Excellence Indicators for Teaching Practices for the
Technology Education Key Learning Area

Foreword

The *Excellence Indicators for Teaching Practices for the Technology Education Key Learning Area* are compiled for use as reference in assessing nominations for the Chief Executive's Award for Teaching Excellence (ATE) (2008–2009).

In drafting the Indicators, we have consulted a number of references, the major ones of which include *Towards a Learning Profession: The Teacher Competencies Framework and the Continuing Professional Development of Teachers* (Advisory Committee on Teacher Education and Qualifications, 2003), the *Technology Education Key Learning Area Curriculum Guide* (Curriculum Development Council, 2002) and *Performance Indicators for Hong Kong Schools* (Quality Assurance Division, Education Bureau, 2008). The Indicators have been formulated and structured in a way that reflects the complexities of teachers' work and the diverse nature of teachers' competencies.

For the purposes of the ATE, teaching excellence means teaching practices that are -

(a) **innovative** with **proven effectiveness** in arousing students' **motivation in the Technology Education KLA** and/or in helping students **to achieve the desired learning outcomes**; or

 are creatively adapted from exemplary teaching practices from elsewhere **to suit the local (i.e. school-based and/or student-based) context** with proven effectiveness in enhancing students' learning outcomes;

(b) based on a coherent conceptual framework, showing reflective practices;

(c) inspiring and can be shared with colleagues to improve the quality of education; and

(d) **instrumental in achieving the learning targets of the Technology Education KLA**, namely, to develop students' technology competence to create products, systems and solutions for the betterment of everyday living; and critical appreciation of the relevant social, economic and environmental implications.

The Indicators fall within four domains, namely, **(1) Professional Competence**, **(2) Student Development**, **(3) Professionalism and Commitment to the Community** and **(4) School Development**.   The first two domains focus on recognising teaching excellence and the other two on fostering teachers' professional development.   Since the ATE does not aim to identify all-round teachers who excel in all domains, the Indicators only serve to evidence, rather than constitute a rigid model of, teaching excellence in the Technology Education KLA.

The Indicators are more than an assessment tool.   They also indicate the qualities of an accomplished teacher in Technology Education.   We hope that, by highlighting these qualities, we can motivate teachers to achieve professional excellence.

Recipients of the Award must possess the essential qualities of a professional teacher such as professionalism and loving concern for students. Instead of assessing a nominee according to discrete areas of teaching practices, we will adopt a holistic approach informed by professional knowledge and judgment.   However, since the primary focus of the ATE is on learning and teaching, the exemplary and effective teaching practices we are looking for must also be inspiring and sharable.

Group nominations will be assessed according to the effectiveness of teamwork as measured by the contribution of each group member, interactions among group members, and how the concerted efforts of group members have contributed to the desired outcomes.

The Assessment Panel on Technology Education
Chief Executive's Award for Teaching Excellence 2008–2009
November 2008

Excellence Indicators for Teaching Practices for the Technology Education Key Learning Area

1. Professional Competence Domain

Area	Performance Indicator	Evidence of Excellence
Curriculum	1.1 Curriculum Design and Organisation	The teacher is able: • to design, with appropriate adaptation, a school-based curriculum that nurtures students' technological literacy by systematically and comprehensively developing their technological capability, technological understanding and technological awareness, having taken into consideration the students' needs, interests and competencies as well as the actual situation of the school and the strengths of its teachers; • to rearrange related learning elements in different subjects and to identify a nexus of knowledge and skills acquired across subjects, with a view to opening up and providing more learning possibilities to students; • to help students understand wider technological contexts, apply generic skills[1] under changing circumstances and effectively develop their creativity, their abilities to think critically, communicate and solve problems, and their health and safety consciousness; • to align himself or herself with new educational trends and the new culture of learning and teaching, and to provide, on the basis of previous experiences and pedagogical strategies, a technology education curriculum that is receptive to changes, flexible and responsive to latest developments; • to adopt a diversified approach to curriculum design and plan life-wide learning[2] activities purposefully, with the

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[1] According to *Learning to Learn: The Life-long Learning and Whole-person Development* issued by the Curriculum Development Council ('CDC') in 2001, the 'generic skills' include collaboration skills, communication skills, creativity, critical thinking skills, IT skills, numeracy skills, problem-solving skills, self-management skills and study skills.

