincerity in words and actions towards others</li> <li>True to profession and organisation</li> </ul>
Teamwork	We must work and help each other as a team so that we can achieve more	<ul> <li>Work as a team to help each other</li> <li>Engage in collaborative partnerships for win-win outcomes</li> </ul>
Excellence	We strive to give our best in everything we do to add value to our customers and stakeholders  ITE Quality Policy  We are committed to providing quality technical education for our customers through the continual pursuit of organisational excellence  ITE Innovation Policy  We are committed to supporting creativity and innovation in the pursuit of organisational excellence	<ul> <li>Strive for higher benchmarks to build the best organisation</li> <li>Continue to improve and innovate to add value to our customers and other stakeholders</li> </ul>
Care	We care for our staff, customers and other stakeholders, the community and environment  ITE Service Mission We Make Things Happen! We are committed to service excellence for our customers, partners and the public  ITE Community and Environmental Policy We care for the community and environment through the use of technical skills	<ul> <li>Go the extra mile, treating others the way we like others to treat us</li> <li>Be thoughtful to others and show genuine interest</li> <li>Be mindful of the environment and minimise wastage</li> </ul>

Table 1.4: Policies and Expected Behaviours to Promulgate *ITE Care* 

#### The Desired ITE Care Culture

To permeate *ITE Care* to all staff, ITE uses various approaches and platforms, as shown in the Framework in **Figure 1.5**.

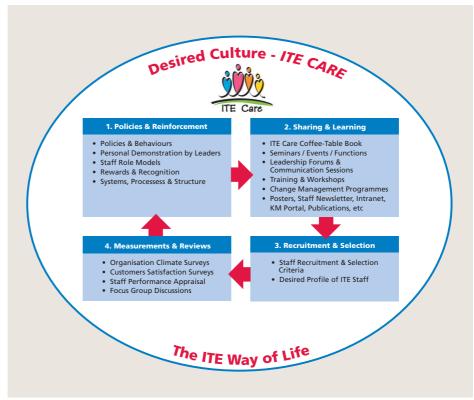


Figure 1.5: Promoting Desired Culture - ITE Care

**Sharing and Learning Our Way of Life.** Since the announcement of **ITE Care** by the CEO in 2003, HOEs have communicated the intent and expected behaviours

of *ITE Care* to their staff. Communication materials have also been introduced like the *ITE Care* book (*Care for a Cuppa?*), which shares stories on how ITE staff embrace and exemplify the core values. Seminars on specific values, such as Service Excellence, Customer Service and Environmental Protection were also conducted. *ITE Care* is also promoted and communicated to staff through the staff's electronic newsletter (InTunE).



ITE Care Book

## 1.3 RESPONSIBILITY TO COMMUNITY AND THE ENVIRONMENT

#### **ITE's Community & Environmental Policy and Goals**

ITE is committed to the community and environment, as reflected in its core value "Care" (which includes "care for the community and environment"), as well as its Community and Environmental Policy. ITE contributes to the community by leveraging on the expertise and capabilities of staff and students, through the four goals shown in **Table 1.6**. Our Community and Environment Involvement is spearheaded by the **Work-Life Unit** (set up in 2001) and the Environmental Management Committee (EMC) (set up in 2002).

ITE Community & Environmental Policy We care for the community and environment through the use of technical skills			
Goals	Programmes / Activities		
Share ITE's VTE Expertise     & Knowledge  Our Community Environmental Policy	<ul> <li>Global Community</li> <li>Plan, Prepare and Lead the Singapore Team in Biennial WorldSkills Competition (WSC)</li> <li>Representation of G7 in international organisations (eg. HKVTC, WSC, SEAMEO)</li> <li>Organisation / Presentation / Sharing at International Conferences (eg. USA, Germany and China)</li> <li>Learning Visits by Overseas Institutions</li> </ul>		
The second secon	<ul> <li>Organise and lead local version of WorldSkills Singapore (WSS)</li> <li>Organise Local Conferences / Seminars (eg. Tay Eng Soon Symposium)</li> <li>Conduct Free Public Courses during S'pore Learning Festival &amp; ITE Open Houses</li> <li>Co-organise Competition / Forum to benefit the community (eg. 2003 Skills Competition &amp; Public Forum for the Physically Disabled)</li> </ul>		
2) Contribute to Social and Community Work	Community Care  • SHARE Programme  • National Charity & Community Programmes  • ITE Community Care Programmes / Activities		
	General Volunteering Activities  • Student Overseas Assignment Programme		
3) Protect Environment (Promote 3Rs - Reduce, Re-use & Recycle)	<ul> <li>Training and education- Talks, exhibitions &amp; campaigns</li> <li>Student Environment Care Programmes</li> </ul>		
4) Extend ITE's Facilities & Resources	Sharing of Facilities with Community  ITE-Wide Community Projects Involving Technical Skills  • ITE SAFE Home™ Programme in partnership with all CDCs (to install safety features at HDB homes of elderly poor)		

Table 1.6: ITE's Community & Environmental Framework

## **PLANNING**

## 2.1 STRATEGY DEVELOPMENT & DEPLOYMENT

#### ITE's Waves of Transformation: A Planning Success Story

Under G7's visionary leadership, ITE has undergone major reforms since its formation as a post-secondary education institution in 1992. The most significant impact of ITE's transformation from 1995 to 2004 is the turnaround in the Brand Equity of ITE, resulting in a record high Enrolment of 21,800 students in 2004, compared to 10,250 in 1995, a tremendous 113% increase, and the high 47% increase in its Brand Equity, from 34% in 1997 to 50% in 2005. These achievements are not coincidental. They are the result of forward and rigorous planning by ITE leaders and staff, through the strong foundation and infrastructure,

which have been put in place over the last decade under our two Strategic Blueprints, viz, *ITE 2000 Plan* (1995-1999) and *ITE Breakthrough* (2000-2004). These two strategic roadmaps led to Two Waves of Transformation for ITE, thrusting ITE into the global playing field. In 2005, ITE launched its Third Strategic Blueprint, *ITE Advantage* (2005-2009), which is the Third Wave of Transformation to propel ITE into *A Global Leader in Technical Education*.

#### **Key Strategic Challenges**

In charting ITE's future directions, the **key strategic challenges** for ITE as a public education institution are:

- (1) Relevance
- (2) Responsiveness
- (3) Resilience

#### **Integrated Planning Framework**

ITE adopts an integrated and aligned planning framework to develop and cascade various plans in a holistic manner, using the Balanced Scorecard (BSC) approach to align Key Performance Indicators (KPIs) to Strategic Objectives.

ITE's long-term plan is supported by its short-term **Annual Plans**, comprising the **Corporate Work Plan (CWP)** and various **Functional Plans**. Together, these Plans are supported by an Annual Corporate Budget Plan. The Plans are deployed to the establishments and individuals through the formulation of **Establishment**, **Department and Individual Work Plans** that are aligned with corporate directions and objectives.

#### **Long-Term (5-Year) Strategic Planning Process**

ITE adopts two separate planning processes for developing and deploying its long-term and short-term plans. Having gone through three comprehensive strategic planning processes - from *ITE 2000 Plan* (1995-1999) and *ITE Breakthrough* (2000-2004), to its third strategic plan, *ITE Advantage* (2005-2009), ITE has, through cycles of review and improvement, put in place a holistic 7-step long-term strategic planning process (Figure 2.1).

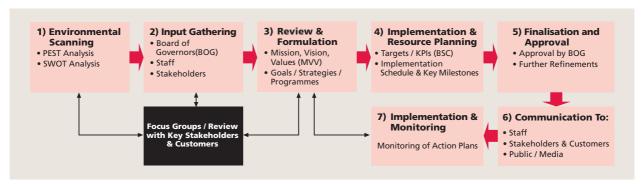


Figure 2.1: Long-term Strategic Planning Process

The uniqueness of strategic planning in ITE stems from its emphasis on three important features:

- (1) External orientation
- (2) Customer focus
- (3) Consultative approach

#### **Short-term (Annual) Planning Process**

The long-term strategic plan sets the broad directions for the formulation of the Annual CWP. The annual corporate planning process is shown in **Figure 2.2**:

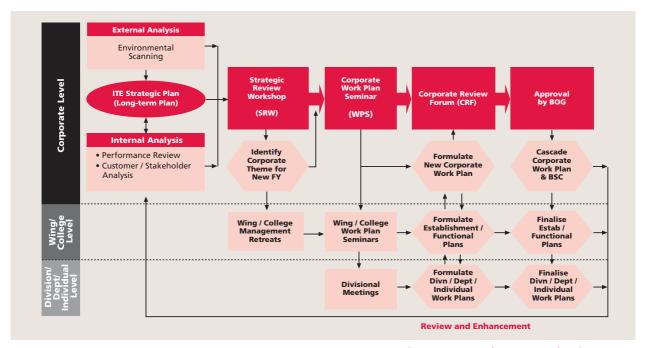


Figure 2.2: Annual Corporate Planning Process

#### **Measuring Strategic Goals and Objectives**

From the strategic planning process, long-term and short-term goals (including stretch targets) are set to spur ITE onto a common direction and purpose.

#### (A) Long-term Vision and Strategic Goals

The vision of ITE under the *ITE Advantage* Plan (2005 - 2009) is to be *A Global Leader in Technical Education*. The long-term Strategic Scorecard of ITE is at Table 2.3.

