The Conception and Implementation of the Gifted Education Curriculum Example 1 (Whole--Class Approach)

Stage	Experience	Characteristics	Difficulties	Solutions
Preparations and Conception	➢ The school provided after-class science subject project learning programmes for F2 secondary school students. After reviewing the results, teachers found that, although the students were able to complete assigned exercises and grasp basic learning skills, there was still some room for improvement in generic skills, such as their creativity and thinking skills. In partnership with the staff of the Gifted Education Section of the Curriculum Development Institute, they systematically immersed the elements of gifted education in their teaching programmes, and took care of the learning needs of the gifted students.	➢ Review previous experience and design curriculum in accordance with students' needs.	➢ Since project learning was carried out in class, arranging periods became the biggest problem.	➢ Discussion with teachers was conducted. The positive effects of project learning on students was recognised. After reaching a consensus, the school decided to conduct a project-learning programme (a double period) every two weeks and the number of periods for Science lessons was reduced to make room for this.
Curriculum Implementation	➢ All the F2 students from the five classes were required to participate in the project-learning programme. The number of students in each class varied from 35 to 40, totalling more than 200. To provide high-ability students with tougher challenges, five high-ability students were selected from each class to form a 25-student team, and a special instructor was designated to conduct project learning for them. ➢ The project-learning programme (a double period) was carried out every two weeks, and led by science teachers who were instructors of the programme. The entire programme was composed of four group courses and seven ordinary courses.	➢ Initiated by some teachers, the gifted education programme was implemented with a step-by-step strategy, which aimed to integrate elements of gifted education into everyday teaching.	➢ While leading the project learning programme, and implementing the other whole-class gifted education programmes, teachers encountered difficulties in applying their teaching skills. For example, how could they improve the students' thinking skills in the process of data analysis?	➢ Provide relevant teacher training. ➢ Produce teaching and reference materials. ➢ Promote collaborative teaching activities to enable teachers to learn from each other.

Reflection and Self-Improvement	➢ The school has always paid great attention to gifted education. In this project-learning programme, teachers tried to design and implement the school-based curriculum for gifted students and gained further understanding of gifted education. ➢ The results of the teachers' and students' questionnaires indicated that students improved their creativity, higher-order thinking skills, and personal-social competence via project learning. Approaches including collaborative learning skills, as well as brainstorming and concept mapping, can also be applied in ordinary classes to improve students' abilities. These skills have been compiled into the curriculum for secondary one student, with the aim of paving the way for secondary-school study in subsequent years.	➢ The students' learning needs and the school's policy orientation for gifted education were reviewed further via the pilot project.	➢ Elevating a gifted education programme designed for a particular form to a thinking curriculum applicable to the entire junior form requires a great deal of manpower and resources, e.g. arranging teaching periods. Due to a lack of existing experience in other schools, the teachers encountered many difficulties when promoting the curriculum. Furthermore, they had to convince other teachers to accept the concept of gifted education.	➢ Through a series of staff development days and curriculum meetings, the school created an ideal atmosphere for curriculum reform, reviewed the existing curriculum framework and class arrangements, identified the classes which allowed most flexibility for changes, and discussed the feasibility of related curriculum reform with the teachers involved.
Elevation to School-Policy Level	➢ In a two-day meeting about the school development, issues about "catering for learner differences", "the thinking curriculum" and "project learning" became the school's major concerns. The school planned to improve students' thinking ability in an active manner, while at the same time creating a school culture that concerns each student's talents.	➢ Consolidate experience, align gifted education with overall curriculum development, and make it an integral part of general curriculum development.	➢ The meeting could be constructive, but is also very likely to become an empty discussion.	➢ The school management should inspect the content and development of the school curriculum. It should also collect various materials to ensure the discussion will achieve its expected goal.
Further Promotion and Enhancement	➢ In the second academic year, Integrated Science project learning will be extended to secondary two, where the teaching approach will be enquiry-based. This change aims to enrich the content of academic discipline; enhance students' creativity; and improve their higher-order thinking skills, personal-social competence		➢ The number of participating teachers has increased. However, they have different opinions about the concept of gifted education and its related teaching	➢ A subject co-ordinator was appointed. Liaison officers were also appointed to ensure the smooth communication of various types of teaching information.

			methods. Some even hold a negative view about the programme. It requires great effort to reach a consensus. In addition, related teaching resources are scattered and need to be integrated.	➢ To pave the way for curriculum modification and promotion, the school invited some professionals to develop teaching materials and compile teaching manuals.
	and project learning skills. ➢ In order to enhance students' thinking skills training, an extensive education programme is being provided for secondary three students. As part of this programme, teachers of Chinese History and History collaborate. Starting with museum visits, students learn thinking approaches from each other, and consequently improve their thinking ability. Liberal Studies is offered in secondary one. This aims to enable students to grasp learning and thinking skills. The curriculum content includes basic learning skills and attitudes, application of mind mapping, and the 6w technique.			