[2] According to *Learning to Learn* (see note 1), 'life-wide learning' refers to learning in different environments such as the classroom, school, home, community and workplace. Learning experiences gained in these different environments complement each other.

Area	Performance Indicator	Evidence of Excellence
		result that students can learn in real and practical situations; • to develop students' technological capability, technological understanding and technological awareness through the Four Key Tasks, namely, moral and civic education, project learning, reading to learn and information technology for interactive learning.[3]
	1.2 Curriculum Management	The teacher is able: • to take on an active role both in making curriculum decisions and in the exchange of ideas and opinions; • to engage in deep reflection on and have a good understanding of teaching and learning performance as well as students' learning needs, and to make appropriate adjustments to teaching plans accordingly; • to use various technology education resources effectively and skilfully, with a view to facilitating practical learning in technology education and enabling students to apply skills that feature both hands-on and minds-on components.
Teaching	1.3 Strategies and Skills	The teacher is able: • to harness appropriate and protean teaching strategies and techniques that contribute to creating a harmonious and inspiring atmosphere of learning; and to draw up detailed, feasible and meaningful teaching and learning plans that enable students to apply what they have learned in real-life situations; • to use various teaching methods and resources skilfully and choose the most suitable learning content according to students' intellectual abilities and interests, with the result that students are encouraged and stimulated to learn

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[3] According to *Learning to Learn* (see note 1), the Four Key Tasks are moral and civic education, reading to learn, project learning, and information technology for interactive learning.

Area	Performance Indicator	Evidence of Excellence
		while receiving appropriate aids;
		• from teaching individual subjects and specific techniques to teaching practical problem-solving, to lead students to have a clear understanding of how humans have been able to solve their everyday life problems, as well as how they can renew and transform their problem-solving efforts to solve endless new problems;
		• to foster integrated learning among students by allowing them to study various subjects grouped under both the Technology Education KLA and other KLAs, so that they can, having integrated generic elements acquired across subjects, deal with, interpret and solve complicated problems relating to technology;
		• to cater for learning differences by adjusting learning and teaching practices, so as to allow students with varying levels of competence to progress at their own pace; to encourage the more able students to strive for excellence in their studies; and to motivate students to seek continuous improvement and to develop their full potential;
		• to reflect on and revise, with greater creativity, his or her classroom strategies and techniques;
		• to use a medium of instruction skilfully and accurately and provide clear instructions and examples, with the result that students have a deeper understanding of what they learn; and to ask questions at varying, progressive levels so as to stimulate thinking and explorative learning;
		• to provide students with manifold interactive learning opportunities and a meaningful context for learning, so as to encourage them to learn actively;
		• to enable students to learn in a safe and orderly environment and to acquire safe and healthy work habits.
	1.4 Professional Knowledge and Attitude	The teacher is able: • to have a good grasp of the curriculum and the subjects he or she teaches, to connect the subjects within the KLA for which he or she is responsible, to keep abreast of new trends in the learning areas in whose subjects he or she

Area	Performance Indicator	Evidence of Excellence
		teaches and to reflect on and actively improve his or her teaching practices; • to update and explore disciplinary knowledge in active collaboration with colleagues, with a view to striving for excellence in teaching and learning in his or her subject field; • to demonstrate a genuine commitment to and a responsible attitude towards teaching, to set appropriate expectations of students and to recognize and value their potential and achievements; • to contribute to his or her profession in a variety of ways such as actively participating in experience sharing sessions held at his or her school or elsewhere; • to actively work out plans to impart safety knowledge to and foster safety awareness among students in respect of practical classes.
Performance Assessment	1.5 Assessment Planning and Use of Information	The teacher is able: • to devise, utilise and review various assessment modes, and to ensure that they are aligned with the current curriculum objectives, assessment beliefs and implementation methods; • to employ multi-dimensional methods in assessing students' learning process and learning outcomes; • to use assessment results to diagnose students' learning condition and provide them with timely encouragement, concrete feedback and suggestions for improvement, with a view to enhancing learning and teaching and fostering self-reflection among students.