	VISION: A Global Leader in Technical Education				
Strategic Goals Perspective Key Performance Indica			Key Performance Indicators		
1	Goal 1 - An ITE Education for a Global	Stakeholder	1	Cohort Capture Rate	
	Economy Economy	Customer	2 3 4	Graduate Employment Rate (Fresh Graduate) Employers' Satisfaction with ITE Graduates Students' Satisfaction	
		Process	5	Training Success	
2	Goal 2 - Lifelong Employability for ITE Graduates	Customer	6 7 8	Participants' Satisfaction Employers' Satisfaction Graduate Employment Rate (After 10 Years)	
3	Goal 3 - An Increased Global Presence for ITE	Stakeholder	9 10	Brand Equity Index Active Overseas Partnerships	
4	Goal 4 - An Enhanced Capability for	Stakeholder	11	Organisational Excellence Score	
Organisa	Organisational Excellence	Learning & Development	12	Staff Satisfaction Index	

Table 2.3: ITE's Long-term Strategic Scorecard

#### (B) Responsive Short-term Strategic Objectives and Targets

The annual Strategic Objectives for ITE under its Annual CWP are summarised in **Table 2.4**.

Corporate Perspective	Strategic Objective (SO)	
Stakeholder	SO1 SO2 SO3	Brand Favourability High Cohort Capture Organisational Excellence
Customer	SO4 SO5 SO6	Programme Acceptance Education Outcomes Student Satisfaction
Process	SO7 SO8 SO9	Optimal Value Add Training Success Effective Resource Management
Learning & Development	SO10 SO11 SO12	Favourable Organisation Climate High Employee Involvement Learning Opportunities

Table 2.4: ITE's Strategic Objectives in Annual Plan

## INFORMATION

### 3.1 MANAGEMENT OF INFORMATION

#### **Information for Planning and Performance Review**

To support its planning and performance review, ITE has a systematic process to select and collect information from all sources. Our information management is supported by an Information System (IS) architecture (see **Figure 3.1**), which comprises key academic systems, such as **eStudent** and **eTutor**, as well as other functional and information management databases such as HR Self-Service, eIDEAS, Electronic Training Directory, Data Warehouse, Knowledge Management (KM) Portal, eNewsletter and Establishment Databases.

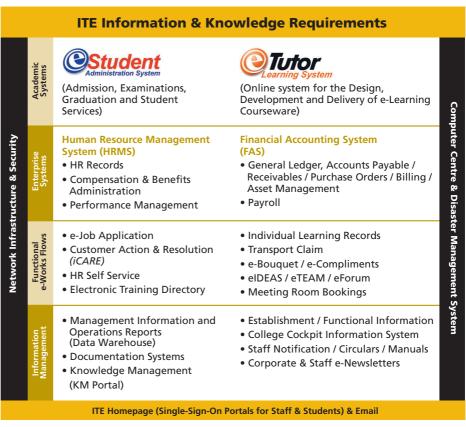


Figure 3.1: ITE's Information System (IS) Architecture

#### **Key Information Requirements**

The key information collected by the respective Committees and Process Owners for use in the formulation and review of strategic, annual establishment and functional plans are summarised in **Table 3.2**. The information collected is aligned to Strategic Objectives defined in the ITE Scorecard.

Ke	y Information Requirements	Systems
Strategic Planning Information  - Trends & Development in Political, Economic, Social & Technological (PEST) Environment  - Strengths, Weaknesses, Opportunities & Threats  - KPI Results		Lotus Notes / Staff Portal     Knowledge Portal     College Cockpit Information System     Online Customer Action & Resolution (iCARE) System     elDEAS (electronic SSS)
Market/ Customer Planning & Review	Customer-focused Information - Industry / Market Trends - Customer / Student Requirements & Satisfaction	
Products & Services - Curriculum Development & Delivery	Market & Key Process Information  - Industry Trends / Market Information  - Manpower Projection / Needs  - Efficiency / Outcomes of Curriculum Design & Delivery	<ul> <li>Lotus Notes / Staff Portal</li> <li>Knowledge Portal</li> <li>eTutor</li> <li>College Cockpit Information System</li> <li>ISO 9001 QSM Database</li> <li>eIDEAS</li> </ul>
Key Operational & Support Functions	Information for Support Processes  Examples: Academic Planning & Admission Facilities Management Financial Planning & Budgeting Marketing	<ul> <li>Lotus Notes / Staff Portal</li> <li>eStudent</li> <li>Knowledge Portal</li> <li>Financial Accounting System (FAS)</li> <li>Electronic Training Directory (ETD) (Staff)</li> <li>eIDEAS</li> <li>Functional Information Databases</li> </ul>

Table 3.2: Key Information Requirements

#### **Information Reliability and Security**

To ensure stringent information integrity and reliability, ITE adopts various standard protocols:

- (1) New applications and systems are subject to **stringent acceptance tests** by data owners and IS Specialists based on system accuracy, response time, and ease of use and maintenance;
- (2) All data inputs are validated by content owners;
- (3) Regular audit trails are conducted to detect data irregularities, if any; and
- (4) **User ID** and **Password** authentication for access to system.

To prevent any threats to our IS system, an **IT Security Framework** has been put in place. Critical IT systems and services are available for business continuity in times of crisis, under the **IT Continuity Plan**. The IT Continuity Plan also covers disaster recovery of ITE's major systems services, such as student admission, student support and examination services, HR services, finance services, email, application database and web services.

#### **Information Accessibility**

To ensure accessibility, ITE provides users with timely and efficient access of information through a variety of IT-based and non IT-based channels shown in **Table 3.3**.

Target Group(s)	IT-Based Platforms	Non IT-Based Platforms
Internal Staff & Unions	ITE Homepage Staff Portal Lotus Notes Functional e-Work Flow (eg. elDEAS, eTEAM, ABLE) Email System KM Portal	<ul> <li>Corporate and Establishment Work Plan Seminars</li> <li>Speeches</li> <li>Annual Corporate Highlights Video</li> <li>Management Communication Platforms</li> <li>Dialogues with Unions</li> <li>Roadshows, InTunE (Staff Newsletter)</li> <li>InfinITE (Corporate Newsletter)</li> <li>Theme-specific handbooks and brochures</li> </ul>
External Customers (Students), General Public, Government Agencies, Partners & Suppliers	ITE Homepage (includes customised Portals for Students, Schools, Industry & Alumni)  eStudent  eTutor	<ul> <li>ITE Programme Prospectuses / Brochures / College Newsletters</li> <li>Principals' Dialogues With Students</li> <li>ITE Open Houses, Roadshows and Exhibitions</li> <li>Experience ITE Programme</li> <li>Visits to Industry / Dialogues with Partners</li> <li>Networking &amp; Communications Activities</li> <li>Media Releases</li> <li>Sharing at International Symposiums / Conferences</li> <li>Visits for Local and International Partners</li> <li>Supplier Feedback Dialogues &amp; Evaluation Ratings</li> <li>ITE Regular Publications: Moving On (success stories of ITE graduates), InfinITE (Corporate Newsletter), IgNITE Magazine (for Alumni), Annual Report</li> </ul>

Table 3.3: Summary of Key Information Dissemination Channels

#### **Knowledge Management**

Supporting frameworks and systems are also put in place to facilitate open and timely dissemination and sharing of information for learning and innovation. Besides various communication and sharing platforms and mechanisms, ITE also developed a comprehensive **KM Framework** to capture and share key ideas and learning points for the continual learning and development of staff. At the heart of the Framework is the **KM Portal**, which facilitates knowledge creation, capture and sharing. KM Portal comprises **seven Knowledge Bases**:

- (1) Corporate
- (2) Curriculum Development
- (3) Customers & Partners
- (4) Human Capital
- (5) Student Management
- (6) Teaching Effectiveness
- (7) Technology



ITE Knowledge Portal

#### **Organisational Planning and Review**

ITE uses various business analysis and management tools to support its organisational planning and review. These include:

- PEST/SWOT\* Analyses
- Balanced Scorecard
- Feature Analysis (FA) Model
- Net Economic Value (NEV) Framework
- Surveys
- Comparative and Benchmarking Studies

(\*Note: **PEST** stands for Political, Economic, Social and Technological; **SWOT** stands for Strengths, Weaknesses, Opportunities and Threats)

## 3.2 COMPARISON AND BENCHMARKING

#### **Comparison and Benchmarking for Organisational Excellence**

To manage the benchmarking process, ITE formulated the ITE Comparison and Benchmarking Process in 2002, as shown in Figure 3.4.

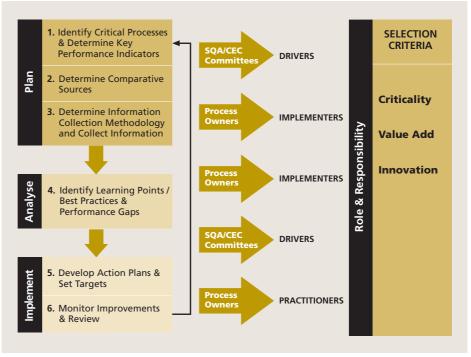


Figure 3.4: ITE's Comparison & Benchmarking Process

#### Types of Comparison and Benchmarking in ITE

Two main types of comparison and benchmarking are conducted in ITE:

Internal Comparisons and Benchmarking. These include strategic KPIs that impact educational outcomes and student learning, such as Enrolment, Student Satisfaction and Cost of Training. The three ITE Colleges also compare their processes and share best practices.

External Comparisons and Benchmarking. Although ITE has no direct competitors, we collect external benchmarking information and best practices from local and overseas educational and non-educational organisations to improve our education systems and processes. We do this by partnering overseas institutions, which have similar educational missions as ITE, and which are recognised for their world-class practices in VTE, such as Gottlieb-Daimler-Schulen (GDS) I & II, Germany; Southern Alberta Institute of Technology (SAIT), Canada; and Hong Kong Vocational Training Council (HKVTC).

#### **Adopting Best Practices through Comparisons and Benchmarking**

Since the 1980s, ITE has been conducting benchmarking studies to seek breakthrough improvements in its VTE system. Many of these benchmarking studies (see key examples in **Table 3.5**) had been instrumental in transforming ITE into a world-class post-secondary technical education institution.

