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FOREWORD

The Recent Reform of School Science Curriculum in China

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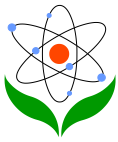
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Executive Summary

A new wave of school curriculum reform spread over China since 2002 with the publication of the new National Curriculum. It changed the foci of school curriculum from knowledge delivery to student development in three dimensions: knowledge and skills, process and methods, and, affective and value. It changed the structure of school curriculum from subject-centred to a more integrated, life-oriented, and selective possibility. It encouraged more enquiry learning and problem solving in order to change student learning from a receptive to an active way. It also encouraged teachers to be more facilitative and interactive in their classroom teaching. It invited educators and teachers to develop new approaches and techniques for assessment to liberate students from the heavy pressure of examination.

School science starts in primary grade 3. It is an integrated course. Two types of science courses are offered for junior secondary students: teachers can decide whether they present the integrate science or, physics, chemistry and biology as usual. In senior secondary level, science include three subjects, each subject includes a number of modules. Some modules are



compulsory and some are elective. After finish the compulsory modules, students can decide themselves if they keep on going to the elective modules.

Contents of the primary science include three parts: a) the living world, b) the physical world and, c) earth and space. Junior science contents four parts: a) life science, b) physical science, c) earth and space science, d) the relationship between science, technology and society. Junior physics contents three topics: a) matter, b) motion and interaction and, c) energy. Contents of junior chemistry include: a) chemical substance, b) structure of matter, c) chemical changes, d) chemistry and social development. Junior biology includes ten topics: a) scientific enquiring, b) organization of organism, c) living organisms and environment, d) green plants in biosphere, e) human beings in biosphere, f) movements and behaviours of animals, g) reproduction, development and heredity of living organisms, h) variety of living organisms, i) bio-technology and, j) living healthily.

The two common compulsory modules of senior physics deal with the basic laws of mechanical motion and interaction. Options of senior physics split into three streams: social, technological and science stream. Each stream includes at least two modules. There are eight modules included in senior chemistry: two are compulsory and six are optional. Senior biology includes six modules, three obligatory and three optional modules

School science teaching and learning become more student-centred and more interactive under the new national curriculum. However, a number of problems still remain unsolved. Especially the problem of how to assess students' achievement is a still serious concern on the way of the reform. Chinese educators and teachers are now trying hard to remove this obstacle.