# Inquiry Approach (Secondary 1 - 3)

The Use of Project Work in Developing Inquiry Learning in A Local Secondary School

Introduction

A project curriculum comprising a series of mini-projects is set up in the school for all S1-3 classes. Within every three to four school cycles, students are required to carry out an inquiry-based mini-project. The curriculum focuses on the learning process of the students and emphasizes the development of skills (e.g. project skills, IT skills), values and attitudes (such as collaborative spirit, and active involvement in learning) rather than the acquisition of academic knowledge.
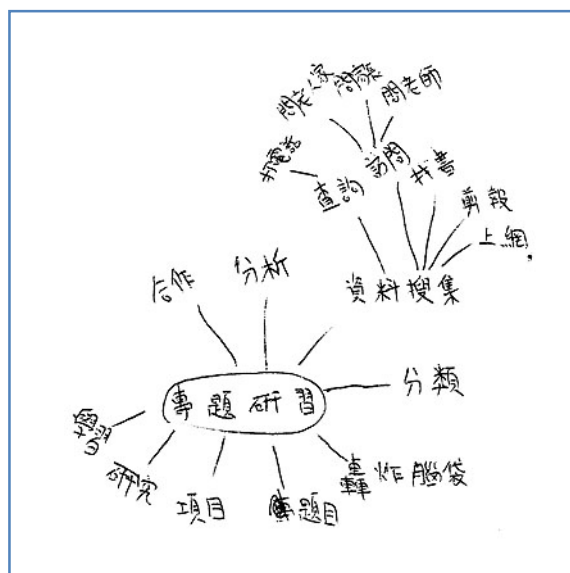
Concept map on project learning developed by a student

Students tasting tea during a project lesson
- a motivation activity for the project "Tea and Culture"

Learning Objectives

•   To develop the generic skills of problem-solving, critical thinking, using IT and creativity

•   To strengthen studentsÕ self-learning capabilities

•   To enhance the collaborative spirit of the students and to cultivate in them a readiness to participate actively in learning

School Administration Strategies in Promoting Project Learning

- To create sufficient curriculum space for project learning, the school rearranges the time-table to allocate 2 periods per cycle specifically to project learning for all S1-3 classes.

- A school intranet system is also developed to provide the initial pool of materials and resources for the students to carry out their project inquiry. All the materials on the intranet are collected and developed by the teachers, but students are also requested to collect their own information and data through web searches, field trips, interviews and library visits.

Students using the School's Intranet to do their projects

Students having a group discussion during a project lesson

Learning / Teaching Process

• Students are allowed to form groups of three or four on their own.

• In groups, students are assigned a title for their mini-projects. Examples include 'Tea and Culture', 'Transport Needs of the Physically Handicapped', 'Poverty and Hunger'.

• Teachers allow students to plan their learning process and only intervene when students get into trouble.

• Students are requested to do most of their work in the two project periods so that teachers can provide immediate assistance when they encounter problems.

• Students obtain feedback from teachers in the process of data collection and compilation, work out their design and present their work to the class.

• All groups have to display their work (such as posters, models) publicly for the principal, teachers and other students to comment.

• After improvement of their designs, students' work is uploaded onto the Internet. Parents may also see their children's work.

Project reports displayed in the classrooms

Posters designed by students displayed on classroom windows facing the corridor

Impact on Learning

- Students have to apply what they have learnt before and make use of the Intranet. This helps them to link knowledge learnt at school with a life issue, to apply knowledge across KLA boundaries and improve IT skills.

- In preparing their final reports, students have to apply all the knowledge they have acquired from the Internet, field trips and site visits as well as those they have acquired in other KLAs. A typical example is the use of their knowledge in science and technology to design new transport facilities to cater for the needs of the physically handicapped.

- The self-directed inquiry process in groups provides students with more space to schedule their work, find out their own answers, communicate with each other and collaborate in their study. Their self-learning capability is strengthened.

Students' comments on project work