Breakthrough Improvements	Partner / Organisation
<ol> <li>Adoption of internationally-renowned 'Developing A CurriculUM', or DACUM for ITE's competency-based / occupational curriculum development model</li> </ol>	Ohio State University
<ol> <li>Development of Certified On-the-Job Training (COJTC) System under an APEC Project led by ITE</li> </ol>	Germany and Japan On-the-Job Training (OJT) Systems
<ol> <li>Adaptation of Germany's Key Competencies Model (Technical, Methodological and Social Competencies) to enhance ITE's Curriculum Model</li> </ol>	Germany's Ministry of Education, Youth & Sports, Baden-Württemberg
4) Adoption of best practices in assigning technologies and appointment of content experts and champions to develop fully web-based integrated <b>eStudent System</b> for services	University of New South Wales (UNSW) and University of Queensland (UQ), Australia
5) Implementation of the 'Programme Director' Model for all full- time courses for clear ownership and accountability of results with annual assessment of course performance	University of Wisconsin - Stout, USA
6) Development of a <b>Virtual Enterprise Learning Model</b> in ITE's formal curriculum to develop students' entrepreneurship skills	Hong Kong Vocational Training Council

Table 3.5: Key Comparative and Benchmarking Studies

## **PEOPLE**

## 4.1 HUMAN RESOURCE PLANNING

#### **Human Resource Planning Framework**

As a People Developer organisation, ITE believes in valuing and maximising the potential of its people. Our HR mission is to **attract**, **retain and develop staff with the desired profile and passion** to meet ITE's vision and goals. To align our HR requirements and plans with MVV and strategic objectives, ITE adopts a **Unified HR Planning Framework**, comprising key HR Plans and Programmes, as shown in **Figure 4.1**.

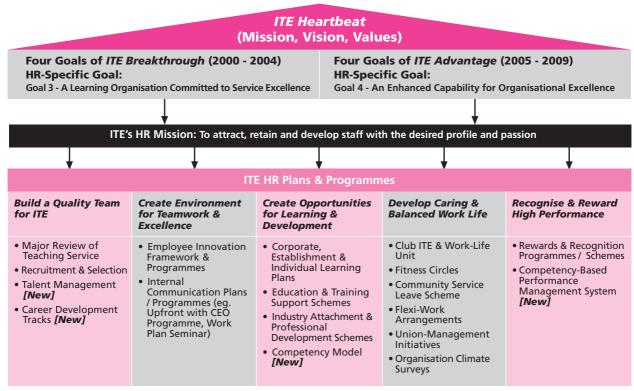


Figure 4.1: Unified HR Planning Framework

#### **Building a Quality Team for ITE**

As a dynamic organisation, ITE adopts a rigorous process of HR planning for key staff categories, viz, teaching, non-teaching (executive and support) and management staff.

**Teaching Staff.** In planning the requirements of teaching staff, ITE:

• Conducts six-monthly forecast and review of its staffing requirements, taking into consideration factors such as projected student intake, introduction of new courses, expansion or phasing out of existing courses, organisational or job redesign, the profile and competency of existing staff, as well as staffing norms.

- Formulates the "Desired Profile of Staff" (personal traits, qualifications, industry experience and competency) as our benchmark in the recruitment of new staff and the upgrading and re-profiling of existing staff.
- Undertook a major Review of Teaching Service in 2001 to enhance the
  compensation and career structure, capability development, performance
  management, professional training and development of the Teaching Service.
  From the Review, four Career Tracks, viz, Leadership, Teaching, Specialist
  and Technologist, were introduced for teaching staff to fully develop potential
  that best fits their individual capabilities and aspirations.

**Non-teaching Staff.** For non-teaching staff in executive and support services, ITE adopts a direct approach of allocating each establishment's approved posts based on staffing norms.

**Management Staff.** ITE also places utmost importance in the succession planning of management posts. We have put in place a **Talent Development & Management Framework**, which entails a systematic process to identify, track and develop staff with potential for leadership positions in ITE. Where internal talents are inadequate, external talents will be recruited to augment the management team.

### 4.2 EMPLOYEE INVOLVEMENT AND COMMITMENT

#### **Creating Environment for Teamwork and Excellence**

ITE has successfully engaged staff in teamwork and innovation since the 1980s. As a result of our active promotion of the Productivity & Innovation (P&I) Movement under the PS21 initiative, teamwork and innovation are an integral part of the *ITE Care* organisational culture. This is a key factor in ITE winning the *National Outstanding IQC Organisation* in 1996, 2000 and again in 2005. To "Enhance Organisational Capability through Employee Involvement", we formulated an Employee Engagement Plan, as shown in <u>Table 4.2</u>.

#### **Continual Learning & Innovation**

One of the key mechanisms to operationalise employee involvement and innovation is the **Employee Innovation Framework (EIF)**, which was enhanced in April 2003 for staff to determine their own levels and avenues of involvement based on their talents, capabilities and interests. Essentially, the EIF (see **Figure 4.3**) offers greater choice for participation and involvement through different types of teams, with greater emphasis on value creation and innovation. Besides

the EIF, we have the **Academy for Best Learning in Education (ABLE)** for ITE lecturers to collaborate, share and learn best pedagogic practices using innovative approaches, strategies and methods in teaching and learning. The **Innovation Panel (IP)**, supported by College-level IPs, provides a platform for staff to test out ideas through seed funding. At the ITE Colleges, the **Technopreneurship Incubation Centre (TIC)** and **Robotics and Intelligent Machines Centre (RIMC)** enable staff to nurture and develop their innovations together with students.

OBJECTIVE : "Enhance ITE Organisational Capability through Employee Involvement"						
Tap on Creativity and Talents of Staff for Learning & Innovation	Involve Staff in Planning and Reviewing of Major Programmes	Communicate Key Developments and Changes to Staff				
Mechanisms / Platforms     Employee Innovation Framework (EIF)     Innovation & Learning Circles (ILCS)     Eureka Teams     Staff Suggestion Scheme (SSS)     Innovation Panel (IP)     Academy for Best Learning in Education (ABLE)     Framework to Patent and Commercialise ITE Innovations     Technopreneurship Incubation Centre (TIC)     Robotics & Intelligent Machines Centre (RIMC)	Mechanisms / Platforms  Annual Work Plan Seminars (Corporate & Establishment)  Project Teams & Focus Groups for Strategic Planning  Cross-functional Task Forces / Committees for Strategic and Major Programmes	Mechanisms / Platforms  Annual Corporate Highlights Video  Communication Plan for key programmes  Announcement of major developments at key events / functions  Sharing through Staff e-Newsletter (InTunE) & KM Portal				

Table 4.2: Employee Engagement Plan

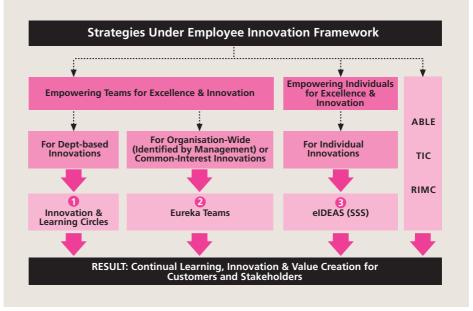


Figure 4.3: Employee Innovation Framework

## 4.3 EMPLOYEE EDUCATION, TRAINING AND DEVELOPMENT

#### **Creating Opportunities for Learning & Development**

Our strong commitment to continual learning has helped us to attain the People Developer Standard (PDS) in 2000, and a subsequent renewal in 2003.

In charting ITE's strategic learning roadmaps, the CEO sets the annual strategic learning direction for ITE, based on *ITE Heartbeat* and Annual Corporate Work Plan (CWP). The strategic learning direction guides the formulation of the ITE Total Learning Plan (TLP), which entails integrated learning need analyses at all

levels (see **Figure 4.4**). Based on inputs from the three levels, HR Divn compiles the Annual TLP to prioritise learning activities. The TLP is supported by the required budget and endorsed by ExCo before implementation.

## **Learning Programmes for All Staff**

ITE has learning schemes, targeting at all categories of staff (see **Table 4.5**), and supplemented by eLearning, online OJT and learning programmes available in an Electronic Training Directory.

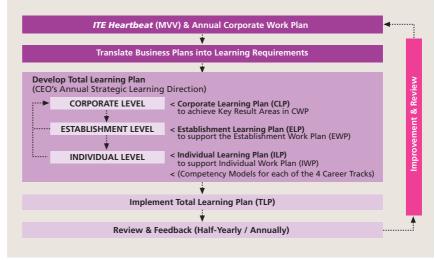


Figure 4.4: ITE People Development Model

Staff Category Scheme	Management Staff	Teaching Staff	Non- Teaching Executive	Non- Teaching Support Staff
(A) Management Development  Executive Development Programmes and Staff Education Fellowship Scheme (Degree and above)	(Incumbent & Potential)			
(B) Pedagogic Training Lecturers without pedagogic qualifications undergo a 14-month Pedagogical Certificate in Technical Education (PCTE) comprising 8 weeks off-the-job Learning and 12 months of Supervised Field Training				
(C) Formal Education & Upgrading  Day-Release Diploma Programmes for non-Diploma Lecturers;  Education Fellowship Scheme for graduate or post-graduate programmes; and Education Assistance Scheme with ITE copaying 50% of tuition fees up to maximum of \$10,000 per course				
(D) Functional Skills and Knowledge Learning & Renewal Key training programmes for all levels of staff based on Total Learning Plan (TLP)				
<b>(E) Industry Attachment &amp; Professional Development</b> Industry attachment for ITE lecturers, at least once in 5 years. Staff can also participate in Sabbatical Programme, present papers at conferences, or do consultancy work	V			

Table 4.5: Staff Learning & Development Programmes

#### **Review of Learning Effectiveness**

ITE reviews its staff learning effectiveness based on the TLP (see **Table 4.6**). Training Review Forms (TRFs) are used at the individual level to determine the achievement of post-course targets, which are set upfront by staff and the respective supervisors before the commencement of a course.

