Part B   Project Summary

Project Title:	Project Number
Internet-based Education for Design and Innovation	2007/0294 (Revised)

Name of Organization: Department of Mechanical and Automation Engineering, CUHK

(1) Goals: To promote secondary technology education and to develop students' self-learning capability and creativity via Internet education resources for design and innovation.

Objectives: (i)To develop a fully-featured Internet education resources motivating secondary students to learn advanced technologies and to develop their creativity; (ii)To enhance students' skill and experience in design and technology in an on-line project-based learning environment, and (iii)To appraise students' creativity via Internet design competitions.

(2) Targets:

Expected number of beneficiaries: At the first stage, 3,944 students (232 * 17 schools) will use the Internet education tools in their courses and about 3,000 students will participate in the design competition. 50,000 students will benefit from this project after completion of the project.

(3) Implementation Plan:
   (i)   Duration: 24 months (04/2009-03/2011)
   (ii) Process / Schedule:
       (a) 04/2009-09/2009: design the curriculum and the Internet education platform; (b) 10/2009-03/2010: develop the Internet design-from-components tools; (c) 04/2010-09/2010: develop the 3-D design simulation tools; and (d) 10/2010-03/2011, implement the curriculum and evaluate the project.
   (iii) Collaboration with other parties/partners: Hong Kong Technology Education Association, 17 supporting secondary schools in Hong Kong

(4) Products:
   (i)   Deliverables/outcomes: A fully-featured Internet education resources for design and innovation with supporting curriculum for both self-learning and class-teaching; integration of the on-line education resources with the new Design and Technology courses, and organization of Internet design competitions.
   (ii) Dissemination of deliverables / outcomes: The teaching materials will be disseminated to all secondary schools for use. The Internet resources will be open to all the students and the general public.
   (iii) Commercialization potential of deliverables / outcomes: The Internet education software can be commercialized and the design training course could be also offered as extra-curricular activities in addition to integration with existing secondary technology education.

(5) Budget:

A	Staff cost	1,212,120	D	Contingency	12,540
B	Equipment	318,000	E	Services	114,140
C	General Expenses	100,000			
				Total expenditure	1,756,800

(6) Evaluation:
   (i)   Performance indicators: The project will be evaluated by the key factors measuring students' performance in design and innovation, such as generic skills development, subject knowledge enhancement and degree of active involvement of the students, and social impact of the project.
   (ii) Outcome measurements: An evaluation committee consisting of education professionals and school principals (or their representatives) will be set up to oversee the effectiveness of the project.