2. Student Development

Area	Performance Indicator	Evidence of Excellence
Student Development	2.1 Attitude	The teacher is able: • by setting up an example to students, to foster their technological awareness, to increase their awareness of the newest technological developments and of the positive and negative effects technologies may have on humanity and the environment, and to enable them to become socially aware decision-makers to whom public morality and the environment are of considerable concern; • to foster the students' right attitude towards life-long learning and the efficient use of resources, and to encourage them to adopt a healthy and balanced lifestyle so that they may be well prepared for grown-up life and challenges lying ahead; • to encourage students to develop upon their strengths, learn proactively and pursue excellence; • to encourage students to respect each other and share with each other their experiences and fruits of learning, with a view to creating a congenial learning atmosphere; • to nurture students' curiosity about and interest in the Technology Education KLA so that they can take up study in the area with confidence and an inquiring mind; • to develop trust and rapport between teachers and students.
	2.2 Knowledge and Skills	The teacher is able: • to enable students to have a good grasp of technological knowledge including technological concepts, technological processes and the potential impacts of technologies; and to keep up-to-date with latest developments so that students may appreciate the rapidly changing nature of technology;

Area	Performance Indicator	Evidence of Excellence
		- to develop students' technological competence to generate products, systems and other methods to improve everyday life, and to develop in them good attitude and habits conducive to health and safety at work; - to strengthen students' generic and transferable skills, especially self-learning and exploratory thinking abilities, through project learning, field study or exhibition of assignments; - to encourage students to make the best of resources, gathering and processing information in a systematic manner.

3. Professionalism and Commitment to Community

Area	Performance Indicator	Evidence of Excellence
Professionalism and Commitment to Community	Contribution to the Teaching Profession and Community	The teacher is able: • to provide active support to the teaching profession and the community, such as contributing to professional sharing activities, sharing good teaching practices and participating in community or voluntary services; • to produce exemplary teaching materials, to contribute to educational research actively and/or to contribute writings on teaching; • to provide support to the professional development of novice teachers such as taking up mentorship, to provide assistance to teaching colleagues and to promote collaboration in teaching practices; • to keep abreast of rapid technological and social developments and strive for continuous self-development and professional enhancement; • to keep parents informed about the study of technology education through home–school activities.

4. School Development

Area	Performance Indicator	Evidence of Excellence
School Development	Support to School Development	The teacher is able: • to play a leading role in designing, bringing forward and reflecting on school-based activities in the Technology Education KLA; • to motivate students to actively participate in public activities such as open competitions; • to inspire peers and colleagues to collaborate on the improvement of learning and teaching; • to foster a culture of collaboration and sharing among colleagues and stakeholders so that the school may develop into a professional learning community; • to get in touch with other departments' colleagues and with parents, with a view to channelling their efforts into continuous school improvement; • by setting an example and sharing his or her experiences, to promote the school vision and mission among colleagues and stakeholders who can then put them into action; and to put the school culture and ethos into effect by all useful means; • to assist in continuous school development through the ideas, products and systems generated from technology learning and teaching.

REFERENCES

Advisory Committee on Teacher Education and Qualifications. *Towards a Learning Profession: The Teacher Competencies Framework and the Continuing Professional Development of Teachers*. Hong Kong: Advisory Committee on Teacher Education and Qualifications, 2003.

Curriculum Development Council. *Learning to Learn: Life-long Learning and Whole-person Development*. Hong Kong: Curriculum Development Council, 2001.

Curriculum Development Council. *Technology Education Key Learning Area Curriculum Guide (Primary 1–Secondary 3)*. Hong Kong: Curriculum Development Council, 2002.

Curriculum Development Council. *General Studies for Primary Schools Curriculum Guide*. Hong Kong: Curriculum Development Council, 2002.

Quality Assurance Division, Education Bureau. *Performance Indicators for Hong Kong Schools 2008: With Evidence of Performance: For Secondary, Primary and Special Schools*. Hong Kong: Quality Assurance Division, Education Bureau, 2008.