Learning Plan	Reviewed By	Frequency
Corporate Learning Plan	ExCo & SQA People Committee for endorsement	Half-yearly / Annually
Establishment Learning Plan	HOEs	Half-yearly / Annually
Individual Learning Plan	Individual Staff with Supervisor	Half-yearly / Annually

Table 4.6: Review of Learning Effectiveness

### 4.4 EMPLOYEE HEALTH AND SATISFACTION

#### **Developing Caring and Balanced Work-life**

In line with our core value "Care", ITE seeks to create a conducive work environment which promotes a balanced work-life to meet the physical, mental, social and harmony needs of staff. The **PS21 Steering Committee**, chaired by CEO, oversees the formulation of strategies for work-life management and balance. It is supported by **Club ITE** and the **Work-Life Unit** under the purview of the HR Divn.



Figure 4.7: Employee Well-being Framework

Unique work-life policies and practices under the *ITE Employee Well-Being Framework* (see <u>Figure 4.7</u>) include:

- **Fitness Circles (FC)** This organisation-wide workplace health initiative was introduced in February 2002 to encourage staff to engage in group fitness activities on a regular basis. Staff are given an hour each week during office hours to participate in any FC activities.
- **Community Service Leave Scheme** This was introduced in October 2002 to encourage staff participation in community work. All non-teaching staff may apply up to three days of paid leave, and teaching staff up to three occasions per year.
- **Flexi-benefits Scheme** This was introduced in 2000 for staff to select from a menu of beneficial items to suit their needs for work-life balance. The list is reviewed on a regular basis.

#### **Industry Best Practice - Excellent Management-Union Relations**

ITE enjoys a very cordial relationship with its Staff Unions, namely, Union of ITE Teaching Staff [UITS] and the Amalgamated Union of Public Employees (AUPE) (ITE Branch) for more than two decades. The consultative approach and regular meetings with the Unions have resulted in open discussions and transparency on initiatives and their implementation. Annual *Management-Union Games*, which have been held since 1981, as well as the *Management-Union Golf Friendly* (since 1996) involving ITE BOG members, senior management, NTUC and UITS ExCo members, have further contributed to our excellent relationship with the Unions.

#### **Measuring Staff Satisfaction**

ITE measures staff satisfaction through the Organisation Climate Survey (OCS), Exit Interviews, Feedback from Staff and Unions, as well as indicators such as Staff Turnover and Medical Leave. The *OCS* is a key instrument measuring staff satisfaction using 13 organisation dimensions. To date, ITE has conducted two Triennial surveys, in 2000 and 2003. Overall, the OCS 2003 revealed that ITE has a very healthy organisational climate. Besides the OCS, ITE participated in the *WorkSingapore™ Survey* in 2004, which was part of an 11-Country Benchmarking Study of employee opinions in Asia Pacific. Conducted under the auspices of Asia-Pacific Research and Information Centre under the Watson Wyatt Group, the findings showed that, *overall*, *ITE performed remarkably well*. It scored an average of at least 13.4 and 14.8 percentage points higher than the Singapore and Asia-Pacific Norms, respectively.

## 4.5 EMPLOYEE PERFORMANCE AND RECOGNITION

#### **Recognising and Rewarding High Performance**

ITE has a comprehensive Performance and Recognition System designed to drive and reward *high performance and desired behaviours*. Other than rewarding staff through promotion and performance bonuses, we have a variety of other rewards and recognition schemes to recognise teams and individual staff who live the *ITE Heartbeat*. These include:

- ExCEL Awards
- INNOVA and ILC Awards
- Best Suggestion and Outstanding Suggestor Awards
- Outstanding ILC Leader/Facilitator Awards
- Distinguished ILC Leader/Facilitator Awards
- ITE Teacher Awards for:
  - Innovation
  - Innovation in Teaching & Learning
  - Excellence in Teaching
  - Instructional Materials & Development
  - Student Care
  - Co-curricular Activities
- Star Service Awards
- CEO Star Service Tea Sessions
- QSM Letters of Commendation
- Long Service & Valedictory Awards

## **PROCESSES**

### **5.1** INNOVATION PROCESSES

#### **Building Innovation Capacity**

Innovation is one of ITE's key building blocks for organisational excellence. Our commitment to innovation is also reflected in our Innovation Policy and core value "Excellence".

#### **Innovation Policy**

innovation in the pursuit of excellence"

ITE adopts the 5S Innovation System to acquire, evaluate and implement creative ideas from all sources. The 5S Innovation System centres on:

- Strategy To define the direction and focus for innovation that align with ITE's long-term and annual plans and innovation policy
- Structure To provide an infrastructure to drive, oversee, energise and empower the innovation processes in ITE
- Staff & Stakeholders To be actively engaged as "Sources of Ideas" within ITE's innovation system
- Support To provide training and funding for staff to test out and implement new ideas
- Sustenance To keep staff's innovative efforts going through the continual promotion of ITE's desired culture and an effective reward system

#### **ITE Innovation Processes**

The Innovation Processes in ITE are shown in Figure 5.1. Key Management Committees, Process Owners and HOEs are responsible for driving innovation processes to generate creative ideas and transform them into new or enhanced products, services and processes.

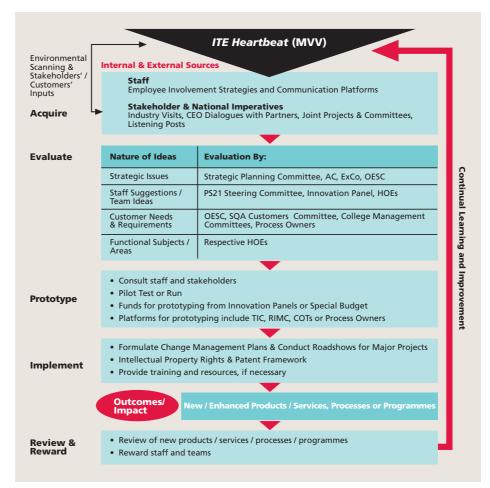


Figure 5.1: ITE Innovation Processes

#### **Key Products and Services of ITE**

ITE has four key products and services:

- (1) Full-time (F/T) institutional programmes leading to *Nitec* and *Higher Nitec* certifications for secondary school leavers [GCE 'O', 'N(A)', 'N(T)']
- (2) Part-time (P/T) programmes leading to Master Nitec/Higher Nitec/Nitec, short courses and other academic programmes offered on modular basis for adult learners
- (3) **Industry-based Training (IBT) programmes** with industry partners through Approved Training Centre (ATC), Approved Training Provider (ATP) and Certified On-the-Job Training Centre (COJTC) Schemes
- (4) International Programmes offered through the Overseas Training and Certification (OTC) Scheme and International COJTC accreditation. ITE is Singapore's first and only public Institution of Higher Learning to be approved by MOE to issue International Certifications based on national qualifications, overseas

# **Product Design and Delivery System in ITE**

To plan, develop and deliver our key programmes, ITE carries out course planning (**Figure 5.2**) followed by a 5-stage process (**Figure 5.3**) to design and implement courses that have been identified.

Underlying the rigour of our curriculum development process is a structured and internationally-recognised occupational analysis process known as 'Developing A CurriculUM', or DACUM, adopted

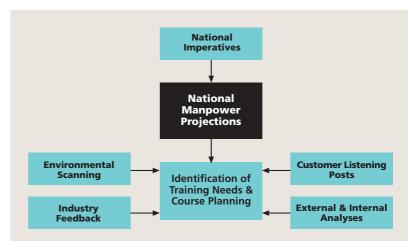


Figure 5.2: Active External Engagement in Identifying and Planning ITE Courses

by ITE during the "Needs Analysis" stage. Through DACUM, the skills profile of an occupation is developed based on an analysis of the specific job competencies and tasks, with the assistance of a panel of experienced industry specialists. All new and existing ITE courses are validated and endorsed by industry professionals through our Academic Advisory Committees. As a result of the multiple sources and breadth of information obtained from customers and stakeholders, ITE has been able to stay attuned to changing industry needs through constant enhancements and renewal of courses. ITE conducts major reviews on its courses every three to five years.

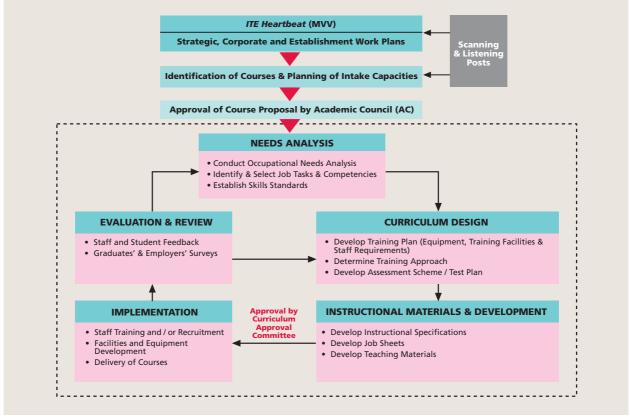


Figure 5.3: ITE Curriculum Development Model

# **5.2** PROCESS MANAGEMENT AND IMPROVEMENT

#### **ITE Business Model**

ITE adopts a robust and highly-integrated approach in the management of its key and support processes to ensure that its products and services meet customer and operational requirements. Our strong commitment to quality is exemplified in our **Quality Policy** and core value "**Excellence**".

#### **Quality Policy**

"We are committed to providing quality technical education through the continual pursuit of excellence"

The Key and Support Processes in ITE's overall Business Model are shown in **Figure 5.4**.

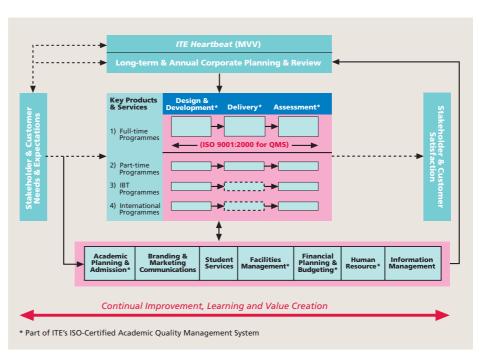


Figure 5.4: ITE Business Model

One of ITE's core strengths is a rigorous Academic Quality Assurance System, which emphasises the entire curriculum development and delivery process - from academic planning to course design, programme delivery and assessment of results. ITE's **Academic Quality Management System** for full-time programmes received the **ISO 9001:2000** certification in 2002, followed by a renewal in 2005. The continual series of internal and external quality audits under the ISO system ensure consistently high quality and standard for ITE courses across the three Colleges under "One ITE System".

#### **Key Process Requirements**

The key requirements of the key and support processes for ITE's full-time programmes are summarised in **Table 5.5**.

Key Processes	Requirements
Curriculum Design & Development	Design and develop ITE curriculum and certifications that are market-relevant
Curriculum Delivery	Provide creative and effective teaching, support, assessment and learning opportunities
Assessment	Ensure a robust and secure system that measures and awards achievements of intended learning outcomes
Support Processes	Requirements
Academic Planning & Admission	Ensure optimal capacity and provision of convenient, accessible and efficient admission services
	Ensure optimal capacity and provision of convenient, accessible and emicient dumission services
Branding & Marketing Communications	Promote the value of technical education

Table 5.5: Requirements of Key and Support Processes

# **5.3** SUPPLIER AND PARTNERING PROCESSES

#### **Key Partners and Suppliers**

ITE establishes strong working relationship with its key partners and suppliers. Our key partners and suppliers and their key performance requirements are shown in **Table 5.6**.

Partners	Performance Requirements			
1) School Partners	Market Reach to potential students, their parents and educators			
2) Training Partners	<ul> <li>ATP</li> <li>Adequate training facilities and infrastructure</li> <li>Technically- and pedagogically-qualified staff</li> <li>Training programmes acceptable to ITE</li> <li>Has MOE School Registration Certificate and other national benchmarks</li> </ul>			
	<ul> <li>ATC</li> <li>Adequate training facilities and equipment to conduct and test ITE-certified courses</li> <li>Professionally- and pedagogically-qualified trainers</li> <li>Acceptable Trainer: Trainee ratio</li> </ul>			
	Council C			
3) MOU Partners	Strategic importance to ITE, staff and students			
Suppliers	Performance Requirements			
Part-Time Teaching     Personnel	Suitable qualifications and industry experiences     Good ratings in Student Satisfaction Survey			
Works & Building     Contractors	Registered companies under Building & Construction Authority (BCA)	Key Requirements		
Other Term Contractors     & Suppliers	Registered companies under Accounting & Corporate Regulatory Authority (ACRA) or relevant Expenditure & Procurement Policies Unit (EPPU).	Must satisfy and deliver the specifications as defined by ITE in its Tender / Quotation Exercises. Other considerations include on-time service delivery; responsiveness; quality service, including after-sales service; and adequate warranty against defects		

Table 5.6: Performance Requirements of Partners & Suppliers

### **Communicating Key Requirements to Partners and Suppliers**

ITE uses various platforms to communicate its requirements to its partners and suppliers, and ensure that these requirements are met. The communication is summarised in **Table 5.7**.

Partners	Communication Platforms	Means to ensure key requirements are met
1) School Partners	<ul> <li>Joint ITE-MOE Committee</li> <li>ITE-Schools Networking System</li> <li>ITE Staff represented in MOE Committees</li> <li>School Visits &amp; Presentations</li> <li>ITE Discovery Programme for Teachers/Trainee Teachers</li> <li>Parents' / Principals' Seminars</li> </ul>	<ul> <li>On-going communication with schools and proactive sharing / consultation with school partners before launch of new initiatives or programmes</li> <li>Feedback/Survey on effectiveness of promotion and marketing programmes</li> </ul>
2) Training Partners	<ul> <li>Dialogues &amp; Seminars</li> <li>Visits by ITE Industry Officers</li> <li>Briefings to communicate changes in curriculum</li> </ul>	Stringent requirements for award of ATCs, ATPs & COJTCs Signing of Licensing Agreements On-site audits Exams set by ITE Close monitoring and spot checks during exams Consultancy services and training in course development and evaluation and pedadogic training
3) MOU Partners	<ul><li> Visits, Dialogues and Sharing</li><li> Seminars</li></ul>	<ul> <li>Pre-MOU exploratory meetings/ discussions and learning visits</li> <li>Signing of MOU</li> <li>Review benefits of MOU</li> </ul>
Suppliers	Communication Platforms	Means to ensure key requirements are met
1) Teaching Personnel for P/T Programmes	<ul> <li>Induction &amp; Training Programmes for New Personnel</li> <li>Briefing Sessions/Feedback by Section Heads</li> </ul>	<ul> <li>Stringent selection criteria and process</li> <li>End-of-module surveys to measure satisfaction of P/T students</li> </ul>
2) Works & Building Contractors	<ul> <li>Site Visits &amp; Briefings</li> <li>Regular feedback to contractors and suppliers</li> <li>Supplier/Contractor Performance Review</li> </ul>	<ul> <li>Conduct "show rounds" &amp; tender briefings</li> <li>Measure Contractor/Supplier Performance</li> <li>Take actions in cases of default (Warning letters, liquidated damages,</li> </ul>
3) Other Term Contractors & Suppliers		security deposit forfeiture or termination of contract)

Table 5.7: Communication of Key Requirements to Partners & Suppliers

# **CUSTOMERS**

### **6.1** CUSTOMER REQUIREMENTS

#### **Customers at the Core of ITE Heartbeat**

ITE seeks to relentlessly build a **customer-centric culture** among staff, as encapsulated in the Core Value "Care", which includes "Care for our Customers", and our Service Mission. The importance accorded to Customers is also reflected in the goals of all three five-year strategic plans ITE formulated since 1995. Underpinning ITE's strong orientation towards our customers (students) is the unique ITE "Hands-on, Mindson, Hearts-on" Education.

> ITE's key market and customer segments are shown in the **Table 6.1**. ITE also has "indirect" customers, comprising participants of IBT programmes (about 130,000 training placements per year), as well as employers who sponsor their employees for training at ITE.

Key Customer Segments	Course Level	Number Per Year
1) Full-time Students (Existing & Potential) from GCE 'O' / Normal (Academic) [N(A)] / Normal (Technical) [N(T)]	<ul><li> Higher Nitec</li><li> Nitec</li></ul>	At least <b>25%</b> of annual school cohort or <b>13,000</b> intake per year, with annual enrolment of <b>22,000</b>
2) <b>Part-time Students</b> (ITE Graduates or Adult Learners)	<ul> <li>Master Nitec / Higher Nitec / Post-Nitec</li> <li>Nitec</li> </ul>	About <b>12,000</b> training places per year
	Others (eg. Short Courses, Train-the-Trainer, Academic Education)	About <b>12,000</b> training places per year

Table 6.1: ITE's Key Customer Segments

#### **Determining Customer Requirements**

ITE has identified its key customer requirements as shown in **Table 6.2**.

#### **Listening Approaches**

To obtain in-depth understanding of our customers' needs and market developments, ITE has established a wide variety of listening posts. Over the years, such listening posts have been continually reviewed and enhanced, and developed into a robust system, as shown in **Figure 6.3**.

Customers	Key Profile	Products	Customer Requirements
1) Full-time Students	<ul> <li>Age (17-19 years old)</li> <li>Secondary school leavers [GCE 'O', 'N(A)', 'N(T)']</li> <li>Kinesthetic Learners</li> <li>Technically-inclined</li> <li>Creative &amp; Enterprising</li> <li>Street-Smart &amp; Practical</li> </ul>	<ul> <li>Higher Nitec Programmes</li> <li>Nitec Programmes</li> </ul>	<ul><li>Responsiveness</li><li>Relevance</li><li>Value</li><li>Quality</li></ul>
2) Part-time Students or Adult Learners	<ul> <li>Age (At least 16 years old)</li> <li>Working Adults / ITE Graduates</li> <li>Skilled / Semi-skilled</li> <li>Upgrading for career opportunities &amp; advancement</li> <li>Quick refresher / reskilling programmes</li> <li>Affordable training</li> <li>Flexibility in scheduling</li> </ul>	Master / Higher Nitec / Post-Nitec / Nitec Programmes     Others (Short Courses, Train-the-Trainer, Academic)	<ul><li>Responsiveness</li><li>Value</li><li>Flexibility &amp; Accessibility</li><li>Quality</li></ul>

Table 6.2: Key Requirements of ITE Customers



Figure 6.3: Key Listening Approaches

### 6.2 CUSTOMER RELATIONSHIP

#### **Multi-Pronged Customer Contact Points**

ITE starts to win over potential students while they are still in secondary schools. Such relationship is carefully managed throughout the entire academic career of our students, even after their graduation and as they return to ITE for part-time education. Besides general access channels such as ITE Website, Customer Service Centres (CSCs), Customer Service and Quality Service Manager (QSM) Hotlines for the public to obtain information and provide feedback, ITE has **specific** "contact mechanisms" for its students at the different phases of their academic career.

- Before Enrolment. Marcom Officers visit secondary schools to introduce ITE and its programmes to students
  through talks, activities and dialogues with students, their parents and teachers. Correspondingly, secondary
  school students and teachers/trainee teachers are introduced to ITE through a two-day Experience ITE
  Programme and ITE Discovery Programme, respectively. ITE also organises Open Houses at its three
  Colleges, as well as Public Exhibitions and Road Shows at shopping malls within the heartland.
- During Enrolment. ITE has established special arrangements with MOE for fresh GCE 'N' and 'O' school leavers to apply for its programmes through annual Joint Intake and Admission Exercises via the ITE Website. The programmes they are eligible for and the application procedures are explained in the Application Kits given to them through their secondary schools. Adult learners also enjoy the convenience of web application of courses or they can apply at any of the four Customer Service Centres at the three ITE Colleges and ITE HQ. In addition, they can call the Customer Service Hotline for information and assistance during extended operating hours.
- Upon Enrolment. Once enrolled, ITE has a Student Care Framework in place to provide care, guidance, motivation and support to students, as part of our value on "Care for students" (see Figure 6.4). Students can also give suggestions and feedback through the Student Councils. ITE also seeks to enhance students' access to all types of student services during their stay in ITE by implementing the eStudent Administration System, which is accessible anytime, anywhere.

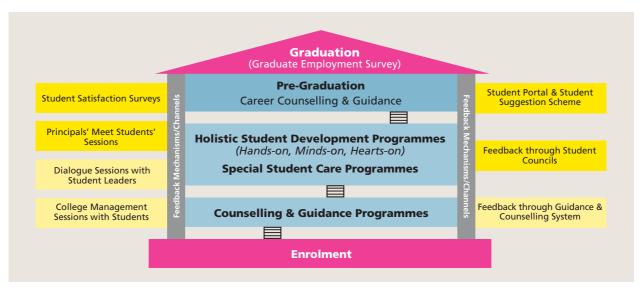


Figure 6.4: ITE Student Care Framework

For adult learners who have different needs, they come under the care and guidance of CET Managers and Supervisors at the ITE Colleges. They help students to meet their needs for learning and support services. The Colleges also conduct surveys upon the completion of the programmes to determine students' satisfaction with the programmes and support services provided.

Upon Graduation. The Career Services Centre services graduating students
by providing advice and assistance with job search, through career counselling,
talks and fairs, visits to industry, as well as job-matching and placement. ITE's
relationship with graduates continues after graduation through the ITE Alumni
Association.

#### **Customer Relationship Management (CRM) Framework**

ITE's philosophy and approach in dealing with its customers are articulated in the CRM Framework at **Figure 6.5**. Underlying the strength of our CRM is our **Student Care Framework** (see **Figure 6.4**), which seeks to care for and strengthen our relationship with students throughout their stay with ITE. The CRM is complemented by the **Customer Resolution Framework** (see **Figure 6.7**), which spells out the roles and responsibilities of staff in instances of service lapses so as to restore customer trust and confidence.

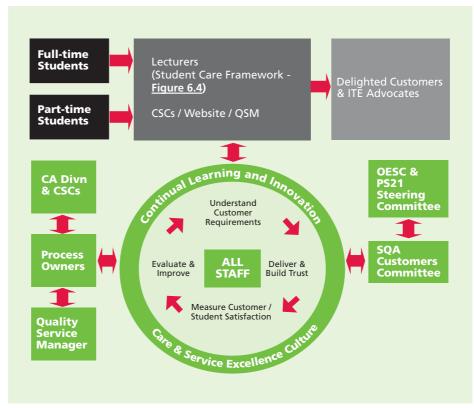


Figure 6.5: Customer Relationship Framework

#### **Key Customer Contact Requirements**

Through the understanding of our customers' needs via key listening posts and the alignment with our **Service Mission**, ITE's key customer contact requirements are:

Courtesy. Accessibility. Responsiveness. Effectiveness

Guided by our **Service Mission**, ITE adopts a multi-pronged approach to deploy the key contact requirements to all staff in ITE, as shown in **Figure 6.6**.

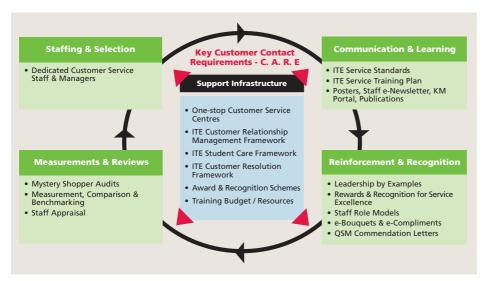


Figure 6.6: Deployment of Key Customer Contact Requirements

ITE develops **specific quantitative and qualitative Service Standards** to spell out clearly what is expected of staff in each service encounter, for example, to serve walk-in customers within **15 minutes**, and to provide a reply to written feedback from customers within **two days**. The service standards are published in a Service Standards Handbook and mounted on the Staff Portal. All compliments received and Areas for Improvement (AFIs) are posted on the online Staff Newsletter (InTunE), e-Bouquets and e-Compliments for sharing and learning.

#### **Customer Resolution Framework**

All ITE staff have the responsibility to ensure customer satisfaction and manage customer dissatisfaction in instances of unhappy encounters. Our **Customer Resolution Framework** is depicted at **Figure 6.7**. Upon receipt or notification of any feedback or complaint, the Process Owner will quickly carry out fact-finding to establish the case, decide on appropriate measures and work with the respective Customer Service Managers in ITE HQ and the Colleges to achieve customer resolution **within two working days**. An interim response is given to the customer if more time is needed for the case, followed by fortnightly updates.

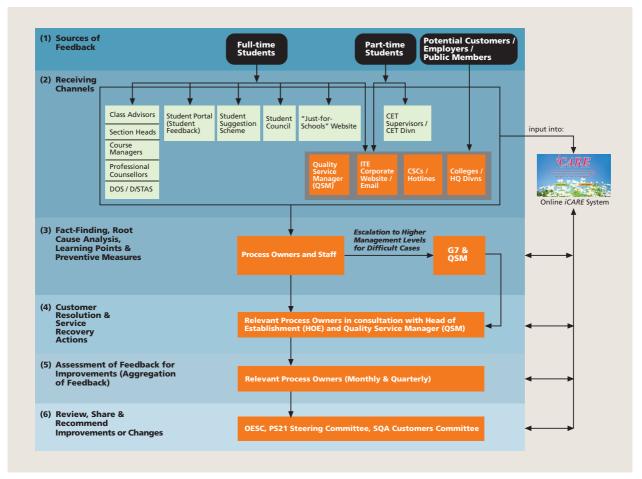


Figure 6.7: ITE Customer Resolution Framework

## **6.3** CUSTOMER SATISFACTION

#### **Determining Customer Satisfaction**

ITE determines customer satisfaction through an extensive and regular collection of data throughout the academic career of students. It measures dimensions such as:

- **Pre-enrolment:** Surveys to measure the perception that school leavers have of ITE, their preferences and expectations
- Admission: Surveys to measure satisfaction of applicants with ITE's admission services (telephone/web/counter services)
- Orientation: Surveys to identify the profiles, interests, values and aspirations
  of the students, their perceptions of their course of study, experiences at ITE
  and their preferred mode of learning

- In-course education: Surveys to measure satisfaction with teaching effectiveness of ITE lecturers and learning facilities
- Graduation: Surveys to measure satisfaction with the ITE training and employment experience in the workforce

The major component of measuring customer satisfaction is the in-course **Student** Satisfaction Surveys conducted bi-annually on student satisfaction with ITE's teaching effectiveness and learning facilities. For major changes affecting students, we conduct surveys to seek inputs from students, such as survey on the shift in Academic Calendar. In addition, other surveys, such as electronic poll on the training aspirations of ITE students and survey on the financial profile of full-time students, are also conducted. The formal surveys are supplemented by other lessstructured and informal listening strategies shown in Figure 6.3 and Figure 6.4.

To measure Service Satisfaction (before students are enrolled), ITE also conducts annual independent surveys of the service standards of the various ITE frontline establishments to assess customers' satisfaction with the key modes of frontline services, viz, counter, telephone and web services. This is done through Mystery Shoppers Audits or direct surveys to establish the standards and quality of ITE service delivery to public members.

# **RESULTS**

## 7.1 CUSTOMER RESULTS

#### **CUSTOMER SATISFACTION**

#### **Satisfaction With Full-time ITE Education**

ITE's student-focused strategies to provide our full-time students with a total education experience have been very successful and effective, as affirmed by the results of surveys conducted among in-programme students and graduates (see **Figures 7.1 & 7.2**).

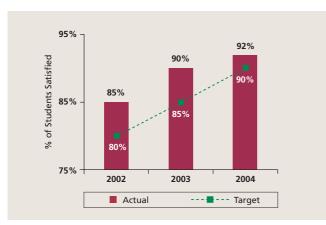


Figure 7.1: Full-time Student Satisfaction

#### Satisfaction With Part-time ITE Education

Adults learners who took up part-time ITE programmes expressed high levels of satisfaction (see **Figure 7.3**) with the programmes attended. A biennial survey in 2004 to collect feedback from adult learners who had successfully completed ITE part-time programmes (ie graduates) revealed a highly favourable 93% of them expressing satisfaction with ITE's part-time programmes in meeting their expectations in upgrading and reskilling for career enrichment and advancement.

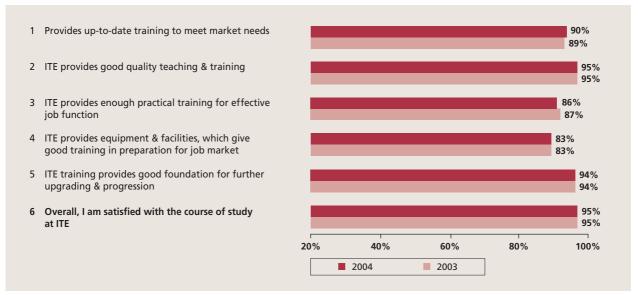


Figure 7.2: Full-time Graduate Satisfaction

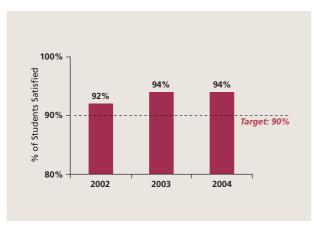


Figure 7.3: Part-time Student Satisfaction

# Satisfaction With ITE's Frontline Services (Counter/Telephone/Web)

Independent audits on the service standards of ITE's frontline services provided by the various ITE Establishments are conducted annually. Generally, ITE's frontline services achieved more than 95% customer satisfaction ratings from audits conducted from 2001-2004.

In 2003, ITE engaged a professional CRM Consulting Agency to conduct an independent assessment of the service standards of our Call Centre and to benchmark service standards against the Call Centre Industry Standards of similar or best-in-class service organisations. ITE was ranked top among four organisations covered in the benchmark study.

#### **PRODUCT PERFORMANCE**

As an education institution, ITE measures product performance based on the education outcomes of ITE's programmes.

#### **Student Success Rate**

Success rate is the measure of final training success of ITE's full-time programmes, taking into consideration student retention from entry point to the attainment of ITE Certifications. The transformation of the ITE Education systems and processes has resulted in high success rates, with a remarkable 16-percentage point improvement since a decade ago.

#### **Student Module Pass Rate**

ITE's quality curriculum delivery process resulted in high student pass rates of above 95% from 2002-2004 for both full-time and part-time programmes.

# **Graduates' Employability and Starting Salary**

ITE conducts the Annual Graduate Employment Surveys on ITE's full-time graduates who are new entrants in the labour market, to assess the value of ITE Education. Despite the less-than-buoyant job market in recent years, the sterling performance of ITE graduates in securing jobs is strong testimony to the robustness and high market relevance of an ITE Education (see **Figure 7.4**).

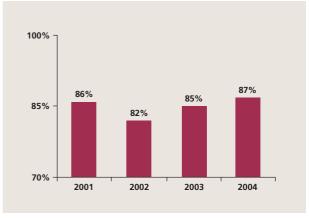


Figure 7.4: Employment Rates of ITE Graduates

The gross mean monthly starting salary of ITE graduates is registering an upward trend despite economic uncertainty in recent years. Between 2001 and 2004, overall gross mean monthly salary rose by 14%, from \$1,226 to \$1,395.

#### **Employers' Assessment of ITE Graduates**

**Full-time Programmes.** Nine out of 10 ITE graduates received an unreserved nod from their employers when assessed on their Technical, Methodological and Social Competencies (see **Figure 7.5**).

**Part-time Programmes.** Employers are also very pleased with the availability of ITE programmes that are relevant to their employees' work, and with the quality of these programmes. From the regular surveys conducted among employers, more than 90% rated ITE's range and quality of part-time programmes very favourably (ie "Excellent" or "Good").

#### **SERVICE PERFORMANCE**

The key service standard measures for ITE's frontline services are shown in **Figures 7.6, 7.7 & 7.8**.

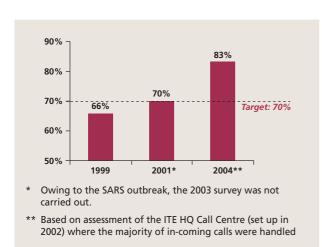


Figure 7.6: Percentage of Calls Answered Within 3 Rings/10 Seconds

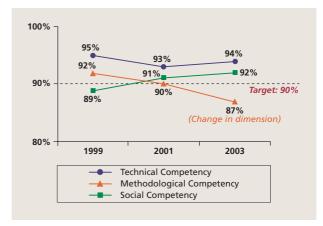


Figure 7.5: Employers' Satisfaction With Key Competencies of ITE Full-time Graduates (Biennial Survey)

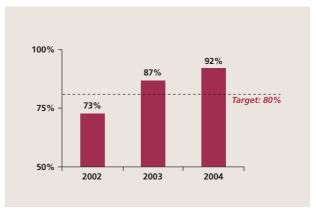


Figure 7.7: Customers Served Within 15 Minutes of Waiting

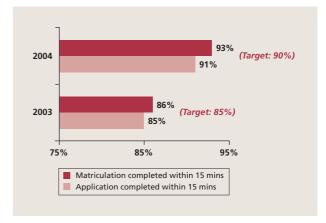


Figure 7.8: Web-based Transactions Completed Within 15 Minutes

### 7.2 FINANCIAL AND MARKET RESULTS

#### **FINANCIAL RESULTS**

ITE is accountable to the public for the public resources invested in technical education. Thus, ITE seeks to optimise government's investment and resources to create and deliver the best educational values and outcomes to its stakeholders and the community.

#### **Budget Utilisation**

ITE has managed its resources well through prudent resource planning and management, and has a strong budgeting process that is tied to ITE's annual and long-term processes. Generally, ITE has consistently shown good budget utilisation rates for both its Operating and Development Budgets, within the 95-100% standards adopted by the Ministry of Finance (MOF) as an indication of good management of budget.

#### **Return on Investment Per Full-time Student**

To assess how well ITE has reaped for its stakeholders from its investment per full-time student, ITE measures the "proxy" returns on cost-of-training investment per student per year vis-à-vis the annual market worth (ie. salary earned) of the students upon graduation from ITE. For every \$1 invested, each fresh graduate gets \$2 returns from the market in terms of the salary earned. This reflects the high value add, which ITE has given to its graduates, as endorsed by the market and employers. On the whole, ITE's cost of training per student per year has only increased marginally over the last few years, while it continues to offer more and better educational options and produces better graduates with high market demand and value by "doing more with less".

#### **MARKETPLACE RESULTS**

#### **Cohort Capture**

In the post-secondary education sector, the national target is for ITE to capture 25% of the annual cohort of school leavers, which ITE has consistently met or exceeded in the last three years.

#### **Subscription to ITE Courses**

ITE courses are in high demand and over-subscribed. For every intake place offered, there is more than one applicant (based on first-choice applicants) for the place. The subscription rate for full-time courses has improved tremendously over the last decade, from 0.6 in 1994 to 1.14 in 2004.

#### **Brand Equity**

Since 1997, ITE has commissioned an independent Triennial Brand Equity Study to establish key stakeholders' and the public's perception of ITE vis-à-vis other post-secondary institutions. The studies have clearly shown that ITE has successfully turned around its image since becoming a post-secondary institution in 1992, from an overall Brand Equity of 34% in 1997 to 50% in 2005 (47% improvement).

## 7.3 PEOPLE RESULTS

#### **EMPLOYEE INVOLVEMENT**

ITE empowers staff at all levels through various employee innovation platforms to directly contribute ideas and suggestions that create value for customers and stakeholders. Besides increasing participation in team projects and staff suggestion schemes, staff involvement in high value-add and innovative projects has grown under the enhanced Employee Innovation Framework (EIF) rolled out in April 2003.

#### **Team Project Participation**

Staff participation in team projects has been 100% since 1996. Team Project Ratio is also climbing steadily, as shown in **Figure 7.9**. ITE won the prestigious **Outstanding IQC Organisation Award** three times in the last 10 years, in 1996, 2000 and 2005, for its successful employee innovation programmes.

#### **eIDEAS (Staff Suggestion) Participation**

elDEAS participation rate achieved 100% since 2003. The average number of suggestions per staff is on an upward trend (see **Figure 7.10**).

# **Best-practice Organisation in Employee Involvement**

ITE's employee involvement strategies have paid off handsomely for ITE. These have helped ITE to develop a highly successful and positive employee involvement culture. In a 2003 survey conducted by the PS21 Office / Prime Minister's Office on the success of ExCEL and PS21 Movements among public-sector organisations, ITE received Top Scores in all the dimensions surveyed compared with the Civil Service as a whole and MOE, indicating ITE as a best-practice public-sector organisation in employee involvement.

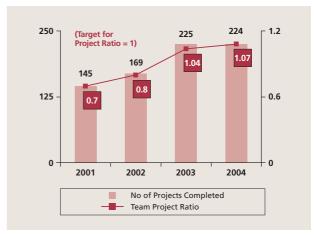


Figure 7.9: Team Project Participation

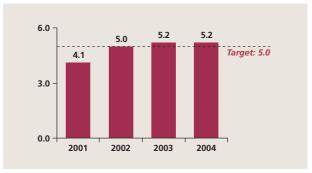


Figure 7.10: elDEAS Suggestion Ratio

#### **EMPLOYEE TRAINING & DEVELOPMENT**

As a People Developer Standard (PDS) organisation, ITE has a rigorous process in planning and execution of learning roadmaps for the different organisational levels (Corporate/Establishment/Individual). Besides strong support given to formal upgrading programmes, staff learning is also facilitated via a variety of less structured learning activities like team / taskforce projects, sharing sessions and On-the-Job Training (OJT). **Table 7.11** provides a snapshot of the levels and trends in staff learning and development in ITE.

Area/Key Performance Indicator	2001	2002	2003	2004
Investment <sup>1</sup>				
Total No. of Learning Activities Made Available	4,500	4,700	6,700	17,000
Investment in Staff Learning as a % of Payroll	4.4%	4.5%	4.4%	4.4%
No. of Staff Undergoing Formal Programmes Sponsored by ITE	232	307	396	400
Utilisation				
Utilisation Rate of Learning Places	92%	95%	85%	88%
(Target = 75% based on People Developer Standard Criteria)	$(4,140)^2$	(4,465)	(5,695)	(14,960)
% of Staff Attaining 100 Learning Hours (Target = 75%)	65%	81%	75%	85%

#### Notes

- 1 Investment KPIs are driven by strategy-aligned needs and objectives rather than targets. Hence, no explicit targets are stated.
- 2 ()s refer to the absolute number of learning places taken up.

Table 7.11: Key Trends and Levels in Staff Learning and Development

#### **EMPLOYEE SATISFACTION**

#### **Organisation Climate Survey (OCS)**

For a comprehensive assessment of staff's satisfaction, ITE conducts the Organisation Climate Survey once every three years. Two surveys had been carried out to date, in 2000 and 2003. The overall Staff Satisfaction Index based on 13 dimensions, covering Leadership, Culture, Vision and Goals, Job Satisfaction, Training and Development, Communication, Change Management and other pertinent organisational dimensions, showed significant increase of 22%, from 3.96 in 2000 to 4.85 in 2003. The scoring is based on a rating scale of 1 to 6, with 3.5 representing a neutral score. Any score higher than 3.5 represents a positive / favourable response.

WorkSingapore™ 2004 Benchmark Study. ITE was invited to take part in an 11-country Asia Pacific-wide OCS, named as WorkSingapore™ administered by Watson Watt in August 2004. In that study, ITE scored better than both the Singapore Market and the Asia-Pacific Region in all the 12 satisfaction dimensions, by wide margins ranging from 10 to 20 percentage points.

### 7.4 OPERATIONAL RESULTS

#### **OPERATIONAL PERFORMANCE**

#### **Cycle Time for Course Development and Review**

Using DACUM, new courses take nine months, on the average, to develop and launch, which is comparable with VTE Colleges in Germany and USA. The time taken also depends on the stage of development in the relevant industry sectors of the courses.

#### **Extent of IT-based Learning**

ITE started to strengthen its IT-infrastructure and develop an IT-based teaching and learning system (eTutor) under the IT Master Plan 2000. By 2004, 22% of course curriculum was delivered via eTutor launched in 2002 (see **Figure 7.12**). On average, each student spends 440 hours engaging in IT-based learning for the duration of a course.

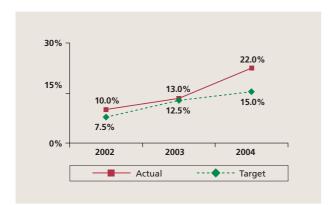


Figure 7.12: Percentage of IT-based Teaching and Learning in Each Course

# Time Taken to Process Examination Results

Compared with 10 years ago, ITE now takes only a third of the time required then (or 12 days) to process examinations conducted at its three Colleges.

# Error-free Rate of Examination Papers & Error-free Rate of Marking and Mark Entry

ITE aims for zero error in examination papers, as well as in the marking and mark entry processes in order to maintain high credibility in ITE's assessment system. The high standards set have resulted in generally 99% error-free rates for the critical areas in the assessment process.

#### **PARTNER PERFORMANCE**

#### **School Partners - Direct Marketing Reach**

The great support and strong relationship ITE has with its school partners have enabled ITE to reach out to

70% of the graduating secondary school students in 95% or more of schools with Normal Streams annually, through various marketing and networking programmes.

#### Industry Partners - Number of ATCs/ATPs/ COJTCs & Number of Training Places Offered

The industry has responded well to ITE's ATC, ATP and COJTC Schemes, as these give employers the maximum flexibility to implement effective OJT at the workplace and/or offer formal training programmes of direct relevance to their businesses. **Figure 7.13** shows increasing trends in the number of industry partners under the three industry training schemes, as well as the number of training places offered under these schemes.

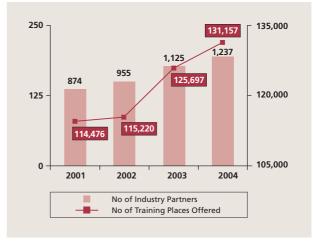


Figure 7.13: Number of Industry Partners and Training Places Offered

#### **International Partners**

ITE has also forged International Partnerships through MOUs for learning exchanges, as well as through programme licensing and collaboration agreements. These partners include: Ministry of Education, Youth and Sports, Baden-Württemberg, Germany (KM); Gottlieb-Daimler-Schulen I & II (GDS), Baden-Württemberg, Germany; Hong Kong Vocational Training Council (HKVTC); Southern Alberta Institute of Technology (SAIT), Alberta, Canada; and Center on Education and Training for Employment, Ohio State University (OSU), USA.

#### SUPPLIER PERFORMANCE

#### **Part-time Students' Satisfaction With Teaching Effectiveness**

Our part-time students have expressed high levels of satisfaction with the teaching effectiveness of their part-time lecturers who are appointed on contracts, with 90% or more indicating they were "Satisfied" or "Very Satisfied" based on annual surveys conducted from 2001-2004.

#### **Percentage of Development Projects Completed on Schedule**

With excellent supplier performance management, all (100%) building, facility and major IT-systems development projects were completed on schedule in 2003 and 2004.

#### **COMMUNITY AND ENVIRONMENT RESULTS**

#### **Care for the Community and Environment**

ITE actively supports major national community service initiatives, such as the President's Challenge, Courage Fund for SARS victims during the SARS outbreak, adoption of community organisations/homes, and services rendered during the recent Tsunami disaster. Sixty-four per cent of ITE staff were involved in community services each year, from 2002-2004. The amount of average SHARE contribution per staff per month was \$4 for 2004.

ITE lecturers also instill community consciousness among students by involving them in various community activities that utilise their technical skills and knowledge. For instance, the SAFE Home Programme supported by all the Community Development Councils (CDCs) installs safety features in 500 homes of needy elderly, annually.

#### **Environmental Protection**

The "Green Movement" is actively promoted within ITE. Driven by the Environmental Management Committee (EMC) formed in 2002, ITE measures its environmental protection in terms of paper, water and electricity usage, as well as compliance with regulations on waste disposal. Despite rising ITE student enrolment, a 13% reduction (Target = 10% reduction) in Paper Usage (Per Year) was achieved, from 22,907 reams in 2003 to 19,838 reams in 2004, whilst Average Monthly Electricity Usage decreased by 2% and Water Usage increased only marginally by 3%.

#### **GLOSSARY**

Abbr	Description	Abbr	Description
ABLE	Academy for Best Learning in Education	IT	Information Technology
AC	Academic Council	KM	Knowledge Management
ATC	Approved Training Centre	KPI	Key Performance Indicator
ATP	Approved Training Provider	MINDEF	Ministry of Defence
BSC	Balanced Scorecard	MMP	Ministerial Meeting with Polytechnics and ITE
BOG	Board of Governors	MOE	Ministry of Education
CA	Corporate Affairs	MOF	Ministry of Finance
CDC	Community Development Council	MOU	Memorandum of Understanding
CEC	College Excellence Committee	MVV	Mission, Vision and Values
CEO	Chief Executive Officer	N(A)	Normal (Academic) Stream
CET	Continuing Education and Training	N(T)	Normal (Technical) Stream
СОЈТС	Certified On-the-Job Training Centre	NEV	Net Economic Value
СОТ	Centre of Technology	Nitec	National ITE Certificate
CRF	Corporate Review Forum	NTUC	National Trades Union Congress
CRM	Customer Relationship Management	ocs	Organisation Climate Survey
CSC	Customer Service Centre	OESC	Organisational Excellence Steering Committee
CWP	Corporate Work Plan	OJT	On-the-Job Training
DACUM	Developing A CurriculUM	отс	Overseas Training and Certification
DOS	Director of Studies	P&I	Productivity and Innovation
D/STAS	Director/Student & Academic Services	PDS	People Developer Standard
EIF	Employee Innovation Framework	PEST	Political, Economic, Social and Technological
Estab	Establishment	PS21	Public Service for 21 <sup>st</sup> Century Programme
ExCEL	Excellence Through Continuous Enterprise and	P/T	Part-time
	Learning	QMS	Quality Management System
ExCo	Executive Committee	QSM	Quality Service Manager
FA	Feature Analysis	ReNEW	Reskilling for New Economy Workforce
FY	Financial Year	RIMC	Robotics & Intelligent Machines Centre
F/T	Full-time	SAIT	Southern Alberta Institute of Technology (Canada)
G7	Group of Seven (Senior Executives)	SARS	Severe Acute Respiratory Syndrome
GCE 'N'	General Certificate of Education 'Normal' Level	SEAMEO	South-East Asian Ministers of Education Organisation
GCE 'O'	General Certificate of Education 'Ordinary' Level	SHARE	Social Help and Assistance Raised by Employees
HDB	Housing Development Board	SQA	Singapore Quality Award
HKVTC	Hong Kong Vocational Training Council	SSS	Staff Suggestion Scheme
HOE	Head of Establishment	SWOT	Strengths, Weaknesses, Opportunities and Threats
HR	Human Resource	TIC	Technoprenuership Incubation Centre
IBT	Industry-based Training	TLP	Total Learning Plan
ILC	Innovation and Learning Circle	TOE	Total Organisational Excellence
IP	Innovation Panel	VTE	Vocational and Technical Education
IQC	Innovation and Quality Circle	WSC	Worldskills Competition
IS	Information Systems	wss	Worldskills Singapore
ISO	International Organisation for Standardisation		



We have witnessed ITE's many great transformation and innovations in one short decade. We note that ITE has already established a very comprehensive and robust Organisational Excellence and Quality System for Vocational Training that is global class and mature. ITE's VTE System is comparable with or even better than the world's best in advanced countries like Germany, Switzerland, Japan and United States of America.

His Excellency Helmut Rau Minister for Education, Youth and Sports, Baden-Württemberg, Germany

10 Dover Drive, Singapore 138683 Phone: (+65) 6775 7800, Email: itehq@ite.edu.sg

www.ite.edu.sg